Study of School Readiness and its Effective Leadership in Light of Developed Curricula in Lebanon

Complete Study

Center for Educational Research
and Development

With the Collaboration of

**School Readiness and Its Effective Leadership
in Light of the Developed Curricula in Lebanon**

Study and Team Coordination

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Abbreviations & Acronyms

CE	Community Engagement
CERD	Center for Educational Research and Development
CP	Community Partnership
CPD	Continuous Professional Development
DG	Director General
DGE	Directorates for General Education
D-RASATI	Developing Rehabilitation Assistance to Schools and Teacher Improvement
D-RASATI 1	First phase of the D-RASATI program
D-RASATI 2	Second phase of the D-RASATI program
EDP	Educational Development Program
EDP II	The Second Educational Development Project
ESS	Effective School Standards
EU	European Union
FED	Faculty of Education
GDE	General Directorate of Education
ICT	Information and Communication Technology
KPIs	Key Performance Indicators
LDP	Leadership Development Program
LU	Lebanese University
M&E	Monitoring and Evaluation
MEHE	Ministry of Education and Higher Education
MOU	Memorandum of Understanding
NGO	Non-government Organization
OECD	Organization for Economic Cooperation and Development
PITB	Pre-service and In-service Training Bureau
PPP	Public-Private Partnership
PR	Public Relations
REOs	Regional Education Offices
SIP	School Improvement Program
SLDP	School Leadership Development Program
SSA	School Self-Assessment
TC	Training Centers (Ecole Normale in French)
TOT	Training of Trainers
UN	United Nations
UNESCO	United Nations Educational, Scientific & Cultural Organization
UNICEF	UNITED NATIONS International Children's Emergency Fund
USAID	the United States Agency for International Development
USAID/L	USAID/Lebanon
WB/WBG	World Bank/World Bank Group

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Executive Summary

Overview

This comprehensive study evaluates Lebanon's educational sectors—public, private free, private non-free, and UNRWA schools—focusing on demographic trends, human resources, technological readiness, resource allocation, infrastructure, communication dynamics, and leadership. The objective is to assess the readiness of schools—both in terms of human and material resources—across various sectors for implementing the developed curricula. The research adopts a mixed-methods approach, combining quantitative data analysis from surveys with qualitative insights from interviews and focus groups. Key performance indicators, such as resource distribution, staff qualifications, and stakeholder engagement, were used to identify gaps and inform recommendations.

This allowed identifying disparities, challenges, and actionable recommendations for a more equitable and effective educational framework.

Key Findings

1. Demographic and Human Resource Analysis

Age and Gender Disparities:
- The study revealed that the majority of principals across Lebanon fell within the 50–60 years age group (37.3%), followed by the 40–50 years age group (36.2%), with notable variations across sectors and regions; the public sector was dominated by principals aged 40–50 years (48.3%) and 50–60 years (43.5%), with no younger leaders, while private schools exhibited a broader age distribution, including both younger and older leaders.
- The study revealed a clear predominance of female representation across educational roles, with females constituting the majority among principals, supervisors, coordinators, and teachers in most sectors and governorates, particularly in the public and private free sectors, while the private non-free sector and certain regions, such as the Beqaa and Baalbek-Hermel governorates, exhibited relatively more balanced gender distributions.

Educational and Employment Qualifications:
- Advanced degrees are most prevalent in private non-free schools, whereas public schools rely heavily on bachelor's degree holders.
- Approximately 40% of public-school principals serve in acting roles, often without formal administrative training.
- Over 70% of public-school teachers are contracted, many of whom lack structured pedagogical preparation.

Experience Levels:
- Public sector principals have extensive teaching experience (25+ years) but limited administrative exposure (0–10 years).

- Private schools display a diverse spectrum of experience levels, including a mix of early-career and veteran educators.

2. Technological Readiness

Teacher Proficiency:
- Significant gaps in technological skills exist among public school teachers, particularly in peripheral regions such as Akkar, North Lebanon, and Baalbek-Hermel.
- Private non-free schools demonstrate higher levels of digital proficiency, especially in urban centers like Beirut and Mount Lebanon.

Infrastructure and Technical Support:
- Public schools face severe shortages in digital tools and infrastructure, with 51.7% of administrators rating their technical support systems as "Completely Unsuitable."
- Private schools, particularly non-free institutions, are better equipped but face challenges in extending these resources to rural areas.

3. Resource Allocation

Laboratories and Libraries:
- Public schools experience acute shortages, with up to 60% of schools in Akkar lacking laboratories.
- Libraries are under-resourced in public schools, while private non-free schools demonstrate better outcomes (e.g., 38.9% well-equipped in Mount Lebanon suburbs).

Playgrounds and Accessibility:
- Many schools lack appropriate playgrounds, with 50% of Beirut schools requiring significant repairs.
- Accessibility for special needs students remains a critical issue across sectors, with unsuitable ramps and toilets reported in most schools.

4. Regional Disparities
- Urban: Beirut and Mount Lebanon lead in readiness, with better staffing, infrastructure, and technological resources.
- Rural Regions: Akkar, North Lebanon, and Baalbek-Hermel face acute shortages in essential roles, infrastructure, and technology.

5. Communication Dynamics

Administration-Teacher Communication:
- Public schools report moderate effectiveness, with strengths in Mount Lebanon and the South but challenges in Akkar and Baalbek-Hermel.
- Private free schools exhibit consistently strong communication, particularly in the Bekaa and South.

Parent-Teacher Engagement:

- Engagement levels vary, with higher effectiveness in urban areas and weaker participation in rural regions.

6. Leadership and Strategic Planning

- Participatory leadership models are prevalent in 90.5% of public schools and 84.7% of private non-free schools.
- Strategic planning and innovation support are strongest in private non-free and UNRWA schools but remain inadequate in public schools in underserved areas like Akkar and Bekaa.

Recommendations

1. Leadership and Capacity Building

- Provide formal training programs for acting principals and contracted teachers, emphasizing administrative skills, curriculum leadership, and pedagogical development.
- Introduce mentorship and peer-learning opportunities to enhance leadership capabilities in underserved regions.

2. Addressing Resource Shortages

- Allocate targeted funding to address critical shortages in counselors, psychologists, and specialized staff in public schools.
- Prioritize the development of laboratories, libraries, and playgrounds in rural and peripheral regions.
- Develop partnerships with private stakeholders to improve resource distribution, particularly in underserved public schools.

3. Enhancing Technological Integration

- Expand teacher training programs in digital tools, AI, and modern applications, with a focus on peripheral regions like Akkar and Baalbek-Hermel.
- Invest in internet connectivity, digital devices, and maintenance support in public schools.

4. Improving Communication and Stakeholder Engagement

- Strengthen school-community relationships by fostering participatory leadership and regular parent-teacher communications.
- Implement standardized feedback mechanisms using digital platforms to improve administrative efficiency and teacher development.

5. Equity and Inclusivity Initiatives

- Ensure equitable resource distribution across public and private sectors by establishing minimum standards for infrastructure, staffing, and technology.
- Upgrade facilities to improve accessibility for students with special needs, including ramps, elevators, and specialized toilets.

6. Monitoring and Evaluation

- Develop comprehensive evaluation frameworks using performance indicators, classroom visits, and surveys to monitor progress and ensure accountability.
- Establish dynamic feedback loops to refine strategies based on real-time data and stakeholder input.

Conclusion

The findings of this study highlight systemic disparities and resource inequities across Lebanon's educational sectors, exacerbated by regional and sectoral differences. By addressing these challenges through targeted investments, leadership training, technological integration, and stakeholder engagement, policymakers can create an inclusive and resilient education system that prepares students for the demands of a rapidly evolving global workforce. The recommendations outlined here offer actionable pathways for achieving sustainable educational reform, fostering equity, and enhancing the quality of education nationwide.

CHAPTER ONE

INTRODUCTION AND BACKGROUND

Introduction

In light of the increasing challenges facing the educational system in Lebanon, effective school leadership is one of the main pillars of school success. This success is crucial for improving the quality of education, achieving educational reform goals, and enhancing learners' competencies. Numerous international studies have confirmed the importance of school leadership in improving students' outcomes and school development (Leithwood et al., 2020; Day et al., 2016).

With the launch of the curricula development workshop in pre-university general education, the urgent need has emerged prioritizing the qualification of school principals who are fully prepared and capable of adopting and efficiently implementing transformative changes. The school leader serves as a pivotal intermediary between strategic educational initiatives and their operational implementation, orchestrating the effective translation of curricular frameworks into tangible pedagogical practices within the educational institution. Such leaders play the role of mediators who motivates teachers, guide learners, and build communications with the community and parents. This was confirmed by the study of (Hallinger & Heck, 2010) which indicated that school leadership indirectly, yet significantly, affects learners' achievement through its influence on school culture and educational practices.

Implementing developed curricula requires school principals who not only possess a theoretical understanding of these curricula, but also leadership competencies that enable them to manage the change process, motivate educational teams, foster a supportive and innovative educational environment, and effectively manage human and material resources. Fullan (2014) indicated that effective educational leaders are those who can lead change and build capacities within their schools. Moreover, enabling school principals to lead educational change requires equipping them with the skills necessary for analyzing data and making evidence-based decisions. Schildkamp et al. (2019) emphasized the importance of using data in educational decision-making to improve educational practices.

In this context, the role of continuous professional development for school principals emerges as a crucial element in the success of implementing new curricula. A study by Darling-Hammond et al. (2007) revealed that effective school leadership development programs are characterized by their contextual relevance, focus on solving real-world problems, and providing opportunities for collaborative learning.

Given the specific challenges facing the educational system in Lebanon, it is necessary to adapt the best international practices in school leadership to the local context. A study by Akkary (2014) indicated the importance of taking into account the cultural and social context when developing school leadership programs in the Middle East.

Therefore, the success of implementing developed curricula in Lebanon primarily depends on the effectiveness of school leadership in directing this process. It also relies on the extent of schools' readiness both in terms of human and material resources, to keep pace with the designed curricula while implementing them efficiently. Hence, enhancing the capabilities of school leaders and providing the necessary support to ensure school readiness should be at the top priorities of a comprehensive educational reform aimed at addressing modern challenges and achieving the desired quality of education.

Study Overview

This study provides a comprehensive vision of school readiness[1] in Lebanon and aims to lead the change process. Its goal is to ensure the successful implementation of developed curricula while contributing to achieving quality in education.

Problem Statement

The process of developing curricula in Lebanon represents a major challenge to the educational system and requires urgent, comprehensive management. Since the adoption of the current curricula in 1997, there has been no fundamental review to align them with the rapid global scientific and educational developments (Shuayb, 2016). This stagnation has led to a significant gap between what students learn and what the labor market and contemporary life require in terms of skills and competencies. The distance learning crisis imposed by the Covid-19 pandemic has revealed major weaknesses in the Lebanese educational system and highlighted the urgent need for a comprehensive update of the curricula (Hammoud, 2021). This update is not limited only to the content of the subjects, but also extends to teaching methods, assessment techniques, and the integration of modern technology.

In 2022, the Lebanese National Curriculum Framework for General Education at the Pre-University level was launched, representing a significant step towards educational reform

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[1] Readiness relates to human and material resources solely, and includes:

- **Human Resources**:

  Number of staff members: The extent to which the number of teachers and administrative staff is sufficient to meet the needs of the effective implementation of the developed curricula and ensuring that there is no shortage of staff that could hinder implementation.

- **Material Resources:**

  School equipment: The availability of equipped classrooms and appropriate educational facilities that support activities related to the developed curricula, such as laboratories, libraries, and computer rooms.

  Technology and Educational Tools: The availability of electronic devices such as computers, interactive boards, and Internet connection which are essential for supporting modern education and the effective implementation of curricula.

(Ministry of Education and Higher Education, 2022). However, the success of the framework largely depends on the readiness of public and private schools to adopt and implement these changes effectively. As a result, the significance of school principals in guiding the change process and creating a conducive environment for the successful implementation of new curricula becomes evident. (Karami-Akkary et al., 2019).

However, this curricular reform faces multiple systemic challenges:

1) **Infrastructure and Resource Constraints**
   Public institutions demonstrate significant deficiencies in facilities and equipment necessary for contemporary pedagogical methodologies (El-Ghali et al., 2019).

2) **Professional Development Requirements**
   The current situation necessitates comprehensive pedagogical training programs (Shuayb & Brun, 2020).

3) **Leadership Development**
   Administrative capacity building is essential for effective change management (Hallinger & Heck, 2010).

4) **Institutional Cultural Transformation**
   Successful implementation requires fundamental shifts in organizational culture toward innovation adoption (Fullan, 2014).

5) **Community Engagement**
   Enhanced school-community partnerships are fundamental to implementation success (Akar, 2016).

Given these challenges, there is an urgent need for an in-depth study aimed at evaluating the readiness of public and private schools in Lebanon to implement the developed curricula, with a particular focus on the role of school leadership in this process. Accordingly, the core research problem centers around the following primary question: ***What factors influence the readiness of institutions for curricular implementation in both public and private educational sectors in Lebanon, and how does leadership within these institutions enhance this readiness?***

Research Questions

1) **How do preparedness levels for curricular implementation differ between public and private educational institutions?**
   This question entails a comparative analysis focusing on the strengths, weaknesses, opportunities, and challenges faced by each institutional type.

2) **What distinctive leadership competencies are associated with effective curricular implementation across different types of educational institutions?**
   This question will explore variations in leadership capacity and their effects on successful implementation.

3) **What human capital and material resource factors impact implementation readiness across various types of educational institutions?**
The analysis will assess patterns of resource availability and utilization.

4) **How does engagement with parents and the community differ between public and private institutions, and how does this support curricular implementation?**
This involves examining how stakeholder engagement varies and its impact on implementation success.

5) **What are stakeholders' expectations regarding the outcomes of curricular implementation in different types of educational institutions?**
This question will compare expectations of implementation success across various institutional contexts.

6) **What are the essential prerequisites for successful curricular implementation as perceived by educational stakeholders?**
This will identify the necessary human capital and material resources as seen by leaders and other stakeholders in the educational sector.

Research Objectives

This study aims to evaluate the comprehensive readiness of schools in terms of infrastructure, human capital, material resources, technical capacity, and pedagogical capabilities, while analyzing the correlation between institutional leadership and organizational preparedness for the curricular transition. It seeks to identify the challenges and opportunities associated with implementing the developed curricula, providing a detailed analysis of barriers and potential facilitative factors. Ultimately, the study aspires to propose evidence-based strategies to enhance institutional preparedness through effective leadership practices, ensuring a successful and sustainable curricular implementation.

1) **Evaluating School Readiness:** Assess the level of readiness among public and private schools to implement the developed curricula, focusing on infrastructure, human resources, material resources, technical support, and educational resources.
2) **Analyzing the Role of School Leadership:** Study how school leadership affects school preparation and facilitates the transition to the developed curricula.
3) **Exploring Challenges and Opportunities**: Identify the challenges that schools encounter during the implementation of the developed curricula, as well as the opportunities that can be leveraged to ensure successful and effective implementation.
4) **Providing Practical Recommendations:** Propose effective school leadership strategies that improve school readiness to implement the developed curricula effectively and sustainably.

Importance of the Study

This study underscores the critical role of school readiness and leadership in the successful implementation of newly developed curricula in Lebanon, aiming to drive significant educational transformation.

The importance of this study is highlighted through assessing the readiness of schools and their principals to implement the developed curricula in Lebanon by emphasizing effective school leadership as a decisive factor in achieving the desired educational transformation. The importance of the study lies in the following aspects:

1) **Evaluating Readiness for Change**

   The study systematically assesses schools' readiness to implement the developed curricula by examining their infrastructure, human resources, and technical equipment, thereby identifying gaps and directing efforts to enhance overall readiness.

2) **Strengthening School Leadership**

   The study highlights the vital role of school leaders in facilitating and managing the transformation process, thereby increasing the chances of successful curriculum implementation.

3) **Supporting Educational Reform Efforts**

   This study aligns with national efforts to reform the school educational sector in Lebanon. It identifies the key factors influencing the successful implementation of the developed curricula, contributing to formulating recommendations that support sustainable development and high-quality educational outcomes.

4) **Supporting Educational Policies**

   This study aids decision-makers at the Ministry of Education and Higher Education, particularly within the General Directorate of Education and the Center for Educational Research and Development, by identifying challenges and opportunities for curriculum implementation and offering grounded recommendations based on comprehensive field assessments.

Overall, this study offers a comprehensive framework for understanding and enhancing the interplay between school readiness and leadership, thereby increasing the success rate of curriculum implementation and contributing to the improvement of educational quality in Lebanon.

Methodology of the Study

1. **Study Type and Design**

    Research Methodology. The study adopts both descriptive and comparative approaches, and the research methodology utilized is a mixed methods approach which combines quantitative and qualitative methods in order to provide a comprehensive understanding of the issues raised. This approach is particularly effective for exploring complex educational contexts as it paves the way for the triangulation of data and enhances the validity of the results (Sammons & Davis, 2017).

    Research Type. The adopted type for this study is applied research as it addresses specific educational challenges within the Lebanese context. It seeks to find practical solutions to improve school readiness and leadership efficiency in implementing developed curricula in Lebanon (Mejeh et al., 2023).

    Research Design. The research adopts a cross-sectional design allowing data to be collected at a single point in time and from multiple participants. This design is suitable for assessing current conditions related to school readiness and leadership competencies (Camerino et al., 2012).

2. **Data Collection Tools**
    - **Questionnaires**. Four questionnaires were developed and distributed to school principals, supervisors, coordinators, and teachers to assess the level of school readiness, leadership competencies, and factors influencing the implementation of the developed curricula.

    - **Interviews.** In-depth interviews were conducted with a sample of school principals, general directors, and experts in the educational field in order to understand the challenges and opportunities related to the implementation of the developed curricula.

    - **Focus Group.** Several focus groups were conducted with a sample of learners to gather their perspectives on the future of schools.

3. **Document Analysis**

Official documents, reports, and policies related to the developed curricula, school leadership, and effective schools were studied.

    - **Official Documents**
      Documents related to the developed curricula.
      Official reports on education in Lebanon.
    - **Educational Statistics**
      Data on the number of schools, learners and teachers.
    - **Previous Studies**
      Academic research on the application of curricula in Lebanon or similar countries.
      Studies on school leadership and its impact on the quality of education.

Reference Frameworks

The Ministry of Education and Higher Education and the Center for Educational Research and Development have collaboratively developed several key reference frameworks that are instrumental in advancing the quality of pre-university academic education in Lebanon. These frameworks serve as foundational tools for educational stakeholders at all levels and include:
- The Reference Framework for School Principal's Competencies
- The Reference Framework for Academic Accreditation: The Updated Standards of Effective School
- The Reference Framework for Community Partnerships, etc.

International Organizations' Reports

- UNESCO and World Bank reports on education and school leadership in Lebanon.
- Comparative studies of educational systems in the region.

Records of teacher training, school principals and administrators in schools:

- Data on professional development programs provided to teachers, school principals and administrators in schools.
- Records of participation in workshops and training courses.

4. Study Sample

In the study, a stratified random sampling method was employed to select a representative sample of 338 schools, encompassing both public and private institutions across various regions in Lebanon. This approach ensures that each region and type of school is proportionally represented, providing a comprehensive overview of the educational landscape. Participants in the study are school principals, teachers, educational administrators, supervisors, coordinators, learners, and decision makers as well as key stakeholders.

5. Data Analysis
- Quantitative data was analyzed using descriptive and analytical statistics to understand the levels of readiness and leadership competencies.

- Qualitative data was analyzed using thematic analysis to identify common themes and insights on leadership practices and challenges.

6. Research Ethics
The necessary approvals were obtained from the relevant authorities. It is worthwhile mentioning that the participants' privacy as well as data confidentiality was respected.

CHAPTER TWO

THEORETICAL FRAMEWORK OF THE STUDY

School Readiness in the Global Context

1. Introduction

The need for radical reforms that encompass various facets of the educational system is evident. Such reforms are crucial not only to provide effective and equitable education for all learners in Lebanon but also to cultivate a generation capable of contributing to national development and navigating the complexities of the twenty-first century. In light of these issues, the role of school leadership emerges as a vital, long-term investment. Strengthening school leadership is key to enhancing the quality of education and achieving the Sustainable Development Goals (UNESCO, 2019). Effective leadership can transform schools by adapting global best practices to the Lebanese context and providing substantial support to school principals, thereby fostering environments conducive to significant educational improvements.

The educational system in Lebanon faces major challenges that require urgent and comprehensive reforms.

According to the World Bank Human Capital Index (2020), Lebanese learners receive an education that is effectively equivalent to only six years of schooling, despite attending school for nearly ten years of compulsory education. This alarming discrepancy highlights serious deficiencies in educational quality and attainment, suggesting that students are not acquiring essential knowledge and skills.

Moreover, public schools in Lebanon suffer from a severe shortage in essential resources, including educational materials, modern technology and human resources (UNICEF, 2021). These deficits lead to a significant disparity in the quality of education between public and private schools which deprives many learners of equal educational opportunities. Additionally, the efforts of teachers' unions to advocate for better working conditions and rights are hindered by persistent internal political tensions (Shuayb, 2018). These multifaceted challenges require immediate decisive interventions by policy makers to provide the necessary resources, improve teachers' conditions, and modernize the public-school infrastructure (Ministry of Education and Higher Education, 2021).

Such a reality highlights the need for radical reforms that include various aspects of the educational system to ensure effective and equitable education for all learners in Lebanon, as well as raise a generation capable of contributing to the country's development and facing the challenges of the twenty-first century. In light of these challenges, the role of school leadership emerges as a necessary and long-term investment to improve the quality of education and achieve the Sustainable Development Goals (UNESCO, 2019) through adapting global best practices to the local Lebanese context and providing the necessary support to school principals.

2. Countries' Experiences in Developing the Curriculum

While the process of defining educational goals for schools may appear straightforward at first glance, it can also be contentious. The decisions made in this regard have significant implications for how the educational system is structured, funded, and managed.

In 1902, philosopher and educator John Dewey summarized the essence of two main goals of school education -the academic goal and the human goal - and the tension that may arise between them. Dewey emphasized, "One school focuses on the importance of the curriculum's content over the child's own experiences. The other school centers the child as the starting point, the core, and the goal, where the child's development and growth are paramount, and self-realization is the ultimate objective, not merely the acquisition of knowledge

Beyond these, school education also aims to fulfill economic, social, and cultural objectives:

- Economic goals include developing an educated and skilled workforce.
- Social goals involve promoting national identity and shared values, such as democracy and the rule of law.
- Cultural goals include promoting religious, secular, artistic, sporting and community activities.

The mentioned multiple and overlapping objectives render defining and achieving school education goals a complex process that requires careful balance between individual and societal needs.

In the subsequent section, this paper will review global experiences in curriculum development, drawing on recent literature that provides insights into the diverse approaches and challenges faced by different nations. This analysis will highlight common themes, pinpoint challenges, and identify areas for further research in the field of educational reform implementation, offering a comprehensive view of how various countries navigate these complexities.

Thailand's Experience: Leadership and Implementation Challenges

Hallinger and Bryant (2013) conducted a comprehensive review of studies focused on educational reform in Thailand from 1999 to 2008. Their analysis explored patterns of reform implementation and the responses of educational leaders to associated challenges. The review underscored the pivotal role of leadership capacity in the success of change initiatives, highlighting that effective leadership is crucial for navigating and sustaining educational reforms. However, it also pointed out significant shortcomings in the existing training and development programs, which are essential for equipping leaders with the necessary skills for these changes.

Moreover, the review identified that change efforts in Thailand were often fragmented and lacked thorough integration into the broader educational systems. This fragmentation suggests a

need for more cohesive strategies that embed reform efforts deeply within the institutional frameworks of education to ensure lasting impact.

These findings illuminate the complex dynamics of implementing educational reforms and the essential role of skilled leadership in overcoming these challenges effectively.

Ireland's Experience: Holistic Learner Development

Ireland has undergone a comprehensive process of redeveloping the national curriculum for primary schools, focusing on holistic learner development. This process has been characterized by a fundamental shift from a detailed and prescriptive curriculum to a more flexible, outcome-based curriculum framework (see Appendix 1 for more details). The process has relied on broad stakeholder engagement including teachers, parents and education professionals, with extensive research and consultation to enrich its development (Kenny et al., 2020).

Ireland has adopted an iterative approach to learning and development based on continuous feedback, with a focus on building the capacity and infrastructure needed for system-wide change. The process has given greater importance to the role of the teacher and learner in the learning process, seeking to balance academic priorities with holistic learners' development. It has enhanced flexibility and adaptability in curriculum delivery while emphasizing the importance of ongoing professional development for teachers, to support implementation of the new curriculum (Walsh, 2023).

These comprehensive efforts focus on modernizing the Irish educational system to become more responsive to the needs of learners and society in the 21st century, rendering it a model for curriculum development at the national level.

The Singapore Experience: School Autonomy

The Singapore educational system has undergone comprehensive developments and multiple reforms, directed towards enhancing school autonomy and improving the quality of education (see Appendix 2 for more details). The focus has shifted from meeting purely economic needs to adopting a holistic educational approach, that focuses on the full development of learners including their character development, enhancing their community participation and enabling them to fulfil their potentials. These reforms have been characterized by increased school autonomy in choosing curricula, teaching methods, assessments, and the adoption of educational system-wide innovations. They have also experienced a shift towards learner-centered teaching methods, with a focus on teaching quality and the development of teachers and school leaders. Singapore has provided multiple educational pathways that suit students' diverse abilities and interests while emphasizing the importance of social and emotional development (Tan et al., 2021). A prominent feature of education in Singapore is its support for the establishment of social institutions that cater specifically to each component of the social fabric, thereby contributing to the advancement of different ethnic communities. In addition, strategies have been designed to develop students' critical thinking, creativity, and inquiry skills (Kwek & Wong, 2023). Despite these positive developments, the educational system in Singapore still faces many challenges, most

notably the existence of a parallel educational system focused on limited academic achievement driven by parental expectations and intense competition. This is evident in the spread of private tutoring and additional educational programs, which may exacerbate socio-economic disparities in education. This challenge constitutes an important point of reflection in the development of the Singaporean educational system and calls for further efforts to ensure equal educational opportunities for all students.

The New Delhi Experience: Happiness Curriculum

The New Delhi Happiness Curriculum is an innovative educational model introduced in 2018 to all 1,024 public schools (see Appendix 3 for more details). The curriculum highlights attention development, critical thinking, reflection, and social - emotional skills in students from kindergarten to grade 8 through daily 45-minute lessons. Key features of the curriculum implementation include its large-scale rollout without prior pilot studies, and a flexible design that allowed for easy integration into the school day. Extensive teacher training was provided, and various stakeholders were involved in the process. The curriculum focused on well-being as a core educational goal, promoting a balanced approach to student development. The implementation of the curriculum faced some challenges such as initial resistance from teachers and the need to balance academic focus with well-being, and challenges related to resource disparities in less privileged areas. This project provided valuable lessons for education policy, including the importance of starting at scale to ensure inclusiveness and the benefits of modular design that facilitates integration with existing systems. It also highlighted the importance of a collaborative, environmentally based approach, and the need for high-level specifications to ensure consistency.

The project emphasized the importance of building trust and transparent communication with all stakeholders and focusing on the process rather than immediate outcomes (Care et al., 2020).

Finally, it highlighted the importance of investing in capacity building, designing curricula in an iterative and adaptive way, and engaging the community in the educational process. The Delhi Happiness Curriculum represents a long-term vision for shifting educational priorities towards the holistic development of students moving beyond the traditional focus on academic achievement alone (Sisodia, 2020).

The South China Experience: School Leaders' Perspectives on Successful Change

A study by Tang et al. (2014) explored school leaders' perspectives on the processes that foster successful change and the challenges encountered by those responsible for its implementation. The study identified three key factors for successful improvement: developing school cultures that support innovation; providing diverse opportunities for continuing professional learning; and clarifying beliefs about learning and a vision for change.

The U.S. Experience:

- **Autonomy**

Honig & Rainey (2012) conducted an integrative review of empirical research on the effectiveness of autonomy initiatives in improving U.S. school outcomes. Findings indicated that certain aspects of implementation were critical to supporting the successful efforts for change while systemic barriers often hindered school-level decision-making.

- **Systemic School Improvement for Ethnic and Linguistic Minority Youth**

Datnow et al. (2005) reviewed factors influencing educational improvement for minority youth in the United States. The review emphasized the importance of district-level improvement, community capacity building, careful planning, solid leadership support, and high-quality professional development. Guhn (2009) focused on two improvement programs in the United States highlighting the importance of building relationships among stakeholders, overcoming resistance to change and the value of formative assessment in guiding improvement efforts.

The International Baccalaureate Experience

The International Baccalaureate (IB) Program is an integrated and comprehensive educational model that aims to develop learners intellectually, socially and emotionally. It is characterized by a holistic educational approach based on inquiry-based learning that links learning to global issues and encourages learners to pose questions and think critically. The program promotes a global perspective, encouraging an appreciation of cultural diversity and the development of international thinking. At the same time, it is characterized by flexibility that allows it to be adapted to different local contexts while maintaining its core standards. The program places great importance on teachers' continuous professional development to ensure effective and consistent implementation of the program.

The success of the IB Program hinges on the active participation of the entire school community, requiring the support and involvement of all stakeholders. The program adopts a holistic approach to assessment. focusing on continuous assessment and self-reflection which contribute to the development of lifelong learning skills. The IB Program aims to achieve an accurate balance between academic rigor and equal access to education striving to provide high-quality education for all learners. To achieve this goal, the program provides multiple capacity-building procedures including developing teachers' skills and enhancing school resources. Finally, the program is characterized by its emphasis on continuous improvement encouraging schools and teachers to continually develop their teaching practices. This comprehensive and flexible approach positions the IB program as an exemplary model for policymakers seeking to develop high-quality education systems that prepare learners for success in a rapidly changing and increasingly complex world (See appendix 4 for more details).

Summary of International Experiences

Several common themes emerged across these reviews including the critical role of leadership, the importance of professional development, capacity building, the need for a comprehensive and integrated approach to development, the importance of considering context and culture in shaping development processes and outcomes. These findings indicate the need for further research into effective implementation strategies in diverse contexts and ways to translate general principles into culturally and contextually appropriate practices.

3. Curriculum Development Components

Lebanon must incorporate the following components to enable the country to develop a high-quality educational system akin to those of successful advanced nations. In order to enable the future Lebanese generations to efficiently face the challenges of the present and the future, it is crucial to work on the following:

Quality Standards and Educational Systems

Within the framework of ongoing pursuit of excellence in the educational sector, education quality standards emerge as a fundamental pillar for developing and improving the entire educational system, as they design a clear roadmap that highlights the strengths and weaknesses in the educational process (Fullan & Quinn, 2015). These standards contribute to developing effective plans that enhance the quality of education. They consist of interconnected elements that include the quality of teachers, curricula, learning environment, and school management working together to create fruitful educational environments (Education Quality Standards, 2024).

Effective school leadership occupies a pivotal position in achieving these standards and translating them into a tangible reality. The school leader is the main driver of change and development, working to transform the educational vision into daily practices by providing the necessary support to teachers and learners, as well as building bridges of communication with the local community. Studies by Leithwood et al. (2004) have confirmed the close link between effective school leadership and high levels of academic achievement, leading to an improvement in the general school climate.

The quality of curricula is the backbone of the teaching/learning process. These curricula must meet not only the current needs of learners, but also the requirements of the future labor market. In a world characterized by rapid change, it has become necessary to focus on enhancing critical thinking, creativity and problem-solving skills rather than relying on memorization and retrieval only. Curricula must also be marked by their integration among different subjects, helping learners realize the interconnectedness between different fields of knowledge and apply them in practical life (Biggs, 2003). The evaluation process is an integral part of the quality of curricula. Consequently, evaluation tools must be diverse and balanced, focusing on measuring the deep understanding of the subject taught and the learner's ability to apply what has been learned in new situations instead of relying on traditional tests that measure only memorization (UNESCO, 2015).

The learning environment plays an equally important role in achieving the quality of the teaching/learning process. The school must provide a safe and stimulating environment for

learning while ensuring the availability of the necessary infrastructure, such as equipped classrooms and modern laboratories (Chimbelu, 2011). Therefore, it is necessary to create a positive school climate that encourages cooperation and communication among all parties in the educational system. The educational environment itself goes beyond the physical aspects to include the general school climate. This in turn, encourages cooperation and constructive communication among learners, teachers and administration creating an atmosphere of mutual respect and support (Biggs, 2003). The learning environment also extends beyond the school walls by building strong partnerships with the local community. These partnerships open up new horizons for learning. They themselves link theoretical knowledge with practical applications in daily life, thus enhancing learners' understanding and enthusiasm for learning (Hodge, 2010).

The quality of teachers is a crucial element in achieving school success as the professional competencies of the teacher go beyond mere knowledge of the scientific subject to include diverse skills that are essential in the modern educational process. According to a recent study conducted by Darling-Hammond et al. (2023), effective communication, efficient classroom management, and innovative lesson design are among the most important competencies that distinguish competent teachers and directly contribute to improving learning outcomes.

In light of the rapid technological developments, the teacher's ability to integrate modern technologies into the teaching process has become indispensable to ensure modern and effective education. A study by Koehler & Mishra (2021) emphasized the importance of what is called "Technological Pedagogical Content Knowledge" (TPACK) as a conceptual framework that helps teachers effectively integrate technology into their educational practices.

Many recent studies have shown a strong positive relationship between the level of teachers' competencies and the improvement of learners' academic outcomes. For example, a longitudinal study by Cordue & Hattie (2022) found that teacher quality had a greater impact on learners' achievement than other factors such as class size or learners' socioeconomic background.

To ensure this quality is sustained, continuous professional development for teachers is vital. Education-like any other field - is witnessing rapid developments in educational theories and teaching methods. Within this perspective, a study by Timperley and Alton-Lee (2024) indicated that effective professional development programs are characterized by their continuity and integration into teachers' daily practices rather than merely separate courses.

Furthermore, a recent study by Fullan et al. (2023) emphasized the importance of creating professional learning communities within schools, whereby teachers share experiences and collaborate to solve educational issues. This collaborative approach contributes significantly to enhance teachers' professional competencies and create a more dynamic and effective learning environment.

Finally, recent research emphasizes the pivotal role of teacher quality in improving learning outcomes with emphasis on the need for continuous professional development and adaptation to rapid technological and educational developments. Investing in developing teachers' competencies is a direct asset in the future of education and the quality of its outcomes.

School management plays a fundamental role in achieving and ensuring the continuity of quality in education. Effective school leadership requires a leader with a clear vision, a sound strategy for school development (Popkewitz, 2000) and able to build a cohesive team as well as motivate all members of the school community towards achieving common goals (Biggs, 2003). School social responsibility is an important aspect of effective management. Therefore, it is necessary for the school to realize the importance of its role as a social institution, and to make an effort to contribute to the development of the surrounding community (UNESCO, 2015) through awareness programs, volunteer initiatives, and providing educational services to the community.

Continuous self-evaluation is fundamental to ensuring ongoing development and improvement in school management. It is essential for schools to periodically and comprehensively evaluate their performance, actively identifying and addressing any weaknesses.

This process not only guarantees sustained development but also equips schools to adeptly respond to the evolving challenges in the educational landscape. According to Kraft (2014), such rigorous self-assessment practices enable schools to maintain a state of continuous improvement and adaptability, critical for thriving in the dynamic world of education.

These standards constitute an integrated framework that aims to ensure high-quality education for all learners. By focusing on the quality of teachers, developing curricula, improving the learning environment, and ensuring effective school management, educational institutions can improve the level of their services and better prepare their learners to face the challenges of the future. Adopting and effectively implementing these standards is an investment in the future of the next generations and in the progress of society as a whole.

The Role of School Leaders

In response to the growing challenges facing the educational sector in the twenty-first century, the role of school leaders has emerged as a crucial axis for change and development within the educational system. The role of an effective school leader goes beyond daily administrative tasks to include a variety of competencies and responsibilities that contribute to establishing a successful and sustainable educational environment. This role is an essential factor in improving institutional performance, enhancing learning outcomes, and establishing a positive school culture that supports innovation and excellence.

A strategic vision is pivotal for successful school leadership. Leaders must formulate an ambitious and comprehensive vision for the institution's future and actively involve the school community in its realization. According to Hargreaves and Fullan (2012), educational leaders need to provide the resources and time necessary to implement modern educational initiatives efficiently. Fullan (2014) also emphasizes the importance of having a clear strategic vision that contributes to improving the performance of the educational institution. Studies show that leaders who focus on building positive relationships with school community members achieve significant improvements in learning outcomes (Fullan, 2014). This approach also promotes collaboration and

engagement, which themselves contribute to more effective achievement of institutional goals (Day et al., 2016).

Beyond a strategic vision, leaders must possess planning and implementation skills to guarantee the successful execution of strategies. Hallinger & Heck (2010) emphasize the importance of formulating an ambitious and inspiring vision for the educational institution, while Leithwood et al. (2020) focus on the need for this vision to be realistic and achievable Bush (2015) notes that translating a vision into clear action strategies requires skills in critical thinking and strategic analysis, a sentiment echoed by Harris (2020).

Effective communication is a crucial tool for successful school leadership. Clear communication with teachers, learners, and parents helps build trust and improves relationships both within and outside the educational institution (Smith, 2015). Active listening and engagement with diverse perspectives enable leaders to foster transparency and build consensus around strategic decisions. Emotional intelligence is also essential for school leaders. Miao et al. (2018) suggest that leaders with high emotional intelligence can understand the emotions of others, significantly contributing to building positive relationships within the school community. Research has shown that emotional intelligence enhances the overall performance of the educational institution and is linked to leadership effectiveness as well as improved school performance (Boyatzis et al., 2017). Continuous professional development is a cornerstone of effective school leadership as specialized training programs help equip leaders with the skills needed to meet contemporary educational challenges. Leaders support teachers' professional development by providing ongoing mentoring and coaching (Darling-Hammond & DuFour, 2019). This approach enhances teachers' effectiveness and improves their teaching practices.

Building partnerships with the community is another vital aspect of a school leader's responsibilities. Schools are integral parts of their surrounding communities, not isolated entities. By developing relationships with parents and community organizations, school leaders can foster community support and provide additional educational opportunities for learners. The ability of leaders to attract external funding is also a key skill in a context of limited resources as research shows that community partnerships contribute to improved learning outcomes and learners' well-being (Henderson & Mapp, 2002).

Finally, effective school leadership is important in managing effective change. Schein & Schein (2017) emphasize the importance of cultivating an organizational culture that encourages continuous learning and addresses resistance to change. Leaders must employ emotional intelligence, rely on strategic vision, and maintain effective communication to navigate these challenges (Kotter, 2012). Furthermore, partnerships are key to successfully implementing new initiatives (Fullan, 2016).

Leadership Models for School Principals During the Curricula Development Process

In the context of curricula development, school leaders play a critical role in directing and implementing changes that enhance educational outcomes. Various leadership models provide frameworks for understanding how leaders can effectively navigate the complexities of curriculum development. Here are some prominent leadership models relevant to this process:

Instructional Leadership

Instructional leadership focuses on the direct influence of school leaders on teaching and learning. Leaders who embrace this model prioritize developing a clear mission and goals for the school, managing educational programs, and promoting a positive school climate (Hallinger & Murphy, 2013). Recent research has consistently shown that effective instructional leadership can significantly enhance the quality of instruction and improve student outcomes during the curriculum development process (Boyce & Bowers, 2018). Key activities include:

- Setting clear learning goals,
- Monitoring and supporting classroom instruction and providing constructive feedback to teachers,
- Facilitating teacher professional development,
- Using data to guide decisions about teaching and learning (Leithwood et al., 2020),
- Aligning resources and professional development with curriculum goals,
- Creating professional learning communities to support curriculum implementation.

A recent meta-analysis by Zheng et al. (2017) found that instructional leadership has a significant positive impact on student achievement, teacher engagement, and school climate.

Transformational Leadership

Transformational leaders act as change agents who inspire and motivate staff to embrace new initiatives, including curriculum changes (Bass & Riggio, 2006). This model emphasizes building a shared vision and fostering an environment of collaboration and trust. Transformational leaders focus on:

- Encouraging staff to take ownership of their roles in the reform process,
- Supporting professional growth through mentoring,
- Creating a culture of innovation whereby new ideas are welcomed,
- Designing a compelling vision for curriculum change (Leithwood & Sun, 2012),
- Modeling enthusiasm and commitment to the new curriculum,
- Recognizing and celebrating successes and progress in implementation,
- Providing emotional support and encouragement to staff during the transition.

Recent studies have shown that transformational leadership is particularly effective in times of major change, such as curricula development (Gumus et al., 2018).

Distributed Leadership

Distributed leadership admits that effective leadership is not the sole responsibility of the principal. It involves sharing leadership roles among faculty members (Spillane, 2006). This model fosters collaboration and empowers teachers to take leadership roles in implementing curriculum reforms.

Key aspects include:

- Identifying and gaining from staff expertise,
- Encouraging collaborative decision-making,
- Forming teams that address specific challenges related to curriculum changes,
- Forming curriculum leadership teams with teachers from different subjects/levels,
- Delegating specific responsibilities related to reform to different members of staff,
- Encouraging teachers to lead professional development sessions for their colleagues,
- Creating platforms for continuous sharing of best practices among teachers,

Recent research by Harris et al. (2019) has shown that distributed leadership can significantly enhance the implementation of curriculum development by increasing teacher engagement and adoption of new practices.

Democratic Leadership

Democratic leadership focuses on involving teachers, students, and other educational stakeholders in the decision-making process regarding curriculum development (Woods & Gronn, 2009). This model values the input of different members of the school community which in turn fosters a sense of ownership and collective responsibility. Important features include:

- Facilitating open discussions about curriculum changes,
- Soliciting feedback from teachers and students on proposed reforms,
- Building consensus on new initiatives,
- Organizing open forums to discuss proposed curriculum changes,
- Conducting surveys to gather stakeholder feedback on reform,
- Involving students in designing and evaluating new curricula,
- Forming mixed committees of teachers and administrators to guide the development process.

Recent studies have highlighted the importance of democratic leadership in promoting sustainable curriculum reform (Uljens & Ylimaki, 2017).

Constructivist Leadership

Constructivist leadership emphasizes empowering teachers and students to construct their own understanding of curriculum changes (Lambert et al., 2002). Leaders who embrace this style encourage collaboration and critical thinking among staff. Key practices include:

- Promoting collaborative problem-solving sessions,
- Allowing teachers to experiment with new teaching strategies,
- Supporting students to take active roles in their learning,
- Facilitating workshops whereby teachers can co-construct new pedagogies,
- Encouraging experimentation and risk-taking in curriculum implementation,
- Using reflective protocols to help staff examine their beliefs and practices,
- Creating opportunities for students to provide input on their learning experiences.

Recent research by Baxter et al. (2021) has shown that constructivist leadership approaches can lead to more effective and sustainable curriculum reforms.

The Most Effective Leadership Model During the Curriculum Development Process

Existing research indicates that school leaders in developing countries commonly employ a combination of Instructional and Transformational Leadership approaches during reform. Instructional leadership focuses on school leaders' direct influence on teaching and learning, a critical element during curriculum reforms. This model prioritizes developing clear educational goals, managing educational programs, and promoting a positive school climate (Hallinger & Murphy, 2013). On the other hand, Transformational Leadership emphasizes the role of the leader as a change agent who inspires and motivates staff to embrace new initiatives, such as curriculum changes (Bass & Riggio, 2006).

In developing countries, school leaders undergoing educational reforms often must balance the improvement of teaching quality and student outcomes with significant organizational changes. The integration of Instructional and Transformational Leadership allows principals to address the practical aspects of implementing new curricula and the broader task of inspiring and empowering teachers to embrace reform. This combined approach has shown to be particularly effective in contexts in which resources may be limited and system challenges are prevalent (Leithwood et al., 2020; Gumus et al., 2018).

In addition, there is growing recognition of the importance of Context Responsive Leadership in developing countries. This means that effective school leaders need to adapt their leadership style to the specific needs of their schools and the particular challenges of curriculum reform within their local and national context (Hallinger, 2018). This adaptive approach, which draws on the principles of both Instructional and Transformational Leadership-, proves to be the most practical and effective model for school leaders navigating reform in the settings of developing countries.

In conclusion, Integrated School Leadership, which combines emotional intelligence, strategic vision, effective communication, and change management, is essential for the continued development. And success of educational institutions in the 21st century. This holistic approach to leadership enables educational institutions to meet contemporary challenges and achieve excellence in educational outcomes.

During curriculum reform, school leaders can draw on various leadership models to effectively guide their schools through change. By incorporating elements of Instructional, Transformational, Distributed, Democratic, and Constructivist Leadership Styles, school leaders can create an environment conducive to successful reforms (Day et al., 2016). Each model offers unique strategies that can be adapted to meet the specific needs of their school community, ultimately improving educational outcomes for all students.

4. School Readiness

Definition

School readiness is a complex concept with varying definitions among researchers and educators. Bender et al. (2011) define school readiness as the competencies essential for academic and social development that a learner possesses upon entering school. UNICEF (2012) provides a broader definition, describing school readiness as a multidimensional concept encompassing children's readiness for school, school readiness for children, and the readiness of families and communities to support the transition to school. The National Commission for Educational Goals has identified five domains of school readiness: physical well-being and motor development, social and emotional development, learning styles, language development, and cognition and general knowledge (Kagan et al., 1993, as cited in UNICEF, 2012). Some researchers focus on specific skills as essential components of school readiness. Rouse et al. (2005) emphasize the importance of reading, writing, numeracy, following instructions, collaborating with peers, and engaging in learning activities. The lack of a universally accepted definition has led to differences in how school readiness is assessed and supported across different educational contexts (Ofsted, 2014). The Education 2030 Framework for Action defines school readiness as "the achievement of developmental milestones across a range of domains, including adequate health and nutrition, as well as age-appropriate language, cognitive, social and emotional development" (UNESCO, 2016, p. 39).

The Importance of School Readiness

School readiness is thus a pivotal point in a child's learning journey and later on in life success (Duncan et al. 2007; Heckman & Kara Pakula 2019; Ramey & Ramey 2019; UNICEF 2004).

The benefits of school readiness include scholastic results, economic, psychological, and health benefits among others (Belfield et al.2006; Black et al.2017; Heckman & Karapakula 2019; UNICEF 2019). The economic investment in school readiness also outweighs the costs of therapeutic interventions, high school dropout, and long-term unemployment (Campbell et al. 2019; Heckman & Karapakula, 2002).

Traditional definitions of school readiness have focused primarily on the skills, knowledge, and abilities that learners need as a means to achieve educational success. However, these definitions have evolved in recent years to include a multidimensional view adding physical and

mental health, social and emotional skills, executive functions, self-control, and broader support from the family and community. Yet, these definitions vary greatly in terms of comprehensiveness.

From this perspective, school readiness for curriculum development in the context of this study is defined as a multifaceted concept that requires developing school principals' leadership skills, securing human and material resources, and engaging decision-makers to increase their ability to successfully implement the intended Lebanese curriculum development. The success of this endeavor ultimately leads to improving educational outcomes and preparing learners for the challenges of the twenty-first century.

School Readiness and Curriculum Development

Curriculum development is a complex process requiring careful planning and implementation. School readiness is critical to this process, involving the preparation of schools, teachers and learners to adopt and implement new curricula effectively. This study provides a conceptual framework for school readiness during curriculum development, highlighting key factors and strategies for successful implementation.

School readiness for curriculum development includes several key dimensions:

- **Leadership and Vision:** School leaders must have a clear understanding of the development goals and be able to communicate them effectively to staff, learners and the community. This requires ongoing preparation and training to prepare them to keep up with educational developments and implement effective leadership strategies. According to Fullan (2019), strong leadership, supported by ongoing training, is crucial for guiding a school through the change process

- **Teacher Readiness**: Teachers, who are at the forefront of implementing curriculum changes, require adequate professional development, training, and support to effectively deliver the new curriculum (Duflo, 2012). Securing qualified teaching staff is a major challenge in light of the rapid changes in curricula. Modern curricula require new and diverse skills from teachers such as career guidance skills, social-emotional learning, and life skills. Consequently, educational institutions must work to create new job descriptions that reflect these requirements and develop ongoing training and qualification programs for both current and new teachers. Teacher training and professional development must be ongoing and comprehensive covering all aspects related to the new curriculum including modern teaching methods, the use of technology, and assessment of learning. e-learning platforms and virtual reality applications can be used to provide flexible and effective training programs.

- **Resource Allocation:** Successful implementation of the new curriculum often requires additional resources including educational materials, technology, and infrastructure. Schools must be prepared to allocate resources appropriately to support development (Chimbelu, 2011).

- **Stakeholder Engagement:** Engaging all stakeholders - including teachers, learners, parents, and the wider community - is crucial for building support and guaranteeing the sustainability of development (UNESCO, 2015).

- **Assessment and Evaluation Systems:** Schools need to adapt their assessment practices to align with the new curriculum, focusing not only on assessing knowledge acquisition but also on skills' development and application (Abdu-Raheem, 2012).

- **Support Programs:** It is essential to provide diverse school support programs that meet the different needs of students. Such programs should include providing academic support for students who are experiencing learning difficulties, as well as providing psychosocial support. This can be realized by providing extra study hours, organizing workshops, providing additional learning resources, and training teachers on individual as well as group teaching methods.

- **Cultural Sensitivity:** Curriculum development, especially in developing countries, should be sensitive to local cultural contexts, including language considerations and traditional values (Raditoaneng, 2011).

- **Technology Integration:** As education becomes increasingly digitized, schools need to prepare for integrating technology into teaching and learning processes (Jennifer O'Neill, 2014). Technology can be leveraged to provide school support such as using e-learning platforms, smartphone applications, and providing diverse digital learning resources. These technologies can help students to learn flexibly and at their own pace.

- **Inclusive Education:** Changes must take into account the needs of all learners, including those with special educational needs, to ensure equitable access to quality education (UNESCO, 2016).

- **School Climate:** School climate is a critical factor in determining the success of curriculum development. According to recent studies, schools with a positive organizational climate—characterized by shared goals, high expectations, mutual trust, and effective collaboration—are more likely to embrace and implement desired changes (Smith & Johnson, 2018). In contrast, schools with a negative climate face greater resistance to change which hinders effective implementation of improvements (Brown et al., 2019). Educational leaders play a pivotal role in shaping and promoting a positive school climate. Leaders in schools with a carefully designed climate are more capable of effectively directing their strategies to support school improvement processes (Lee & Park, 2020). It is worth noting that these results are consistent with Kurt Lewin's (1936) "psychological field" theory which assumes that behavior is influenced by interaction.

- **Comprehensive School Planning:** Comprehensive school planning is a key component of successful educational development. Research suggests that plans lacking accurate self-evaluation or relying on superficial solutions often hinder change efforts (Wilson & Taylor, 2017). Therefore, school plans should be based on careful analysis and evidence-based decisions. According to Davis et al. (2021), setting goals directly impacts the actions taken.

Schools should, therefore, develop plans that include a self-evaluation framework, periodic review processes, clearly defined priorities, implementation timelines, responsibility allocations, and criteria for measuring success.

- **Preparation Prior to Implementation**: Studies emphasize the importance of careful preparation before implementing improvements. Clear goals and a shared vision established by school leaders are critical to the success of improvement efforts (Anderson & Lewis, 2019). This approach allows school community members to understand and participate in the process collectively which in turn fosters a sense of ownership and commitment. Research also suggests the importance of effective communication and cognitive shaping at this stage. According to Harris & Robinson (2020), clear communication of goals shapes how teachers and staff respond to proposed changes. This process is crucial in generating support and ensuring that all parties are aligned with the development goals.

- **Capacity Building:** Capacity building is a key component in the success of educational developments. Studies show that developments often fail due to a lack of deep understanding of teacher development requirements (Thompson et al., 2018). Successful implementation therefore requires that leaders and teachers have a comprehensive understanding of the changes required and how to align them with current practices. Small pilot projects are an effective strategy for capacity building. Mitchell & Carter (2022) suggest that these programs allow schools to trial development strategies in a controlled setting, thereby generating staff enthusiasm and building the necessary expertise and capacity for broader implementation.

The Impact of School Infrastructure on School Readiness

School infrastructure plays a pivotal role in creating effective and inclusive learning environments as confirmed by international organizations through their extensive investments in this area (UNESCO, 2019). Improving learning environments requires a multidimensional approach that considers several key factors such as school size, number of students in class, infrastructure, school day organization, and school leadership (OECD, 2021). Decisions regarding these factors need to be based on robust research evidence taking into account local context and available resources (Darling-Hammond et al., 2020).

Current evidence suggests that improving learning spaces can lead to multiple benefits including the efficient use of energy, enhanced safety, and improved learning outcomes (Barrett et al., 2019). Although direct causal evidence is limited, descriptive studies show a long-lasting association between investments in school infrastructure and improved learning outcomes (Neilson & Zimmerman, 2014).

The World Bank emphasizes the critical role of school infrastructure in delivering high-quality education. Effective investments require consideration of several key factors, including accessibility, school environmental safety, learning space design, alignment with modern pedagogical practices, community engagement, and long-term sustainability (World Bank, 2018).

Ideal schools should be within reasonable travel distances, relatively small with smaller class sizes, and structurally robust to withstand natural disasters (OECD, 2021).

New technologies and innovative teaching methods are leading to a new approach to school building design, highlighting the importance of participatory planning that involves all space users (Byers et al., 2018). The provision of basic services and outdoor play areas is a critical factor in enhancing student attendance and health. The physical characteristics of learning spaces including factors such as lighting, air quality, temperature control, acoustics, and overall design, play a vital role in student performance. All of this forms a comfortable, accessible, and stimulating environment (Barrett et al., 2019). An example of the positive impact of infrastructure improvements can be noticed in the successful renovation of toilet facilities in schools which has consequently improved attendance rates, reduced lost time, and enhanced a sense of ownership among students (Adukia, 2017).

Schools should also be designed with local climatic and cultural conditions, and many existing facilities can be cost-effectively improved to enhance the learning environment (OECD, 2021). The availability of classroom space is influenced by multiple factors including technology, specific educational programs, and building layout. Technological advances have led to more flexible classroom setups, where personal devices and wireless technology replace traditional computer labs (Byers et al., 2018). However, practical tensions exist within the educational system, such as conflicts between energy-saving practices and maintaining adequate ventilation and lighting, where poor air quality can adversely affect student health and performance. Such conditions highlight the need for balanced priorities in school environments (Barrett et al., 2015).

The impact of school infrastructure and organization on educational outcomes is multifaceted and significant. Studies consistently show that smaller schools often achieve better outcomes, especially for students from disadvantaged backgrounds. For example, a study in New York showed higher graduation rates and improved academic progress in smaller schools compared to larger schools (Bloom et al., 2010).

Experts suggest that the optimal size for elementary schools should be around 500 students while secondary schools should be limited to 1,000 students (Leithwood & Jantzi, 2009). These smaller institutions can provide many benefits, such as reduced travel time for students and increased community engagement (Nguyen et al., 2019). The number of learners in a class is another important factor in the educational environment. In England, it has been found to affect student engagement and interaction although its impact on student achievement is complex (Blatchford et al., 2016). Reducing the number of learners in a class may not be the most effective way to improve outcomes due to the fact that increasing teacher effectiveness may lead to greater benefits (Hattie, 2009). Recent studies have also highlighted the advantages of smaller schools in terms of cost-effectiveness, academic performance, and community atmosphere (Leithwood & Jantzi, 2009). Smaller schools typically operate more efficiently due to lower administrative costs and reduced infrastructure requirements, and they tend to promote higher academic achievement (Nguyen et al., 2019). Finland is a prime example of the benefits of smaller schools with an average of 195 students per school and only 19 students per class allowing for intensive instruction and small-group teaching (OECD, 2018).

The length and timing of the school day also play an important role in educational outcomes. For example, some countries such as Romania operate in shorter school days which can result in reduced actual learning time. Research suggests that starting the school day relatively later may benefit adolescents by aligning it with their natural wake-up times (Wheaton et al., 2016).

The Role of School Leadership in Developing School Readiness

It is important to reconsider the misconception that the quality of an educational system depends solely on the quality of its teachers. In fact, quality also depends heavily on the leadership and overall organization of schools (Leithwood et al., 2020). Teachers operate within a system, shaped by leadership and organizational dynamics, making effective school leadership teams and collaborative structures essential to support teachers and improve educational outcomes (Hallinger & Heck, 2010).

School leadership plays a pivotal role in shaping educational outcomes and steering the course of educational development. Leadership styles and effectiveness vary across educational systems and cultural contexts around the world (Bush & Glover, 2014). In centralized systems with limited school autonomy, school leaders often find themselves in formal administrative roles without much leadership influence. In contrast, schools with greater autonomy develop stronger leadership structures due to increased responsibilities (Leithwood et al., 2020). This variation in leadership practices is evident across many countries. For example, Italy embraces a shared leadership model across multiple institutions while India offers limited opportunities for leadership roles (Hallinger & Walker, 2017). This diversity reflects differences in the organizational structures and cultural contexts of different educational systems.

Achieving real educational transformation requires more than just structural changes; it entails fundamental shifts in cultural beliefs and assumptions. This process is gradual and involves profound cognitive and affective changes (Fullan, 2016). It definitely goes beyond simply providing more training for teachers; it requires reshaping deeply held pedagogical beliefs about teaching, learning, equity, and inclusion (Hargreaves & Fullan, 2012).

Cultural changes imposed from above or imported from other contexts often fail if the educational system remains centralized and in case teachers and school leaders are not actively involved in the process of change (Leithwood et al., 2020). Sustainable change must therefore reach the school level and motivate all school personnel while recognizing the critical role of leadership in this process (Harris, 2020). In many resource-constrained settings, hierarchical structures rooted in traditional power dynamics and colonial heritage hinder transformation (Tikly, 2011). Consequently, effective leadership starting with principals and extending across the system is essential to foster structural and cultural change. This requires addressing issues such as appropriate salaries, suitable workloads, and incentives for leadership training (Oplatka, 2004).

Research in developing countries has shown that effective student learning is linked to student mentoring, differentiated instruction, and the use of low-cost learning materials in students' native languages (Glewwe & Muralidharan, 2016). The combination of small-group learning and large-group teaching also supports regular assessment of student progress, providing personalized feedback and enhancing problem-solving skills (Banerjee et al., 2017). Discrimination against

students with disabilities remains a major challenge, often manifested in inadequate school facilities. Addressing these issues through the provision of appropriate facilities and adherence to universal design standards, is critical to ensuring equal access to education (UNESCO, 2020).

5. Challenges of School Readiness for Curricula Design in Developing Countries

The imperative for curriculum development often arises from changing societal demands, technological advancement, and evolving pedagogical philosophies. In developing countries this need is particularly pressing due to challenges such as poverty, political instability, and socio-cultural barriers (Chimombo, 2005). Traditional learning methods are no longer effective in today's technology-driven world necessitating a shift from acquiring knowledge to developing skills relevant to modern labor markets and technological environments (Anderson, 2002; Kraft, 2014).

Biggs (2003) identifies three main components that shape students' learning experiences: curricula, teaching strategies, and assessment. These elements, together with students' personal abilities and external factors, form the foundation of the educational process. The goal of primary and secondary education is to develop learners' intellectual, moral, physical, and social skills including literacy, numeracy, communication, and critical thinking (Hodge, 2010).

However, developing countries encounter several distinct challenges that can significantly impede educational development. These include, but are not limited to:

1) **Political Problems**

- **Political Instability:** Education in developing countries is often shaped by political agendas. Government policies determine education funding, curricula, teacher management, and learner assessments. Political instability disrupts the educational system as governments fail to provide the necessary resources and opportunities, focusing instead on political interests or conflicts.

- **Wars:** Wars cause significant damage to educational systems. UNESCO reports that 34 million children in conflict-affected areas are out of school. Education can restore hope and help prevent violence, but conflict destroys the educational infrastructure. Inclusive education that reduces inequality can also be a powerful tool for conflict prevention.

- **Adopting and Financing Education:** Governments are primarily responsible for adopting and financing education as it is a basic human right. Politicians play a key role in ensuring that education is prioritized and financed, which is often missing in politically unstable areas.

2) **Economic Problems**

- **Poverty:** Poverty severely impacts education in developing countries, limiting access to learning and leading to poor educational outcomes. Children from poor families are much less likely to attend school.

- **Cost of Learning:** Many learners in developing countries must pay for their education which is often very expensive. The private education sector is expensive and the public sector has limited capacity creating additional costs for learners.

- **Lack of Funding:** Inadequate funding for education results in a shortage of facilities and classrooms, low-paid or untrained teachers, and poor-quality materials.

- **Child Labor:** High poverty rates and limited educational opportunities contribute to the prevalence of child labor. Children are often employed in family businesses or other work, which consequently deprives them of education.

- **Lack of Infrastructure:** Developing countries often suffer from inadequate educational infrastructure, such as lack of schools, insufficient school furniture, and limited access to electricity and clean water.

3) **Sociocultural Issues**

- **Language barriers:** Learners in many developing countries face challenges in learning multiple languages simultaneously due to curricula often requiring at least one additional language during primary school and more in secondary education.

- **Illiteracy rates:** Low literacy rates create significant learning barriers. Educated families are more likely to encourage their children to pursue their education, whereas families without educational backgrounds may push children towards work rather than study.

- **Displacement:** Displacement, whether involving Syrian or Lebanese populations, exacerbates learning barriers, adding complex socio-cultural and economic challenges to the educational environment.

4) **Educational Problems**

- **Efficiency and Quality:** A major problem in education is the lack of basic literacy skills with 175 million young people unable to read globally. UNESCO estimates that 250 million children do not acquire basic reading and mathematics skills even after four years of schooling, contributing to what is termed a "global learning crisis." This poor quality of education results in substantial financial losses for developing countries due to wasted funding. Additionally, rapid increases in teacher numbers through untrained recruitment often undermine the quality of education (UNESCO, 2015).

- **Effectiveness and Improvement:** Effective learning is challenged at various levels including learner attitudes, teaching methods, curricula, and inadequate training of teachers and administrators. Despite efforts by governments and

societies to improve education, several obstacles hinder the effectiveness of learning processes (Abdu-Raheem, 2012).

- **Teacher Training:** Problems in teacher training contribute to inadequate educational systems. Challenges include inadequate teacher education institutions, poor academic backgrounds, and their inability to use modern technology. Teachers also face challenges such as isolation from teacher education departments and lack of feedback mechanisms, which hinder their professional growth (Duflo, 2012).

- **Lack of Learning Materials:** Schools in developing countries often face shortages of basic learning materials, including textbooks and digital resources. Inadequate funding, limited technological infrastructure, and poor internet access restrict learners' ability to engage with e-learning opportunities (Jennifer O'Neill, 2014).

- **Learners with Special Needs:** Developing countries struggle to accommodate learners with disabilities due to inadequate resources, a shortage of specialized teachers, and inadequate policies. Many learners with disabilities are marginalized or forced to drop out of school. Disabilities can range from learning difficulties and physical disabilities to chronic illnesses such as HIV/AIDS.

- **Non-Formal Education**: Non-formal and private educational institutions in developing countries face challenges such as lack of qualifications, weak competition, and ineffective outcomes. Non-formal education, which is often less structured, constitutes a lifelong process that frequently leads to inconsistent education quality of education (Jennifer O'Neill, 2014).

6. Conclusion

Curriculum development requires a comprehensive and multidimensional approach that goes beyond the boundaries of traditional classrooms. As Fullan (2016) emphasizes, achieving sustainable systemic change requires working at the macro-institutional level while fostering collective innovation across the educational system. This comprehensive approach is based on five key elements: effective school leadership, institutional infrastructure and organization, cultural transformation, informed investment, and technological integration. These elements require balancing the assessment of the technical with the human aspects of the change process focusing on fostering a culture of continuous improvement and learning. In the context of developing countries, it is important to design curricula that are appropriate to specific challenges such as limited resources, large class sizes, and diverse learners. Smith et al. (2023) demonstrated the effectiveness of learner-centered learning strategies and the "minimum" strategy in improving the performance of gifted students while enhancing their critical and creative thinking skills.

As Fullan (2014) notes, successful school leaders are distinguished by a blend of emotional intelligence, strategic vision, and robust communication and relationship-building skills. These

leadership skills contribute to creating a stimulating and supportive learning environment that encourage innovation and creativity, and help prepare learners to meet the challenges of the 21st century.

This integrated approach to school leadership, combines institutional development, effective leadership, and cultural transformation, represents a strategic investment in the future of societies and the quality of life of future generations. It transcends the traditional notion of educational improvement by embedding these capabilities within the fabric of school culture, thus ensuring sustainable impact that extends beyond mere academic success. This holistic model not only enhances educational practices but also prepares students to contribute meaningfully to society.

School Readiness to Implement the Developed Curricula in the Lebanese Context

1. Plans and Strategies

Efforts and initiatives aimed at developing the educational and school system in Lebanon have not ceased since the 1990s. These efforts were translated into a number of plans, strategies, programs, and projects that have marked significant milestones in the development of education. Some of these initiatives were based on previous experiences, which helped strengthen the accumulation of knowledge and lay the foundations for subsequent initiatives. However, some of them were not implemented due to various factors related to the political, economic, and administrative realities.

Among the most prominent recent plans and initiatives is the Lebanon five-year general education plan (2021-2025), launched by the Ministry of Education and Higher Education in 2021, as well as initiatives from the Center for Educational Research and Development (CERD) in 2022, including the launch of the Lebanese National Curriculum Framework for Pre-University Education (referred to hereafter as the National Curriculum Framework-NCF) on December 15, 2022, following the release of several reference frameworks and publications on August 23, 2022.

Notably, one of the earlier plans is the "Educational Advancement Plan in Lebanon," prepared by CERD in May 1994 and approved by the Council of Ministers in August of the same year, which served as the foundation for the curricula adopted in Lebanon since 1997.

In 2000, CERD prepared the "Strategic Directions for Education in Lebanon for 2015," and it is important to highlight the section related to the effectiveness of schools, particularly in the fifth axis: "Educational Management," or institutional development. Some indicators released by CERD show that the enrollment in public schools has not improved since the application of the new strategy and even declined significantly in the 2014-2015 academic year. Additionally, there was an increase in indicators of school dropout rates in public schools, which were a priority of the strategy, while the number of public and free private schools declined across all governorates, in contrast to a slight increase in the number of private schools (Shaib, 2015).

A major milestone in the development of education was the National Strategic Vision for Education in Lebanon, prepared by the Lebanese Educational Sciences Association in 2007. One of the key points concerns the readiness of schools to implement the curricula, particularly the expansion of teacher contracts in both primary and secondary education in public schools, alongside the enactment of laws that gradually reduced the working hours for appointed teachers.

Furthermore, the extensive training operations conducted by the Ministry of Education to include all teachers in the public sector and broad segments of private education aimed at familiarizing them with the new curricula at the time (UNESCO and the Lebanese Educational Sciences Association, 2002).

In 2000, a project for continuous teacher training was prepared, aimed at forming a group of trainers who would be responsible for ongoing teacher training in the six governorates' training centers. The project also sought to support the six main teachers' centers in the regions and then local teachers' centers, transforming them into learning resources and accredited centers for

continuous training. The project aimed to establish an information and documentation network and introduce skills based on modern technologies, particularly the internet, while setting up mechanisms for needs assessment (CRDP, 2001). Actual work on the continuous training project began in the 2003-2004 academic year (Gharib, 2008).

Studies on school readiness and its capacity to deal with the "new" curricula indicated a weakness in educational resources in public schools (laboratories, libraries, workshops, computers), according to a report by the Secondary Education Teachers' Association in Lebanon in 2001 (Lebanese Educational Sciences Association, 2007). Even when such resources were available, they were often not utilized properly due to reasons related to school management and the lack of qualified technical staff, as well as the lack of focus on non-examinable aspects. Despite the curricula emphasizing the learner as the center of the educational process and the use of active teaching methods, the reality in schools reflected a predominance of teacher-centered teaching styles and a breakdown in school climate, evident in weak relationships between students, teachers, administrators, and parents (Henningsen & Zebian, 2003). This has been a focus of the National Curriculum Framework (2022) and other reference frameworks issued by CERD in 2022, which prioritize community partnerships, school wellbeing, and continuous professional development.

Regarding school management, studies on the national strategy for education and the management of public schools in Lebanon showed that public schools face management issues, including the limited powers of school principals in administration and leadership, the hiring conditions that do not require a degree in educational administration, failure to adhere to mandatory training for principals at the Lebanese University, the absence of a performance evaluation system, and the lack of institutionalized training for principals in educational leadership and ongoing professional development (Lebanese Educational Sciences Association, 2007).

The reference to these plans, strategies, and initiatives and their evaluation is part of exploring the readiness of schools to implement the curricula adopted at the time, which remain relevant today. However, it is essential to emphasize that alongside these plans, the Ministry of Education and Higher Education has implemented several development projects, including the "Leadership Development Program for School Principals" through the first Educational Development Project-EDP (2005-2009), the "Effective School Standards," the "DIRASATI Project" (2013), and "DIRASATI-2 Project" (2013-2016), which contributed to the implementation of the educational sector development plan and the monitoring of the school improvement program, as well as the professional development program for principals and administrators through the second Educational Development Project- EDP II (2014-2016).

As previously mentioned, the ministry launched the five-year plan for general education in Lebanon (2021-2025) and is currently preparing the Ministry's Reform Roadmap (2025).

Most of these plans and strategies, along with the studies that supported them and followed them, form the basis upon which CERD relied to establish the National Curriculum Framework and its supporting documents, along with a set of other reference frameworks. These Reference Framework for the Principal's Competencies, the reference framework for the competencies of the director of teacher's training center, the reference framework for the supervisor's competencies,

the reference framework for the coordinator's competencies, the reference framework for the librarian's competencies, the reference framework for active community partnerships, the reference framework for academic accreditation: the updated standards for effective schools, the reference framework for the competencies of technical managers in teachers' training centers, the continuous professional development for school principals, and the competency assessment tools based on the principal's competencies framework. These frameworks are interconnected and offer various solutions and treatments through their practical implementation, supporting all previous and current plans and strategies. Furthermore, in 2017, the Ministry of Education and Higher Education, in collaboration with CERD, launched "Reference Frameworks - Supporting Education Quality in Lebanon," which includes four reference frameworks for the competencies of: teachers, teacher trainers, educational counselors, and psycho-social advisors.

2. Indicators of School Readiness in Lebanon

Touching upon the readiness of any school, implies its ability to achieve any of its aims and in this case, the application of the developed curriculum is one addressed target. Accordingly, the readiness of the school in this sense is its ability to apply what this curriculum requires at all levels based on what the National Curriculum Framework and its supporting papers along with other reference frameworks have provided. Therefore, we will focus on the most prominent aspects addressed by these frameworks in relation to the school's readiness to implement the developed curriculum that is currently being worked on. These are based on the Reference Framework for Academic Accreditation: Updated standards for the effective school which focused on five areas whose availability lead to the answer to the central question: What school do we wish for? i.e. in terms of realizable and achievable targets. These areas are: school leadership, teaching and learning, school environment, community partnerships, digital learning and information and communication technology. What are the justifications that can be presented in the context of linking these areas and the effectiveness of the school in implementing the developed curriculum?

School Administration and the Principal's Competencies. It is not possible to address the school's readiness to implement the developed curricula without considering the position of the principal and the necessity of acquiring leadership and administrative competencies. Given the connection between the principal's role and the roles of other job positions with the level of the abovementioned readiness, the principal plays an important and pivotal role in the success of the school (Al-Aghbari, 2006) and has an indirect impact on the learners' results (Heck & Hallinger, 2003). By successfully performing his/her roles, he/she can reshape the conditions of learning and teaching, restructure the institution, distribute leadership roles and responsibilities, enrich curricula, improve the quality of teaching and learning, and build internal and external cooperation which themselves ensure the school's necessary readiness to implement the curricula.

In order to achieve these competencies, many factors are crucial. One is acquiring personal competencies such as: emotional and creative intelligence, the application of critical, analytical and synthetic thinking. Another is reconsidering the criteria for selecting managers that have been in place for a long time, the nature of the role assigned to them, their tasks and responsibilities. Hence, the Reference Framework for the Principal's Competencies (2022) focused on a set of competencies that are consistent with the structure of the educational institution to which the

principal aspires (p. 4). They are distributed over four areas: specialized professional practices, professional relationships, continuous professional development, and professional ethics.

In this context, the Center for Educational Research and Development prepared a work based on the reference framework for the principal's competencies, and the self-assessment project for the performance of principals under the second Educational Development Project (EDPII). This work is titled "Assessment Tools – Competency Assessment Based on the Reference Framework for the Principal's Competencies", in which CERD adopted an evaluation policy that includes a 360-degree assessment (i.e., evaluating the employee's performance from various perspectives: self-assessment, direct supervisor assessment, subordinates' views, peer evaluation, etc.) to address the questions related to the purpose, timing, tools, methods, and how to make use of the results.

The National Action Plan for improving administrative, educational, and overall educational performance in Lebanon, proposed by the Center for Educational Research and Development, and among the foundational supporting documents for the National Curriculum Framework (which has not been published), in the context of developing the pre-university general education curriculum, emphasized the need to reconsider the job description of the principal, as well as the conditions for their selection, appointment, preparation, and ongoing professional development. Additionally, the job descriptions for other positions (supervisors, coordinator, and librarian) were also included. The proposal also introduced new job descriptions, for a primary reason: that it is impossible to talk about the readiness of schools without considering the development of these positions, training the leadership/administrative team, and updating the school structure to enable it to achieve optimal performance, quality, and professionalization.

The quality of educational administrative performance is directly linked to academic accreditation as well as to other frameworks (social-emotional learning, school well-being, professionalization of education, and the motivation/Grant system), as will be examined. Therefore, the school's readiness from this aspect means verifying the set of activities and responsibilities through which the school administration manages these operations, and the competencies possessed by the administrative and educational bodies.

Self-evaluation. The concept of an effective school is based on the school's ability to conduct permanent self-evaluation to ensure comprehensive quality according to the standards set by the "Reference Framework for Academic Accreditation: Updated Standards for an Effective School" prepared by the Center for Educational Research and Development (2022) in accordance with international studies and standards. The latter include governance standards, ensuring the quality of education and its indicators, and unifying the mechanism for improving this performance (p. 21). This is in response to the question posed by the framework his is in response to the question posed by the Lebanese National Curriculum Framework: What kind of school do we wish for?

The importance of evaluation according to the Academic Accreditation Reference Framework stems from the fact that it is a fundamental process in educational development, and emulates one of the principles of governance. Its goal is not to judge people, but to reveal the strengths that must be preserved in the school, and the weaknesses that need to be thought about and worked on to

improve them. The more effort is exerted on handling weaknesses, and reinforcing strengths, the higher the level of school readiness and ability to deal with the developed curriculum and other educational processes.

Strengthening Community Partnerships. Among the indicators that must be worked on to ensure the effectiveness of the school in implementing the developed curriculum is strengthening community partnerships and their related fields. We have seen that these partnerships have been missing from most of the plans and strategies that were previously presented despite their importance in achieving school effectiveness.

The National Curriculum Framework emphasized the principle of administrative flexibility (p. 38), stating that although the developed Lebanese curriculum is centralized in nature, it encourages school principals, teachers, and learners to develop self-initiatives and be prepared to collaborate and work jointly with local communities. It is based on the fact that the partnership that the school establishes with government and community institutions is positively reflected in the quality of the educational process. Any school with high levels of family participation has high levels of students' academic achievement (Shoroukh, 2004) as such partnerships achieve the goals related to improving the learner's academic level (Swap, 2013, p. 13). The developed curriculum calls for strengthening the partnership between educational institutions and other community institutions emphasizing the importance of a comprehensive approach to learning (National Framework, p. 37). In line with this, the reference framework for active community partnerships developed by the Center for Educational Research and Development (2022) views these partnerships as "based on cooperation and coordination between the components of the school on the one hand, and the surrounding environment of social forces , governmental and non-governmental organizations on the other hand to build bridges and constructive relationships among these various parties .All of these contribute to improving the teaching-learning process, activating the role of educational institutions in society and advancing it" (p. 25).

The Reference Framework for Active Community Partnerships (2022) includes six areas as follows: volunteer work, career guidance and the labor market, prevention and protection, awareness, parental involvement, and public relations and communication with the community. If we consider that the implementation of these partnerships is a key component in the school performance development and evaluation programs at the Lebanese level, community partnerships carried out by the school become a primary factor in its readiness to implement the developed curriculum. This curriculum encourages self-initiated and voluntary efforts, involves parents and members of the local and civil community in the educational process, and maximizes the school's role in serving the environment, local community, and problem-solving.

Social-Emotional Learning (SEL). Social-emotional learning is considered one of the indicators of school readiness. The developed curriculum has primarily focused on this principle based on what is outlined in the National Curriculum Framework. A suitable reference framework was established based on the projects undertaken by the Center for Educational Research and Development and the Ministry of Education and Higher Education, such as the Social-Psychological Support Program for learners, teachers, and parents during crises and emergencies (2020), the recovery plan following the COVID-19 pandemic, and the Summer School Project

(2021, 2022, 2023), leading to the National Reference Framework for Social-Emotional Learning (2023). All of this justifies the national and educational importance of working on this framework, as it is central to the educational process and one of the components used to measure the effectiveness of the school, especially when educational management plays a decisive role in creating an educational environment that enhances social and emotional learning among students.

The relationship between school readiness and the implementation of the developed curriculum is reflected in the focus of the Lebanese National Curriculum Framework for Pre-University General Education Curriculum (2022), which emphasizes "access for all to quality education, the demand for an inclusive education approach for students with special needs, and achieving a balance between cognitive, social, and emotional components in learning..." (p. 18). The school meets the need for adopting inclusive education, as called for by the developed curriculum, when it provides the necessary components for a high-quality educational environment, in addition to the availability of leadership skills among its leaders.

School Well-Being. The school achieves its effectiveness mainly when it works to achieve school well-being in all its dimensions. Its importance is highlighted by the fact that it creates a positive and supportive school environment that enhances such well-being, along with justice, and social integration. It is supported by a new strategy to improve mental and psychological health services in schools.

The Framework of Reference for School Well-Being reflects an advanced trend in school well-being policy in Lebanon based on physical, health, environmental, social, and emotional competencies that fall within the areas of transversal competencies identified by the National Framework for General Education Curriculum (p. 14). They require "supporting the efforts of teachers and learners to enable them to deal constructively with changing conditions, difficult living conditions, social crises, and psychological trauma" (p. 26). It takes into account the problems endured by learners such as bullying, dropout, violence, school leavers due to health crises and disasters, among others. This framework was based on the initiatives undertaken by the Center for Educational Research and Development in coordination with the Ministry of Education and Higher Education to promote well-being including the Psychosocial Support Program in Emergencies and Crises, the Academic Accreditation Framework, the Child Protection Policy in the School Environment, and the Social Emotional Learning Framework in Lebanon.

The framework raises the issue of the physical structure of the school specifically the buildings and how to occupy their spaces. It raises again the issue of school clusters from the perspective of addressing the issue of schools in which the number of learners, the number of teachers or even the size of the school are not proportionate. Here, we conclude that the conditions for achieving this readiness extend to the human and material aspects of the school and even the material surrounding the school. All of these points must take into account the requirements of the developed curriculum and the importance it attaches to school well-being. The physical aspects of the school include: the location of the school, the condition of the building, its standard specifications and readiness, and the size of the classes. Moreover, it necessitates the availability of the following: green spaces, rest and entertainment facilities, safe and clean sanitary facilities, health facilities, halls designated for teachers and meetings, a library, halls for laboratories and

practical activities, information and communication technology systems, technological equipment and supplies specific to inclusive education, lighting, ventilation, heating, cooling, and maintenance supplies.

Regarding the human aspects, they involve all school workers, their level of job qualification, and competence to work. They are made up of: an administrative team, teachers, technicians, technicians, and employees who provide services to the school.

In terms of school leadership and management, the Reference Framework for Academic Accreditation: The Updated Standards for Effective Schools (2022) addresses in the domain of school leadership, seven sub-domains: Strategic leadership, educational leadership, operations management, professional development leadership, communication leadership, data usage, and school resource management. (p. 56).

Providing School Support. The National Curriculum Framework of the Curricula focused on the importance of school support by encouraging all learners in developing their learning, life and work skills. It focuses on transversal competencies, health, well-being, and teachers' orientation towards developing and enhancing education (National Framework, p. 36). The school is responsible for adopting a comprehensive and holistic approach to learning taking into account the provision of equal opportunities for all learners and their needs specifically for those with special needs (learning difficulties, disorders, disabilities and gifted students), as the Lebanese curriculum noted. This implies that the school must be well equipped. The needs addressed are in terms of human, material and logistical resources that pave the way to achieve this goal.

On the other hand, the school must engage in forms of cooperation with parents to ensure school support that handle the academic failure of some learners which aligns with the stipulated principles of curriculum development (p. 36). Through this partnership, the school manages the support process in agreement with its teaching staff, parents and the local community.

Human, Material and Logistical Readiness. As studies on size economies consider the appropriate space conditions that fit the institution's goals, this also applies to the school building in terms of the level of its rehabilitation and the necessary equipment, laboratories and information and communications technology. It also includes the ratio of teachers to learners, the number of technicians in the school and their training levels, and the size and number of classrooms. Other indicators which indicate the school's readiness include the availability of the equipment, the suitability of some of them to carry out the required activities, the availability of equipped and safe facilities related to health, recreation and arts in the school. In order to implement the developed curriculum, additional conditions are required for schools to be classified as inclusive schools. They are related to: adopting inclusive education with all the human, material and technical readiness.

 Another indicator of material readiness is the primary reliance on technology in the learning process. This requires its availability along with the need to update it continuously to meet the requirements of the curriculum. In addition to training employees on technology in line with what was stated in the Academic Accreditation Framework: The Updated Standards for an Effective School which allocated a separate field for digital learning, information and communications

technology among the five fields addressed in it. (Academic Accreditation Framework, 2022, p. 128).

The Academic Accreditation Framework addressed the school environment as one of the five fields it focused on. These include - in addition to the physical environment previously mentioned - relationships within the school among the various members of the school community, and the degree of well-established interaction among these parties. Another field addressed is the participation of learners in school life through providing equal opportunities for them in carrying out school activities. Finally, the well-being of the school community, which includes establishing a mechanism for dealing with complaints and suggestions, protecting the learner, providing a healthy environment, and providing psychosocial support.

Professionalizing Education. According to the Organization for Economic Cooperation and Development (OECD, 2015), there are five aspects of professionalizing education: making education an attractive profession, developing teachers' knowledge and competencies, improving teachers' recruitment, selection, and deployment conditions, retaining good teachers in schools, and establishing and implementing teacher-related policies.

Given this importance, the Ministry of Education and Higher Education, along with the Center for Educational Research and Development, launched reference frameworks to support the quality of education in Lebanon (2017) for teachers, teacher trainers, educational counselors, and social-psychological counselors. In 2022, CERD also launched reference frameworks for the competencies of several school staff, including the supervisor, coordinator, and librarian, in addition to the principal. These frameworks identified the required professional competencies and the conditions for professionalizing these roles in alignment with global trends, while considering the Lebanese context, educational system, and general directions, as well as the close interrelationship between the roles of these positions in a complementary and holistic manner.

The professional competencies in all the reference frameworks fall under four areas: specialized professional practices, continuous professional development, professional relationships, and professional ethics. These intersect with the OECD's (2015) definition of professional competencies. The reference frameworks outlined the components of these four areas, listing a set of competencies for each. While the areas of practices, relationships, and ethics create a positive school climate that enhances teaching and learning processes, continuous professional development serves as a vital contributor to this environment, enabling staff to apply these competencies with professionalism, which reflects positively on the overall school performance.

When considering continuous professional development, it aims to build the capabilities of the school community, based on the study of needs and aspirations. As mentioned earlier, the competencies of school principals that should be strengthened to lead the school improvement and performance plans were highlighted. However, this development is not limited to principals only; it includes all school staff to help them adapt to the changes introduced by the implementation of the developed curriculum and address new trends and updates within this framework.

In the context of professionalization, the issue of contracts cannot be overlooked, as it has become a prominent phenomenon in the Lebanese education sector over the years for multiple reasons.

One of the main factors was the discontinuation of teacher training intermittently, followed by a complete cessation as per Law No. 344/2001, issued on August 6, 2001. Article 5 of this law prohibited the employment of teachers without at least a university degree (except for teacher training centers' students who joined before the law was enacted). This article was amended by Law No. 489 on December 12, 2002, which allowed contracts for those without a degree in primary education until the 2003-2004 academic year and allowed teacher training for non-degree holders according to Law No. 442/2002, issued on July 29, 2002. Thus, teacher preparation became confined to the Faculty of Education at the Lebanese University.

However, the general conditions in the country led to irregular training sessions at the Faculty of Education, as well as insufficient numbers of graduates to meet the needs of public schools and high schools. Along with other causes, the number of contracted teachers in public pre-university education, particularly in public education, gradually increased. According to the statistical bulletin of the Center for Educational Research and Development (2022-2023), the percentage of contracted teachers in various roles reached approximately (55.1%) of the total number of teachers.

This percentage reveals that more than half of the teachers in public education are not subjected to any organized professional preparation. As a result, practitioners of the teaching profession are divided into two categories with differing levels of professional preparation, which hinders the achievement of professionalization and the adoption of uniform performance and motivation standards. Solving this problem is an urgent necessity to achieve professionalization standards and improve the quality of education in Lebanon.

3. Lebanese Studies on School Readiness
3.1. Introduction

The following section includes a presentation of a number of Lebanese studies and reports that addressed school readiness in Lebanon. The objective of each study was identified as well as its main findings to ensure its relevance to our topic and to later use these findings to outline school readiness indicators. These studies focused on: how the application of educational curricula affects the quality of education, the readiness of schools to receive students and the impact of educational infrastructure and resources on successful implementation of curricula. These studies will be presented in a chronological order of publication from oldest to newest.

3.2. Shuayb's Study (2014)

Shuayb, M. (2014). Partnerships in Education: How Can NGOs Support Schools in Lebanon? This study aimed to reveal ways to improve school readiness through community partnerships with civil society and international organizations in Lebanon. This includes identifying the challenges facing schools in Lebanon and how NGOs can help overcome them by evaluating the effectiveness of programs and initiatives implemented by NGOs. The study also pointed out to how NGOs could affect the quality of education in the concerned schools by

enhancing the educational environment, providing the necessary resources, and providing recommendations to enhance cooperation between NGOs and schools.

The study was applied on a number of schools facing economic and social challenges, in which NGOs work or cooperate. Data was collected through questionnaires and semi-structured interviews with teachers, school principals, and representatives of NGOs.

The findings of the study revealed the following:

- Lebanese schools face many difficulties such as lack of resources, weak infrastructure, and high student-to-classroom ratios, and these factors negatively affect the quality of education.

- Partnerships between NGOs and Lebanese schools played a major role in improving school readiness, especially in poor areas.

- International organizations such as UNICEF provided financial and technical support to improve school infrastructure, provide educational resources, and implement additional educational programs.

- Partnerships also helped train teachers and provide psychosocial support to students suffering from the effects of conflicts and crises.

The study recommended developing effective strategic partnerships between schools and NGOs to provide sustainable support, including mutual understanding and exchange of resources and expertise. This helps achieve educational goals and improve educational conditions. It also recommended supporting educational initiatives by providing the necessary funding from NGOs and conducting periodic evaluations of NGO programs to determine their impact on the quality of education.

3.3. Dryden-Peterson Study (2016)

Dryden-Peterson, S. (2016). Refugee Education in Countries of First Asylum: Breaking Open the Black Box of Pre-Resettlement Experiences. This study addressed the challenges facing Lebanese schools in preparing themselves to receive large numbers of displaced Syrian students and how this would impact the quality of education and school infrastructure. We present it here only from the perspective of schools' capacity to accommodate students.

The findings of the study revealed the following:

- The pressure on Lebanese public schools increased due to the influx of a large number of displaced Syrians, which led to overcrowding of classrooms.

- Despite international and local efforts to support education for displaced persons, many schools were not adequately equipped to meet the linguistic and social needs of these students.

- The disparity in educational opportunities between Lebanese students and displaced Syrians became a real problem, as there were challenges in adapting the displaced to the Lebanese curricula.

3.4. Farhat's Study (2019)

Farhat. (2019): Curriculum Implementation and School Readiness: A Case Study in Lebanese Public Schools. This study aimed to explore the readiness of schools to implement modern curricula, focusing on factors that hinder full implementation such as lack of teacher training, insufficient educational materials, and infrastructure. The study showed that many schools suffer from a severe shortage of the resources they need to implement the curricula effectively, and that teacher training is insufficient to promote a comprehensive understanding of the new curricula.

The study also showed several results related to the following areas:

- Challenges in implementing curricula: The study showed that there are multiple difficulties facing public schools when implementing modern curricula, including inadequate teacher training and educational resources, and these challenges negatively affect the effectiveness and quality of education.

- School readiness: The results showed that some public schools are not always ready to implement the new curricula, due to the lack of appropriate infrastructure and necessary resources such as books and educational equipment, which hinders the effective implementation of curricula.

- Teachers' response and educational practices: It was observed that some teachers make a great effort to implement the curricula despite the challenges which indicate their commitment. They expressed a desire to improve the educational process and showed a great desire to adapt to the new curricula, but they faced many obstacles.

- Community interaction: The results indicated that parent and community interaction have a positive impact on school readiness, as it can contribute to supporting the educational process.

The study recommended the following: providing continuous training for teachers , increasing government support for schools ,improving infrastructure to ensure effective implementation of curricula and enhancing communication between management and teachers to ensure effective implementation of the curricula.

3.5. World Bank Study (2019)

World Bank. (2019). Lebanon: Education Public Expenditure Review. This study analyzes public spending on education in Lebanon and its impact on school readiness under the multiple crises facing the country. It indicates that the lack of government funding leads to the deterioration of school infrastructure and the decline in the quality of education. It also highlights the gap between urban and rural areas in terms of the availability of educational resources, and indicates the need for structural reforms in the education system to ensure better school readiness.

The study concluded the following:

- The Lebanese education system suffers from a severe shortage of funding, as insufficient resources are allocated to support infrastructure and improve the quality of education.

- Public schools suffer from significant disparities between rural and urban areas, as rural schools tend to be less equipped and less able to provide an effective learning environment.

- There is an urgent need for comprehensive reforms in educational spending policy to ensure improved quality of education and school readiness across the country.

3.6. El-Khoury's Study (2020)

El-Khoury, Z. (2020). Educational Inequalities in Lebanon: The Effect of Socio-Economic and Geographical Disparities on School Readiness. This study focuses on the impact of socio-economic and geographical disparities on school readiness in Lebanon. It examines the significant disparities between schools in urban and rural areas, and how this impacts the quality of education and learning opportunities. The study shows that students in rural and poor areas face greater challenges in accessing quality education, leading to significant disparities in school readiness across different regions of the country.

The findings of this study revealed the following:

- The gap between schools in urban and rural areas significantly affects school readiness, as rural schools suffer from a lack of basic resources such as educational equipment and qualified teaching staff.
- Students in poor and rural areas suffer from fewer educational opportunities, leading to increasing socio-economic disparities in educational attainment.
- Improving school readiness requires investments in infrastructure and training, in addition to educational policies that take into account geographical and economic disparities.

3.7. Shuayb and Al-Salman's Study (2020)

Shuayb, M., & Al-Salman, S. (2020). The Impact of the Lebanese Economic Crisis on Education. This study focused on the impact of the economic crisis on the readiness of Lebanese schools, including the provision of basic resources, school equipment, and the ability to maintain the required educational standards. The study capitalized on the urgent need for comprehensive reforms and supportive policies by highlighting the following areas:

- The economic context and the impact of the Lebanese economic crisis that has been significantly worsening since 2019 in addition to the high rates of inflation and unemployment, the devaluation of the Lebanese currency, and the impact of this crisis on all aspects of life in Lebanon, including education.

- Impacts on education in terms of school funding. Schools, especially private schools which represent a large part of the education system in Lebanon, suffer from a lack of funding due to families' failure to pay school fees. In addition, there is the decline in the level of infrastructure services due to the deterioration of educational facilities as schools are no longer able to maintain buildings and provide an appropriate educational environment. Among the impacts on education are those related to teachers who suffer from low salaries due to the deterioration of the value of the Lebanese pound, which affected their ability to meet their basic needs and thus the quality of teaching. Also, those impacts relate to learners, most of whom were forced to drop out or move to less expensive schools due to the deterioration of their families' economic situation.

- Impacts on the quality of education: The crisis caused a decline in the quality of education due to the lack of financial resources in both private and public schools, and many schools were forced to reduce educational programs and support services for students.

- Disparity between private and public schools: The study showed that the gap between private and public schools increased during the crisis, as some of the better-funded private schools were able to continue, while the conditions of public schools and many of the less-funded private schools deteriorated.

- Psychological and social repercussions: The study identified the impact of the crisis not only on the educational aspect but also on the psychological state of students, their families and teachers, specially that psychological and social pressures increased significantly.

The findings of the study showed the following:

- Lebanese schools were greatly affected by the economic crisis, as they faced a severe shortage in funding that led to a reduction in basic educational resources such as books and school supplies.

- Many public schools suffered from a shortage of teachers, as some teachers moved to the private sector or abroad searching for better work opportunities.

- School maintenance and equipment deteriorated due to the lack of funds to repair the infrastructure.

- Frequent power outages and internet services have disrupted digital education that became essential during the Corona pandemic.

The study provided a set of recommendations to restore the education system in Lebanon such as providing financial assistance to schools, restructuring the education system to be more capable of facing crises, and enhancing cooperation between educational institutions and international organizations to provide financial and technical support.

3.8. Karami and Hamadeh's Study (2021)

Karami & Hamadeh. (2021). The Response of Lebanese Schools to COVID-19 Pandemic: Challenges and Innovations. Karami & Hamadeh's 2021 study, "The Response of Lebanese Schools to the COVID-19 Pandemic: Challenges and Innovations," examines how Lebanese schools adapted to the constraints of the pandemic, focusing on the shift to distance learning and the continuity of education. The study aimed to assess the challenges faced by schools, analyze strategies for maintaining the educational process, and explore the innovations that emerged from the transition to distance learning.

Challenges identified included:

- Digital infrastructure: Many schools suffered from weak digital infrastructure, including the lack of technological devices and weak internet connection, especially in rural areas.

- Technology training: Teachers and students faced difficulties in adapting to distance learning platforms due to the lack of training in the use of modern technology.

- Socio-economic disparity: There was a large gap between students from different social and economic backgrounds, as many of them were unable to access electronic devices or the internet.

- Psychological stress: The mental health of teachers and students was affected by new challenges, including isolation and the inability to communicate directly.

As for innovations and responses, the study noted the following indicators:

- Blended education: Some schools adopted the blended model that combines traditional education and distance education, to reduce the density of students in classrooms and ensure compliance with health procedures.

- Use of electronic platforms: The use of platforms such as Google Classroom and Microsoft Teams has spread to ensure the continuity of distance education. Education via messaging applications such as WhatsApp has also been activated in schools that were not fully equipped with technology.

- Collaboration between schools and parents: The role of parents as partners in the educational process emerged, as they had to closely monitor their children's performance and participate in learning.

Regarding curriculum improvements, curricula were modified to suit the new educational environment. For example, some educational materials were reduced and assessment methods were adapted to suit distance learning.

The study findings revealed the following:

- The pandemic significantly impacted Lebanese schools, forcing them to develop new strategies for continuing education. Despite substantial challenges, the situation also spurred innovations in teaching methods and educational management.

- Most schools were unprepared for the transition to distance learning at the pandemic's onset, with a notable deficiency in necessary digital infrastructure.
- There was a marked disparity in preparedness between private and public schools, with private institutions better equipped for online education.
- Despite numerous obstacles, some schools managed to devise innovative solutions, such as utilizing mobile applications for communication with students in areas lacking robust internet service.

The study recommended improving the technological infrastructure in schools, providing devices for students who do not have the necessary means to access distance education, training teachers and students to ensure the effective use of digital education tools, and providing psychological and social support to teachers and students to help them deal with the psychological challenges imposed by the pandemic.

3.9. UNESCO's Study (2021)

UNESCO. (2021). Beirut Explosion: Rehabilitation of Affected Schools. This report addresses the efforts made to rehabilitate schools affected by the Beirut Port explosion on August 4, 2020, and its impact on the readiness of schools to receive students. It aims to assess the damage and provide recommendations for the rehabilitation of damaged schools, with a focus on restoring education and improving educational conditions. This is done by:

- Estimating the magnitude of the school damage caused by the explosion.
- Developing a plan to rehabilitate damaged schools and provide safe learning environments.
- Enhancing the ability of the education system to overcome future crises.

To this end, questionnaires were designed to collect comprehensive information from school principals, teachers, and parents about schools' damage. Interviews were also conducted with a range of stakeholders, including school principals, teachers, and community representatives to envision the damage and challenges facing schools. Field visits were conducted by a team of experts to directly impacted schools to assess the damage and collect accurate field data on the condition of schools and facilities. Analysis of the data collected enabled the identification of rehabilitation priorities and estimation of the necessary costs.

The direct impact on students and teachers, including the psychological and social effects resulting from the explosion, was assessed. The assessment included how the explosion affected access to education and educational conditions in the affected schools.

The report's findings were divided into three areas as follows:

1) **Damage assessment**

   - About 150 schools were directly damaged, affecting more than 85,000 students.
   - Damage was identified as broken windows, collapsed walls, and damaged sanitary facilities.

2) Impact of the explosion on education

- The explosion led to the suspension of education in some schools, while other schools were forced to reduce the number of students due to the damage.
- The unstable conditions affected the mental health of students and teachers.

3) Challenges in rehabilitation

- Rehabilitation operations face multiple challenges, including lack of funding, bureaucracy, and delayed evaluation.

The report recommended:

1) Rehabilitation of schools

- Allocating sufficient financial resources to rebuild damaged schools and improve facilities.
- Establishing local task forces consisting of teachers and the local community to facilitate the rehabilitation process.

2) **Providing psychological support.** Providing psychological support programs for students and teachers to help them overcome the effects of the trauma resulting from the explosion.

3) **Improving infrastructure.** Upgrading sanitary facilities, and enhancing safety in schools to prevent such disasters from occurring in the future.

4) **Developing contingency plans.** Creating contingency plans for education that aims to ensure the continuity of education during future crises.

3.10. Shuayb's Study (2021)

Shuayb, M. (2021). The Impact of the Lebanese Crisis on the Education Sector: Challenges and Opportunities. This study reviews the impact of successive economic and political crises in Lebanon on the education sector, focusing on the impact of these crises on school readiness in terms of infrastructure, curricula, and the ability to provide quality education. The study indicates that the education system in Lebanon faces major challenges related to providing a safe and effective school environment, especially in rural areas and areas affected by the Syrian displacement. The study reviews the opportunities available to improve school readiness, including international interventions and new funding strategies.

The study results include:

- The economic and political crisis in Lebanon has led to a severe deterioration in school infrastructure, especially in rural areas and areas hosting displaced Syrians.
- Public schools suffer from a lack of funding, which has affected the quality of education and basic services provided to students.

- Lebanese families face difficulty in securing education for their children due to high costs, which has increased school dropout rates.
- There are opportunities for improvement through international interventions and increased funding, but this requires structural reforms and improving the efficiency of educational spending.

3.11. Hammoud, Shuayb & Al-Samhoury's Study (2021)

Hammoud, Shuayb & Al-Samhoury (2021): The Challenges and Prospects for Returning to School: Reflections from Parents, Teachers, and Principals in Lebanon. Conducted by the Lebanese Center for Studies in 2021, this study examined the readiness of schools, teachers, families, and students for the academic year 2021-2022 across all Lebanese governorates. It aimed to explore the challenges and prospects related to returning to in-person and online education, as well as to identify possible solutions for a successful return, especially after the Corona pandemic. The study surveyed the opinions of 2,442 parents and 819 teachers from the public and private sectors, in addition to conducting telephone interviews with eight school principals from both sectors distributed across all eight governorates.

The findings were divided into four main areas:

- The impact of the Lebanese crisis on the social and economic situation of teachers and parents
- The readiness and preparedness of schools
- The challenges associated with returning to in-person and online education
- The potential solutions from the perspectives of parents, teachers, and school principals.

The focus will be on what the research found in these four areas and link them to school readiness. In the area of the impact of the crisis on the social and economic situation of teachers and parents, it was found that the financial crisis, especially after the deterioration of the Lebanese pound exchange rate, negatively affected 67% of parents in public schools and more than 55% of teachers in these schools in terms of their inability to pay their bills (p. 7), and also significantly affected the private education sector. The financial crisis and its impact on the standard of living have left many parents (78%) and teachers (79%) with no choice but to consider leaving the country in search for a better quality of life elsewhere. Interviews with principals also showed that teachers are leaving Lebanon in search for more competitive jobs abroad (p. 7). Naturally, teacher migration has affected the level of readiness of schools in terms of human resources.

The study adds that the economic crisis has forced many parents to transfer their children from private schools to public schools because they can no longer afford private school tuition fees. 31% of parents with children in public schools reported that they have recently transferred their children to public schools (during the year 2019-2020). Moreover, 15% of parents with children in private schools reported that they are considering transferring their children to public schools. When asked about the reasons for transferring or planning to transfer their children to public schools, about 85% indicated that they can no longer afford private school tuition fees. In contrast, 12% reported that the public school was closer to their homes, making transportation

easier (pp. 19-20). It is important to note that the large and sudden influx of students puts pressure on public schools in some governorates, affecting their material readiness, especially if they are not qualified to accommodate numbers that exceed their size, and their human readiness in terms of the lack of sufficient teaching staff.

The findings from the study highlight significant concerns about school readiness for the 2021-2022 academic year, particularly in Lebanese public schools compared to private ones. The study reports that 29% of parents with children in public schools believe these institutions are not prepared for the new school year, a sentiment significantly lower in private schools at 13%. Similarly, 45% of public-school teachers feel their schools are unprepared, versus 26% of their counterparts in private schools. These perceptions underline a notable disparity in readiness between public and private educational institutions The primary reasons cited by parents and teachers for the lack of readiness include logistical and health concerns. A critical operational issue is the lack of fuel, which affects electricity, heating, and transportation. The high cost of these essentials further strains the schools' ability to function normally. Additionally, the inability to maintain social distancing remains a significant challenge, exacerbating the risks associated with in-person education during the ongoing pandemic. Compounding these issues is the slow pace of COVID-19 vaccinations among students and teachers, which delays the safe return to classroom settings. Moreover, the transition to online learning—a necessary alternative amid physical school closures—faces major hurdles. Most notably, the unreliable access to electricity and internet connectivity makes it impractical for many students and teachers to participate effectively in remote education (p.21). According to the results of interviews with school principals, the economic and fuel crises are affecting the availability of drinking water in some schools, as water supply cannot be secured to schools which affects students' hygiene and safety (p. 23).

As for the results of the second area about challenges associated with online education, the study showed that one third of each the parents (34%) and the teachers (35%) reported that power outages and the lack of reliable internet amid the worsening fuel crisis are the main concerns when returning to online education, and two-thirds of parents (66%) who have children in public schools and more than half of public school teachers (51%) reported that they have poor internet connectivity (P.9).Also, 16% of parents and 19% of teachers highlighted the need for establishing a fund to provide financial support to schools. Moreover, principals indicated that providing assistance to schools, teachers and parents is vital for saving the school year (P.9). This indicated that the school lacks the necessary financial resources that enables it to implement a new school year in a crisis situation.

As for the impact of the crisis on school readiness and preparedness, the results indicate that 29% of parents of students in public schools believe that their child's school is not ready for the new school year, compared to 13% of parents of private schools. Similarly, (45%) of public-school teachers surveyed indicated that their school was not ready for the new school year, compared to a quarter (26%) of private school teachers (p. 8). These responses indicate that while a significant proportion of teachers and parents in both sectors were not ready, the crisis had a more noticeable impact on parents and teachers in the public sector. Furthermore, most principals reported that their schools were not ready to operate and receive students. Only a few had prepared

to reopen their schools, and these few identified risks related primarily to fuel shortages and power outages that could hinder the implementation of these plans.

3.12. Toma & Vervenne's Study (2022)

Toma & Vervenne (2022). Educational Inequality in Lebanon: Challenges Facing Rural Schools. The study addressed the issue of school readiness and the disparity in this readiness between schools in urban and rural areas in Lebanon, focusing on the challenges facing these schools, including the lack of educational resources, infrastructure, and government support, with the aim of exploring the educational gaps resulting from the inequality in resources and opportunities available to students in urban and rural areas, and the causes of educational inequality in Lebanon. Finally, it aimed to provide recommendations to address educational gaps and improve the quality of education in rural schools.

Data was collected through interviews with teachers, school principals, and parents providing insights into the challenges and opportunities in rural schools. Additionally, questionnaires were used to collect quantitative data on the educational experiences in these schools.

Main finding included:

1) **Challenges**

Rural schools suffer from a lack of educational resources, such as books, technology, and sanitary facilities. Instances were recorded where students had to share textbooks or rely on informal materials due to a shortage of textbooks. The lack of necessary technology, such as computers and internet access, has created a significant gap in digital learning opportunities between students in rural and urban areas.

Many schools in rural areas suffer from poor infrastructure. The study confirmed that many schools lack basic sanitation facilities, such as clean toilets, adversely affecting the learning environment and student attendance. The study also showed that some schools suffer from overcrowded classrooms, which makes it difficult for teachers to deliver a lesson effectively. This also leads to negative learning experiences for students. Moreover, the scarcity of resources and equipment is much more acute in rural schools compared to their urban counterparts, with infrastructure services such as electricity and water often being unreliable.

As for academic challenges, there is difficulty in accessing higher education and advanced educational resources for students in these areas. The study showed that education levels in rural schools are often lower than in urban schools. This is due to the lack of qualified teachers and the absence of academic support. The study also noted that there is a lack of extracurricular programs and activities that enhance learning, which affects the development of students' skills in a comprehensive manner.

2) **Regarding differences in educational opportunities**

The study showed that students in rural schools face greater challenges than their peers in urban areas, including fewer opportunities to obtain a good education, especially opportunities to enroll in higher education. In addition, the school dropout rate is high due to economic pressures, which makes it difficult for students to complete their education.

The results of the interviews showed that many parents and teachers express their concerns about the quality of education in rural schools and call for improved support from the government and the community. The results also indicated that poor transportation and access to schools in rural areas negatively affects students' attendance at school.

The large disparity in the quality of education between rural and urban areas leads to a disparity in students' opportunities for academic success.

The study presented the following recommendations:

- Increasing government support: It is necessary to allocate more financial and technical resources to rural schools.
- Improving infrastructure: Investing in improved school facilities and providing the necessary technology for education.
- Teacher training programs: Developing special training programs for teachers in rural areas to enhance their skills and guide them.
- Increasing community awareness: The importance of raising awareness about the value of education in rural communities and encouraging parents to support their children's education.

3.13. UNICEF's Study (2022).

UNICEF Lebanon. (2022). Lebanon Education Brief: Challenges and Responses. This study examines the most significant challenges facing education in Lebanon, including school readiness under the severe economic crisis. It focuses on how funding shortages, power outages, and the high cost of living affect schools, and presents possible solutions to improve school readiness through international support and increased investment in education. It highlights the important role played by NGOs in enhancing school readiness, especially in the most affected areas.

The study identified the following challenges:

- The economic crisis: It has significant impact on families' ability to afford education, leading to increased dropout rates.
- Quality of education: The deterioration of educational infrastructure and educational resources affected the quality of education provided.
- Health impacts: The impact of the COVID-19 pandemic on education led to schools' closure and   learning loss.
- Crisis response: There was a lack in effective response to education requirements during times of crisis.

The findings of the study included the following:

- Increase in school dropout: The study recorded a significant increase in dropout rates among students due to the economic crisis, which negatively affected the number of students enrolled in schools.
- Deterioration in the quality of education: The study showed that there was a deterioration in the quality of education due to a lack of resources, including a lack of trained teachers and appropriate educational facilities.
- Impact of the COVID-19 pandemic: The pandemic caused the interruption of traditional education. This led to students losing learning opportunities. It also led to the adoption of online education, which was not available to everyone due to the lack of technology.
- Economic challenges: The economic crisis made it difficult for families to afford education, including tuition fees and school supplies, which prompted many families to withdraw their children from schools.
- UNICEF and stakeholders' response: UNICEF responded through financial support programs, providing educational materials, and promoting distance learning. Also, vocational training was provided to improve teachers' skills.
- Cooperation between actors: The study highlighted the importance of cooperation between the government, civil society organizations, and the private sector to ensure the sustainability of education and meet the needs of students and teachers.

The study recommended developing educational support programs to enable students to return to school, enhancing distance learning and providing the necessary resources for teachers and students, and vocational training for teachers. Finally, it recommended cooperating with stakeholders such as the government, civil society organizations, and the private sector to improve the educational situation.

3.14. Study of the Ministry of Education and Higher Education and the World Bank (2024)

An Analytical Study on Teacher Utility and Cost Efficiency in the Public-School Sector (2024). This study aimed to identify potential ways to improve the efficiency of resource use in the formal education sector. It highlighted several key conclusions.

On the subject of human resources readiness, the study found that the ratio of students to teachers in Lebanon is lower than the average ratios adopted by the Organization for Economic Cooperation and Development, especially in the secondary stage (13.01% in primary grades and 5.91% in secondary), while for the Organization for Economic Cooperation and Development it is 15.1 in primary school and 13.1 in secondary school. These ratios vary from one governorate to another and even between the same schools. The study considered that there is a weakness in the effectiveness of using teachers, and a defect in the application of regional equality in the distribution of teachers (p. 2).

The study attributes the reasons for the low ratios of students to teachers to the fact that the teaching hours (the quota) of personnel or full-time teachers are frequently used for non-educational tasks such as administrative work, supervision, the library, etc. This is due to the need for someone to perform these tasks, or upon the request of the teacher himself due to his health condition. The aforementioned study attributed this defect in the working hours of teachers in the staff to the lack of a clear policy regarding the working hours of teachers (p. 2).

Concerning the student-teacher ratios, the study also highlights another pertinent problem, which is the problem of contracting of part timers. This problem is represented in that a large number of part time teachers work under contracts with limited number of teaching hours, specifically in the secondary school. It is stated that about 50% of them teach 7 hours per week or less, according to data from the School Information Management System (SIMS) (p. 3).

The study showed that there is another factor behind the low student-teacher ratio, which is class sizes. The sizes are low compared to the averages adopted by the Organization for Economic Co-operation and Development. The results of the study indicate that the average class size for each section in primary schools is 18.6 students, and 17.3 in secondary schools. While according to the Organization for Economic Co-operation and Development, it is 21 students per class in the primary cycles and 23 in the lower secondary stage. This average is not constant for all Lebanese schools, but rather varies from one school to another and from one governorate to another (p. 3).

The study attributes the reason for the low-class size to the widespread prevalence of small schools and not to the failure to enforce existing policies related to class size. This size varies due to the size of the school. More than half of primary schools and more than half of secondary schools were found to have fewer than 200 pupils each, with an average class size of less than 16 pupils per class. The average class size is closer to the maximum permitted of 30 pupils in very large schools with more than 600 pupils, which represent only about 5% of primary schools and 2% of secondary schools. The study suggested that the size of the teaching workforce should be adjusted, i.e., adapting it to the needs, resources and objectives of the educational system, by increasing the number of teaching hours per teacher, ensuring that personnel teachers think carefully about their teaching hours and setting these hours. It also suggested reducing the number of contractual teachers on a small contract basis. Regarding the issue of contracting, the study found that the formation of the educational workforce will increasingly depend on contractual teachers, because their full-time colleagues in the staff will have a higher rate of retirement over the next 15 years. On the one hand, this reduces the financial burden on the Ministry of Education and Higher Education, and on the other hand, it meets the needs of the sector under the current circumstances. However, this raises questions about the efficiency and quality of candidates entering the profession, which makes it difficult to attract highly qualified candidates.

The study recommended improving and implementing policies related to the educational process and determining teachers' working hours. The aim is to improve the effectiveness and extent of benefiting from teachers and increasing the productivity of the current and new teachers. It also recommended implementing effective planning and distribution processes for teachers so that current teachers in the system are used effectively and to their maximum potential before

hiring additional teachers. It also recommended implementing objective controls for employment based on needs so that not all teachers who leave the profession are replaced. Also, making new employment or recruitment directed to fill gaps/needs within the sector, whether within a specific governorate, educational stage, or subject.

3.15. Al Maalouf & Al Baradhi's Study. (2024).

The Impact of the Economic Crisis on the Educational Sector in Lebanon in Terms of Student Enrolment, Quality of Education, and Teachers' Motivation. This study aims to explore the multiple impacts of the economic crisis in the education sector in Lebanon, with a focus on student enrolment, quality of education, and teacher motivation. Exploring a positivist approach, two questionnaires were adopted: one for students (674 students) probing the effects of the economic crisis on their enrollment and the quality of education received, and another for teachers (272 participants) exploring the impacts on their motivation and the quality of education provided.

It emphasizes the importance of maintaining high-quality education and teacher motivation during economic crises to ensure the future well-being of the country. The results revealed significant correlations between the economic crisis and its negative effects on student enrolment, quality of education, and teacher motivation, as reported by both the students' and teachers' perspectives.

The study emphasized the need to address the challenges facing the education sector in Lebanon during this crisis. Targeted interventions, including financial support programs, resource allocation, and measures to enhance teacher motivation, are needed to support students, teachers, and educational institutions. These measures are essential to protect Lebanon's human capital development, economic growth, and the long-term resilience of the education system.

Furthermore, the study suggests that the observed decline in teacher motivation and the deterioration of education quality necessitate policy measures to enhance the learning environment. This could include measures to address teacher salaries, provide professional development opportunities, and better allocate resources to schools.

The study also highlights the consequences of the decline in student enrollment and declining education quality on the country's human capital development and economic growth. It emphasizes the importance of maintaining high-quality education and teacher motivation during economic crises to ensure the future well-being of the country.

The study recommended:

- Developing financial support programs: This can be accomplished by designing financial programs to support students and their families by the government to reduce the effects of the economic crisis on their enrollment in schools.
- Improving the working environment for teachers: Measures are needed to improve teachers' working conditions, including addressing wage issues and increasing opportunities for professional development.

- Allocating resources: Additional resources should be allocated to educational institutions, including financial support for schools to provide a good learning environment.
- Incentive programs for teachers: Consideration should be given to developing incentive programs that aim at enhancing teachers' motivation, which contributes to improving the quality of education.
- Periodic evaluation: Periodic evaluations should be conducted to ensure the effectiveness of implemented interventions and identify areas for continuous improvement.
- Collaboration with the private sector: The private sector can collaborate with the government to provide support to educational institutions through grants and donations, which helps mitigate the negative impact of the crisis.

3.16. Conclusion

Previous studies have addressed school readiness in Lebanon, highlighting the challenges that the education system faces in preparing schools to receive students and provide an appropriate learning environment. These studies have reflected the extent to which school readiness in Lebanon has been affected by economic, social, and health factors, in addition to national disasters such as the Beirut Port explosion. Collectively, these studies have shown that these challenges place great pressure on the educational system, underscoring the urgent need to strengthening community and international partnerships to support education.

The results from these studies provide insights on the multifaceted concept of school readiness, emphasizing the essential human, material and technical dimensions that should be considered.

These indicators are crucial for accurately assessing the current state of these aspects on the ground and for informing targeted interventions aimed at enhancing the overall educational landscape in Lebanon.

These studies have demonstrated how school readiness has been impacted by a combination of economic, social, and health factors, further exacerbated by national disasters like the Beirut Port explosion. Collectively, these challenges impose significant pressure on the educational system.

CHAPTER 3

METHODOLOGY

Study Design

1. Research Methodology

The study relies on descriptive and comparative approaches adopting a mixed methods approach that combines quantitative and qualitative methods. This approach aims to provide a deeper and more comprehensive understanding of the issues raised which is necessary when dealing with complex educational environments. This approach allows for the collection of quantitative data through questionnaires targeting several categories of the school community, in addition to qualitative data through interviews or focus groups. Data triangulation contributes to enhancing the reliability and validity of the results by comparing and confirming data from multiple sources making the analysis more accurate and relevant to reality (Sammons & Davis, 2017).

2. Type of research

This study is classified as applied research because it focuses on addressing clear and specific educational issues and challenges in the Lebanese context. The research aims to provide realistic and implementable solutions to improve school readiness and enhance the efficiency of school leadership in implementing the developed curricula. Applied research is essential in developing practical strategies that are directly applicable in the educational settings (Mejeh et al., 2023).

3. Research design

A cross-sectional design was adopted to collect data from a diverse group of participants in a single period of time. This design is considered appropriate for assessing the current status of school readiness in Lebanon in both sectors public and private. It also aligns with school leadership competencies in the context of implementing the developed curricula. This design allows for identifying the different needs and gaps of schools at the same time, providing a clear vision of the challenges and opportunities available and helping to propose effective recommendations based on the results (Camerino et al., 2012).

Population Sample

The stratified random sample method was adopted to select participants in order to achieve a comprehensive and accurate representation of all educational sectors. The sample consists of (338) schools, distributed among public and private schools in various Lebanese governorates (See appendices 6 for more details).

Although the questionnaires were distributed to (338) schools, and all of them were contacted, (279) schools responded and actually participated in the study (See appendices 7 for more details).

However, comprehensive representation of the different sectors remained available which enhances the accuracy of the results and reflects the required geographical and school diversity.

The study population consists of (279) schools distributed across various pre-university academic educational sectors as follows:

- (147) schools from the public sector,
- (30) schools from free private education,
- (98) schools from non-free private education,
- (4) UNRWA affiliated schools.

The study involved:
- (279) principals
- (368) supervisors
- (442) coordinators
- (1901) teachers.

The surveys focused on assessing the readiness level of the participating schools, identifying their needs, opportunities, and differences. They also explored the experiences of participants, shedding light on the challenges they faced under the current curricula, as well as their aspirations and hopes for the new curricula.

Justifications for choosing the sample

- Achieving a balance in the representation of all educational sectors to ensure diversity of viewpoints.
- Reflecting the geographical and school distribution in Lebanon accurately.
- Enhancing the credibility of the study results by engaging all stakeholders in a balanced manner.
- Selecting the sample from different governorates contributes to identifying potential differences among schools in different regions and educational sectors. As a result, it will provide recommendations that are widely applicable.

Data Collection Tools

Several tools were used to collect data to ensure the comprehensiveness and accuracy of the results:

- **Questionnaires:** Four questionnaires were developed for school principals, supervisors, coordinators, and teachers. This tool was selected because it allows for the collection of large-scale quantitative data quickly and efficiently (See appendix 8, appendix 9 and appendix 10 for more details).

- **Interviews:** (11) interviews were conducted with officials in the Ministry of Education and Higher Education (Director General of Education, Director of Secondary Education,

Director of Primary Education), the President of the Center for Educational Research and Development, Director Generals from private schools, and experts who worked on developing curricula. These interviews aimed to investigate the process of developing curricula and the necessary needs to support the success of these curricula, the extent of schools' readiness, and the plans and mechanisms in place to support this readiness. This tool helped in obtaining deep insights into curriculum development and implementation tools (See appendices 11 for more details).

- **Focus groups:** It included (16) focus groups with students from secondary classes in both public and private sectors representing various Lebanese governorates. This tool aimed to explore students' perspectives directly which added a qualitative dimension to the analysis (See appendices 12 for more details).

Description of the tools and justifications for their choice

1. The questionnaire:
- *Title of the questionnaire:* "School Readiness and Effective Leadership in Light of the Developed Curricula in Lebanon".
- *Target group:* School principals, supervisors, coordinators, and teachers.

The Objective of the questionnaire is to:
- Determine the sum of the human and material needs of schools.
- Determine the level of readiness to implement the developed curricula.
- Evaluate the role of school leadership in facilitating the educational process and ensuring the quality of education.
- Guaranteed participation: regarding data confidentiality and use for scientific research purposes only.

Questionnaire sections:
- Personal data (closed and optional questions): The data aims to classify participants based on age, gender, employment status, experience, academic degree, and educational region. Such data is necessary to analyze trends and differences among different categories of target groups according to demographic factors which can affect the level of school readiness and leadership.

- *Section One:* Human Resources in the School (only in the principal's questionnaire) - Specific quantitative questions (inputting numerical values): These questions allow for the collection of accurate data on the distribution of human resources in the school. This section outlines the organizational structure and employee count within the school, enabling an assessment of any shortages or surpluses in human resources. It can also be used to determine whether schools follow appropriate recruitment policies to meet the needs of advanced education.

- *Section Two:* Overall, School Readiness - Closed Questions (multiple choice) with case specifications: aims to evaluate the readiness of the school in terms of infrastructure and facilities. These questions provide multiple options covering various aspects such as the availability of educational tools, technical devices, and the suitability and condition of facilities. This design allows for an accurate and comprehensive assessment of each element in the school.

- *Section Three:* Technology and Digital Infrastructure - Closed Questions (Multiple Choice): The questions provide a clear picture of the availability and use of technology and modern educational tools in classrooms, in addition to the technology-related training needs of each target group, and the aspects of support provided by the school administration to use technology. These are essential for implementing the developed curricula.

- *Section Four:* Leadership and Administrative Competencies: This section includes four categories with sub-sections as follows:
    - Category One: Strategic Planning and Decision Making
    - Category Two: The principal's Leadership and Administrative Competencies
    - Category Three: Follow-up and Evaluation Processes
    - Category Four: Future Needs and Expectations

The questions in this section vary between **closed and open** which help in collecting quantitative and qualitative data at the same time. These questions are designed to measure the effectiveness of school leadership and management in the areas of strategic planning, decision-making, the principal's leadership and administrative competencies, monitoring and evaluation processes, as well as future needs and expectations.

Closed questions. Fixed choices (such as: always, often, sometimes, never) are utilized on a Likert scale to assess the degree of frequency or importance of a behavior or process. These questions allow for easy quantitative analysis by quickly classifying data according to specified criteria.

Open questions. Such questions ask participants to clarify the **challenges and needs** of the school or human and material resources. They facilitate the collection of personal and in-depth opinions as well as additional details that may not be covered by closed questions.

- First category: Strategic planning and decision-making: These questions aim to **assess the extent to which the planning process** is organized in the school and the extent to which different bodies are involved in decision-making. They serve as assets for identifying the **priorities of school management** and frameworks related to strategic planning.

- Second category: The principal's leadership and administrative competencies: These questions focus on the **leadership styles** adopted in the school (such as participatory or individual leadership) and how they affect innovation and motivation. It aims to identify the **basic leadership skills** required in the school context and identify the gaps that principals may need to develop.

- **Third category: Follow-up and evaluation processes:** This category measures the **effectiveness of the used evaluations** to measure the performance of teachers and school management. It aims at identifying **tools of communication and follow-up** among the different parties within the school, with parents, the local community and supporting bodies to ensure improved performance and sustainable quality. It extends to include the tools used to identify potential problems and works on devising solutions by the school administration in addition to supervision, classroom visits, guidance, support, and follow-up on improvements and recommendations resulting from evaluations. The list goes on to include the reality of implementing school support for struggling students in schools.

- Fourth category: Future needs and expectations: It seeks to identify the **training needs** of principals and school workers to achieve sustainable development. It facilitates the development of plans that mainly **support and ameliorate resources** - whether material or human - and keeps pace with educational development in the future.

Timing of questionnaire distribution. Upon obtaining the approval of the Director General of Education to implement the study tools in the sample schools, a survey study or pilot test of the questionnaire questions was conducted on a small group of schools (10 schools) on Thursday and Friday, November 14 and 15, 2024. Minor amendments were made to refine the questions based on the feedback received. After that, the links of the four questionnaires, directed to the principal, supervisor, coordinator and teacher were sent to all sample schools (338 schools) in various sectors and governorates. The concerned parties in the schools were contacted directly to fill out the questionnaires during the period extending from Monday November 18, 2024 to Monday December 2, 2024.

The deadline was extended to Wednesday, December 4, 2024. Responses were obtained, as confirmed by the statistics officer at the Center for Educational Research and Development. In total, responses were collected from 279 schools across various sectors and governorates in Lebanon.

Why was the questionnaire selected as a main tool?

- **Easy data collection**. The questionnaire allows for the collection of large amounts of data from a wide range of schools in a short time.

- **Comparison and analysis**. The questionnaire compares different schools in sectors based on uniform criteria, thus providing a homogeneous analysis.

- **Accuracy and objectivity**. Closed and accurate answers elude personal bias which enhances the reliability of the data.

- **Diversity in questions**. Combining open and closed questions provides an opportunity to collect quantitative and qualitative data while presenting a comprehensive picture.

2. Interviews

Interview title: "School Readiness and Effective Leadership in Light of the Developed Curricula in Lebanon".

Target group: Interviews were conducted with officials at the Ministry of Education and Higher Education (Director General of Education, Director of Secondary Education, Director of Primary Education), the President of the Center for Educational Research and Development, and general managers in private schools (widespread educational institutions representing various segments of Lebanese society have been selected) in addition to experts who participated in developing the curricula. The number of people contacted was (12), but one of them was unable to participate in the interview so the total number of participants became (11). This number is sufficient according to qualitative standards that focus on achieving data saturation due to the fact that the participants contributed to providing multiple perspectives reflecting the diversity of experiences and expertise (see appendix 13 for more details).

Objective of the interviews:

- Explore in-depth views on the human and material resources required to implement the developed curricula.
- Analyze the role of school leadership in the success of the implementation process.
- Identify the challenges facing schools and school administrations.
- Understand the Ministry's future plans, and support tools provided to schools.
- Specify the actual needs of schools at the administrative and educational levels in light of the developed curricula.

Type of questions: Semi-structured interviews were adopted to provide space for participants to express themselves freely with a frame of reference that ensures the achievement of the interview objectives. Such type allows for expanding the discussion on issues that were not previously anticipated or else to collect in-depth qualitative data. The questions focused on the following axes:

Evaluating the human and material resources required to implement the developed curricula through the following:

- Basic resources required to implement the curricula.
- Availability of educational equipment and tools in schools.
- Plans to secure the necessary human cadres and equipment.

The role of school leadership
- The role of school administration in the success of the developed curricula.

- The extent of school principals' readiness to support the implementation process.

- The need to reconsider the authority and responsibilities of principals.

Expected challenges
- The most prominent challenges facing school principals during curricula implementation.

- Support and follow-up plans to ensure successful implementation.

The role of technology and digital infrastructure
- The importance of technology in supporting developed curricula.

- The level of schools' technological readiness.

- The Ministry's plans to provide digital tools and their respective infrastructure.

Supporting students and the learning environment
- The Ministry's plans to support students including those with special needs.

- Ways to enhance a safe and healthy learning environment in schools.

Future vision
- The Ministry's vision for the future of education after implementing the developed curricula.

- The vision of those responsible for private schools regarding the future of education after implementing the developed curricula.

- The vision of experts who worked on the curricula for the future of education.

- The steps necessary to achieve comprehensive and sustainable development of schools.

The questions were designed in line with the objectives and areas of the research while ensuring their connection to the theoretical framework and the research problem.

These interviews contribute to building a knowledge base that provides realistic recommendations to school administrations with the aim of improving the chances of success in implementing the developed curricula.

The interviews were recorded after obtaining the participants' approval and after submitting an official letter from the President of the Center for Educational Research and Development to the Director General of Education. The data were transcribed and analyzed in programs dedicated to qualitative data.

Timing of the interviews

Upon obtaining the approval of the Director General of Education, the President of the Center for Educational Research and Development, and the experts to conduct the interviews and take various appointments, the interviews were conducted from Monday November 25, 2024 to Wednesday December 4, 2024.

3. Focus Groups

The tool used in this context is **focus groups** which is a research technique that aims to collect the opinions and positions of participants on a specific topic through guided group discussions. This tool chosen for focus groups is in the form of interviews for several reasons related to its characteristics and advantages in collecting qualitative data, especially in the field of "School

Readiness and Effective Leadership in Light of Developed Curricula". The tool was implemented with secondary school students in public and private schools from various governorates in Lebanon (See appendix 14 for more details) after communicating with school administrations and obtaining their approval based on the approval of the Director General of Education to implement the research tools.

Why were focus groups chosen?

Group interaction

- **The interaction among focus group participants** can deepen understanding due to the fact that each group member may influence the positions of others creating interactive and rich discussions with different opinions.
- In this context, group participation leads to discovering how the school environment and leadership support jointly affect the learners' experience.

Expressing diverse opinions:

- Focus groups allow for the collection of **diverse opinions and feelings** from students that may not be expressed in other settings such as individual interviews. The presence of a group of participants increases the chances of obtaining diverse ideas and opinions about different aspects of the school environment.

Exploring individual and group differences:

- Focus groups provide the opportunity for students to **explore differences** in opinions and views about aspects such as curriculum, academic support, and content. Through group discussion, it is possible to determine the extent to which visions about "school readiness and effective leadership" are consistent.

Expanding the scope of qualitative data

- This tool provides **a greater scope for collecting abundant qualitative data** (such as personal opinions, feelings, and insights) compared to traditional interviews. Furthermore, the participants can freely express their experiences and interactions regarding the curriculum and academic support.

Facilitating discussions of difficult issues

- It may be easier for learners to discuss **certain issues** in an informal setting on topics such as safety at school or academic challenges when they are part of a group conducting a discussion.

Questions for learners in focus groups

School environment

These questions aim to **identify the feelings and daily experiences** that students go through within the school. Accordingly, this paves the way to examine the **school climate** and how it affects the students' psychological and physical well-being.

- For example, a question such as "Do you feel safe and welcome at school?" helps to assess the **emotional aspect** of the school environment.

Academic support

Questions related to academic resources highlight **learners' educational needs** and reveal whether current resources are able to adequately support learners academically.

- Inquiring about "Programs that help you succeed academically" allows us to **identify gaps in academic support** and the effectiveness of available programs.

Skills and content

These questions aim to **develop transversal skills** such as communication, teamwork and time management. They constitute an essential part while **preparing students for their future**. They also help to measure **the relevance of the curriculum** to the demands of professional and personal life after graduation.

- A question such as "Do you feel that the current curriculum prepares you well for life after high school?" provides a **realistic comparison** between the content of the curriculum and learners' future goals.

Future aspirations

Questions related to future aspirations allow learners to **express their ideas and visions** about the curricula they would like to follow or the topics they perceive as necessary.

- The question "What if you had the opportunity to express your opinion on designing a new school subject?" opens the door to creative thinking and contributes to **analyzing students' priorities** about the topics they would like to learn about.

Timing of conducting focus groups

After obtaining the approval of the Director General of Education to conduct interviews and taking various appointments from the participating schools and especially the learners in the focus groups, (16) focus groups were conducted with students from secondary classes in various sectors of pre-university academic education and from all Lebanese governorates during the period extending from Thursday December 5, 2024 to Monday December 23, 2024. The period was long because it depended on the availability of multiple groups as well as communication and internet conditions that sometimes did not allow for conducting focus groups smoothly and as expected.

Focus groups responses were recorded after obtaining the participants' consents, and upon submitting an official letter from the President of the Center for Educational Research and

Development to the Director General of Education and the approval of school principals and stakeholders. The data was then transcribed and analyzed.

The importance of focus groups for this study is that they provide an open platform for group interaction and in-depth exploration of ideas and experiences which pave the way for collecting comprehensive qualitative data on **school readiness and effective leadership** in light of the developed curricula.

It is worth noting that all tools have been accurately linked to take mostly advantage of answering the research questions and raising basic practical recommendations on school readiness and effective leadership in Lebanon.

Verifying the validity of the tools: Testing the validity and reliability of the tools

1. Testing the validity of the tools

The experts preparing the study developed the items of the questionnaires, interviews and focus groups based on the initial drafts that were prepared earlier. Then, the necessary modifications were made to these tools to ensure their consistency with the study objectives and research questions. The goal is to make them clearer and more accurate in line with the context and needs of the study, thus ensuring the apparent validity of these tools (arbitration).

2. Testing the reliability of the tools

To ensure the reliability of the tools and their ability to produce consistent results when used repeatedly, a pilot study was conducted on a small sample of ten schools (See appendix 15 for more details) on November 14 and 15, 2024. The aim of this study was to ensure that the tools do not produce variable or confusing results when applied to similar samples.

3. Analysis of the reliability of the questionnaires using Cronbach's Alpha

The Cronbach's Alpha scale was used to assess the internal consistency of questionnaires or measurement tools due to the fact that it helps measure the extent of the interrelationship of items measuring the same concept or dimension. The results showed a value of (**Cronbach's Alpha = 0.93 ~ 1**), indicating that the tools have very high internal reliability, and are therefore considered suitable for use in the study.

It is worth noting that the required modifications were made based on the results of the pilot study to improve the clarity of the tools and ensure the accuracy of the measurements taken.

Data Analysis

The data collected using different tools (questionnaires, interviews, focus groups) were analyzed through quantitative and qualitative analysis techniques as follows:

1. Quantitative Analysis

Statistical software such as (SPSS) was used to analyze the quantitative data extracted from the questionnaires. The analysis process included distributing the extracted data in tables and graphs to represent the main patterns and trends. The results were presented in text form by the research experts who manually analyzed the data to support answering the research questions and extract relevant recommendations.

2. Qualitative Analysis

For the qualitative data collected from interviews and focus groups, the texts were analyzed using ATLAS.ti and thematic analysis. At this stage, the data were classified into main themes and subcategories according to the research objectives of the study. Clear classification criteria were used to identify common patterns and topics among the participants, such as school readiness, leadership practices, challenges, and future aspirations. The analysis was conducted manually by the research experts to ensure the accuracy of data classification and the extraction of recommendations (See Appendix 16, appendix 17 and appendix 18 for more detail).

3. Mixed Methods Analysis

It greatly enhanced the accuracy and comprehensiveness of the research results. To enhance the analysis process and ensure the effective integration of quantitative and qualitative data, the **Mixed Methods Analysis** was adopted in this study. This approach facilitated the combination of quantitative and qualitative tools in a single analysis to achieve more comprehensive and reliable results.

Adopting **mixed analysis** opened the way for a comprehensive study that combines the advantages of quantitative data with the accuracy of qualitative data resulting in deeply supported results and worthwhile interpretations. This advanced approach provides a comprehensive and reliable view of the phenomena studied and helps draw a clear picture of the available areas leading to improvement and development in the educational system.

Note: Due to the large volume of results extracted from the four questionnaires, these results will be included in the appendices to avoid ending up with a lengthy report (See appendix 16 for more details).

Limitations and Challenges

- **Time constraints:** Due to time constraints, the data were collected over a relatively short period of time. This may affect the comprehensiveness of the sample. The study was also affected by the difficult security and military conditions that Lebanon experienced during the selection of the sample schools. During this period, it was necessary to ensure an accurately represented sample according to the standards of CERD, Think Tank experts, and the Natafa3al Consortium, as well as secure the inclusion of all sectors and governorates. These conditions also affected the distribution of questionnaires and the receipt of responses which took longer than expected, thus affecting the overall timeline of

the study. The dates of several interviews were delayed due to the difficulty of coordinating with officials to set dates at tight times, but these challenges were flexibly overcome by the research experts to ensure the representativity and reliability of the sample.

- **Partial responses:** Despite the distribution of questionnaires to a wide sample of schools, the response rate was uneven which may affect the representation of the sample in some regions. Security challenges also affected the response of schools in some areas. However, this was overcome by intensifying communications with the target groups to obtain the largest possible representation of responses.

- **Language challenges:** Given the linguistic diversity in Lebanon (Arabic, French, and English), it was necessary to use Arabic in the data collection tools to ensure full understanding by all participants. Therefore, the responses were in Arabic which necessitated their translation into English in the final stage of the report. The translation took longer, but each part of the study was translated upon its completion and eventually these parts were linked together in a consistent manner.

- **Field conditions:** The researchers faced some field challenges in reaching schools located in areas that were subjected to aggression or whose residents were displaced. The volatile and accelerating social, political and security conditions also affected the organization of interview dates and their implementation on time.

- **Time challenges specific to the study:** The biggest challenge was the limited time to conduct a comparative descriptive and analytical study between the public and private education sectors, in addition to comparing data across governorates. Despite the difficult circumstances, the efforts were intensified to ensure that the results extracted from questionnaires, interviews and focus groups were linked together. This task also included the preparation of statistical tables and graphs in order to reach practical recommendations related to the study's title, objective and problem.

- **Security and military conditions:** The prevailing **security and military** conditions in Lebanon also affected the research experts as they faced difficulty in moving and communicating with some of the stakeholders in light of the tensions. However, these challenges were overcome through **continuous coordination** and teamwork to ensure the completion of the study to the maximum.

Ethical Controls

In this research, all ethical controls related to social and educational research were adhered to:

- **Maintaining data confidentiality:** Complete confidentiality of the information collected was ensured taking into consideration that all data was stored in a secure environment.

- **Informed consent:** It was ensured that all participants obtained informed consent before participating in the research. They have all been informed that: their participation was

voluntary, their right was reserved to withdraw at any time, and their consent was taken to record the dialogues.

- **Transparency in data use:** The purpose of the research was explained to the participants indicating that the data would be used only for purely academic and scientific purposes.

Field procedures

To effectively implement this study, the following field procedures were followed:

- **Preparation of tools:** Questionnaires, interviews, and focus groups were developed based on the literature review, the specific objectives of the research, and the research questions.

- **Distribution and Implementation**: The tools were distributed via email to schools and through other means of communication (google forms links), and delivered in person at schools. Further assistance included ensuring that guidance messages were sent to participants on how to fill out the questionnaires and participate in the interviews and focus groups.

- **Follow-up:** Reminder messages were sent to participants who did not complete the questionnaires by the specified dates to secure the highest possible response rate. All participants were contacted personally by those in charge of this task at the Center for Educational Research and Development.

- **Organization:** Interviews and focus groups were organized at flexible times that fit the schedules of the study participants.

CHAPTER FOUR

ANALYSIS OF STUDY RESULTS

First: Demographic Results

The questionnaires addressed to principals, supervisors, coordinators, and teachers included a section covering demographic data. This section encompassed variables such as age, gender, academic qualifications, job titles, and years of experience in their respective fields. After analyzing the data for each variable within the different respondent categories and comparing them across educational sectors and regions, the following results were derived and summarized:

1. Age Results

1.1. Percentage Distribution of Principals by Age Category

The following chart illustrates the distribution of principals by age category.
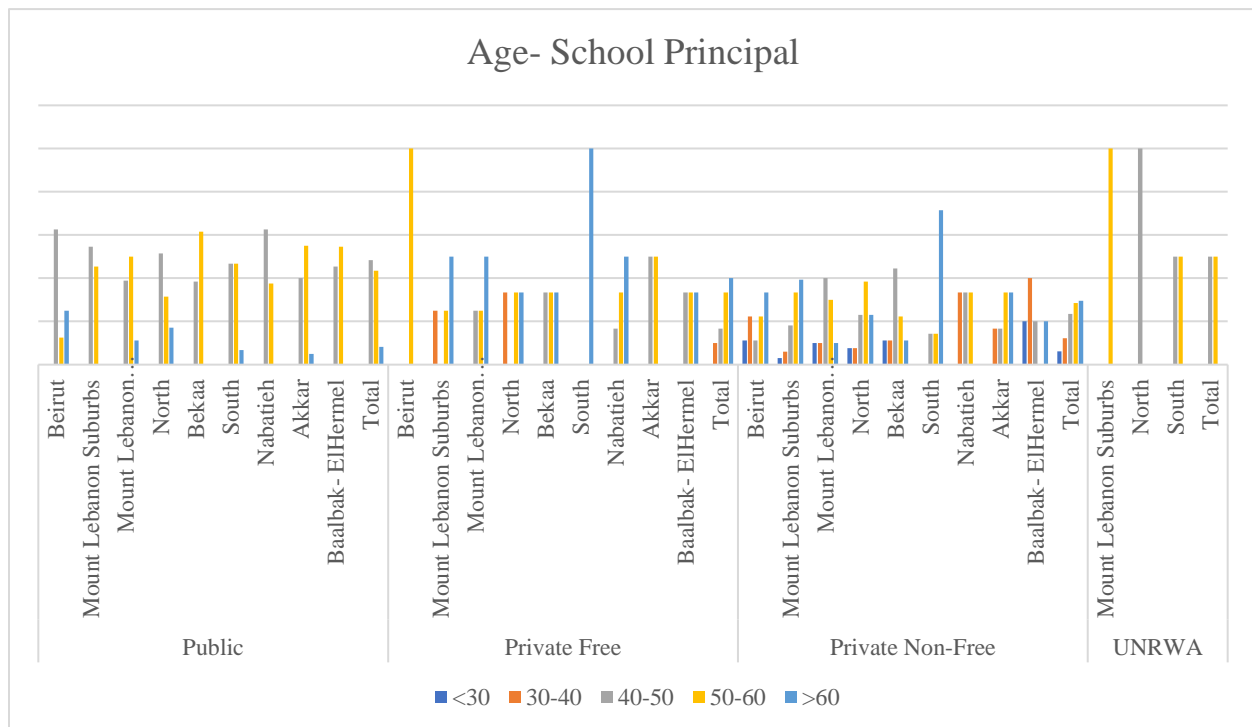
Chart (1): Distribution of Principals by Age

The total number of principals participating in the study was 279, distributed across educational sectors in Lebanon's governorates. Age was categorized into groups (each spanning 10 years) to facilitate statistical analysis. The overall results showed that the largest proportion of

principals fell within the age group 50–60 years, representing 37.3% of the total participants. This was followed by the age group 40–50 years, which constituted 36.2% of the participants. The age group above 60 years accounted for 19.0%, while the lower age groups had smaller shares: 5.4% for those aged 30–40 years, and the minimum share of 2.2% for those under 30 years.

In the public sector, the 40–50 years age group had the highest representation at 48.3%, followed closely by the 50–60 years age group at 43.5%, with total absence younger age groups.

In the private free sector, the more than 60 years age group was the most prominent, representing 40%. However, the percentage for the 30–40 years group increased to 10%, indicating a higher presence of younger principals.

In the private non-free sector, the more than 60 years age group was the most prominent, representing 29.6%, and the 50–60 years age group 28.6%, and the 40-50 years 23.5%. with 12.2% of ages 30-40 and 6.1% of less than 30 years old.

In the UNRWA sector, the 40-50 years and 50-60 years age groups dominated, with a noticeable absence of younger principals.

Regionally, in the Beirut governorate, the public sector showed a concentration of principals in the 40–50 years age group at 62.5%, followed by 25% in the above 60 years group. The private non-free sector in Beirut displayed a significant presence of principals aged 50- 60 years.

In the Akkar governorate, the 50–60 years age group represented 55.0% in the public sector, while the other sectors showed more balanced age distributions.

In Baalbek-El Hermel, the public sector reported 100% in the 40–60 years group, while the private non-free sector showed 40% representation for the 30–40 years age group.

In the South, public sector results showed an equal distribution between the 40–50 years and 50–60 years age groups, each at 46.7%, while above 60 years groups also dominated in the private sector.

In Nabatieh, the 40–50 years age group had the highest representation in the public sector at 62.5%, while the private sector showed more balanced age distributions.

In the North, the public sector had a dominant representation in the 40–50 years age group (51.4%), while in Mount Lebanon Excluding Suburbs, the 50–60 years age group led in the public sector.

It is evident that all educational sectors rely heavily on older principals, as the results reflected a weak presence of younger principals.

1.2. Percentage Distribution of Supervisors by Age category

The results indicated that the most common age group among supervisors was 40–50 years, representing 43.8%, followed by the 50–60 years group at 41.9%. Meanwhile, younger age groups

(30–40 years) were less represented, accounting for only 3.7%. The following chart illustrates the distribution of supervisors by age.

The public sector is characterized by a significant representation of the 40–50 years and 50–60 years age groups, indicating a reliance on older supervisors, with the presence of supervisors aged under 30 years declining to only 3.7%.

In the private free sector, the largest proportion was in the 30–40 years age group, accounting for 32.3%, primarily concentrated in the Bekaa and South governorates. The private non-free sector displayed more balanced results across age groups, with good representation of younger supervisors (23.1%). In the UNRWA sector, supervisors were equally distributed across the middle age groups (30–60 years), with no representation for those under 30 years.
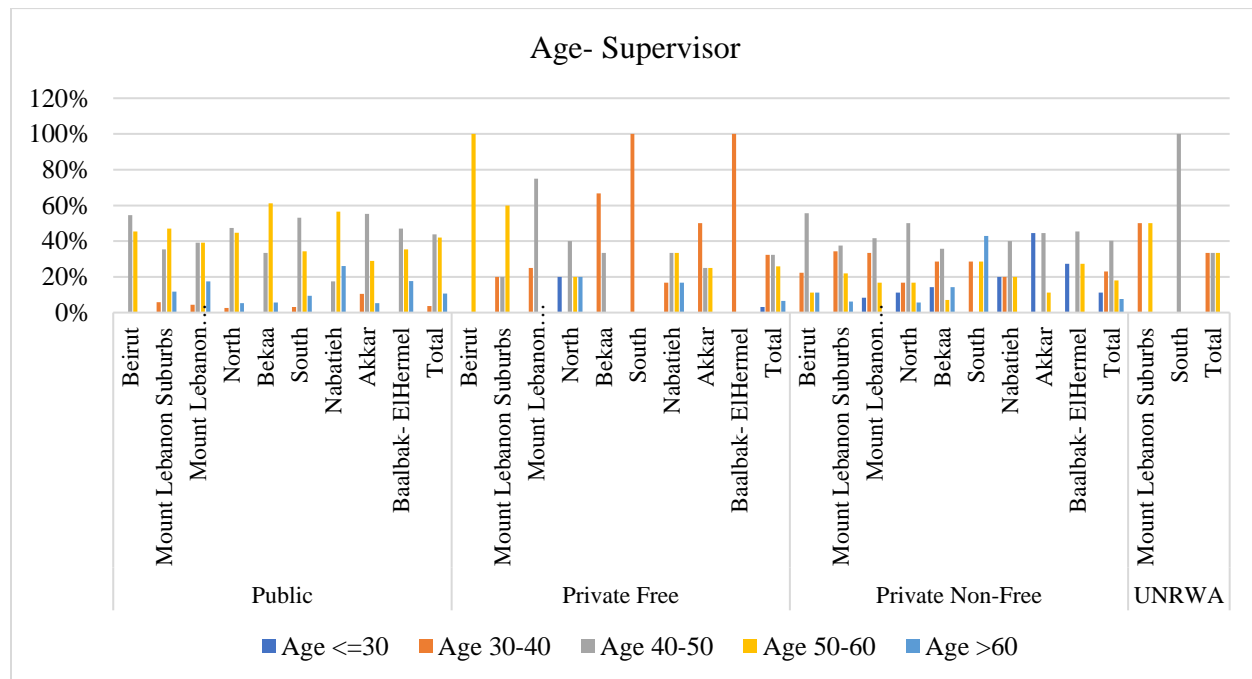
Chart (2): Distribution of Supervisors by Age

Overall, the private sector demonstrated greater flexibility in integrating younger supervisors compared to the public sector, where supervisors are predominantly in the older age groups.

At the governorate level, Beirut recorded the highest percentage of supervisors aged above 50 years, while Akkar and Baalbek-Hermel showed a stronger presence of younger supervisors (under 30 years). The 30–40 years age group was particularly prominent in the South and Nabatieh governorates, accounting for 100% of supervisors in private free education.

1.3.   Percentage Distribution of Coordinators by Age Category

The results indicated that the most common age group among coordinators is 40–50 years, representing 42.1%, followed by the 30–40 years group, which accounts for 35.3%.

In the public sector, the results from Beirut governorate show that 44.4% of coordinators are under the age of 30, while other governorates rely more on the 40–50 years age group. In Baalbek-Hermel governorate, the results reveal an equal distribution across the 30–60 years age groups, with each group accounting for 33.3%.

The following chart illustrates the distribution of coordinators by age.
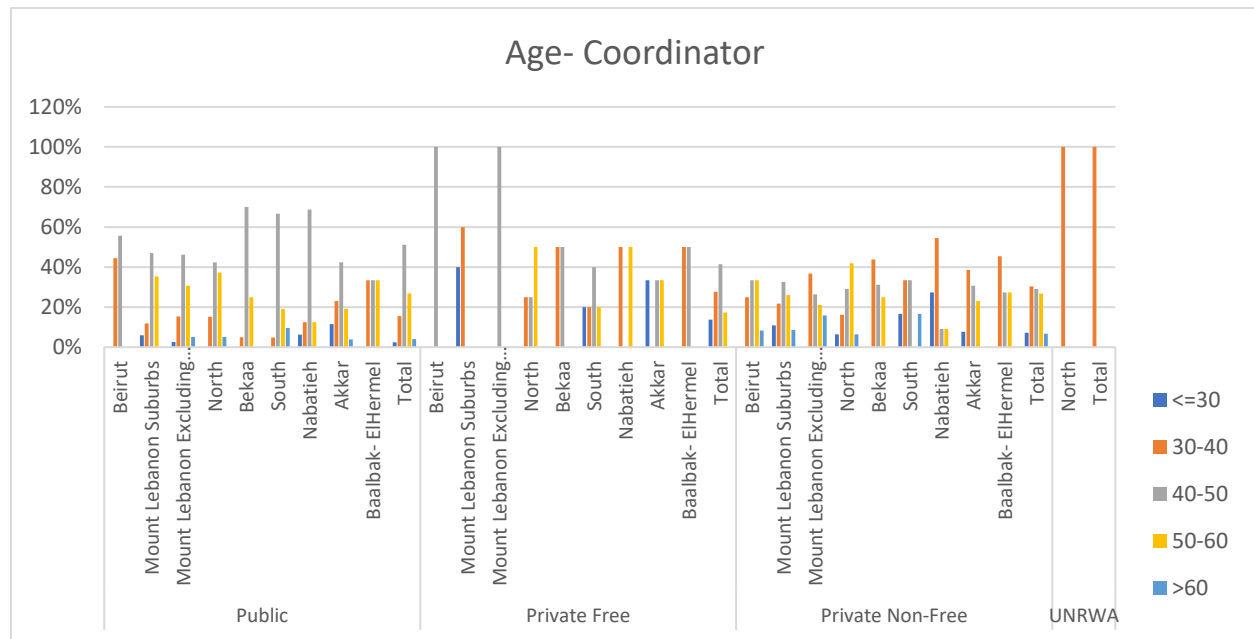
Chart (3): Distribution of Coordinators by Age

The private free sector shows a relative balance between age groups, with a strong representation of the 30–40 years group, which accounts for 60% of coordinators in the Mount Lebanon governorate.

In the private non-free sector, younger age groups are more represented, with a notable percentage of coordinators in the 30–40 years category, reaching 36.8%. In the UNRWA sector, coordinators are evenly distributed between the 30–40 years and 40–50 years age groups.

At the governorate level, young coordinators in the 30–40 years group stand out in the Bekaa (70.0%) and South (66.7%) governorates. The North governorate relies more on older coordinators (50–60 years), while the other age groups are evenly distributed (25% each). In Mount Lebanon (excluding its suburbs), the majority of coordinators belong to the 40–50 years group and work in both the public sector and the private free sector.

There is a clear variation in the age composition of coordinators across sectors, with the private sector more inclined to include younger age groups compared to the public sector.

It can also be concluded that most coordinators across governorates belong to the 40–50 years age group, accounting for 42.1% of all coordinators. The proportions vary by governorate, with the highest representation of younger age groups (30–40 years) in the Bekaa and Beirut governorates. In contrast, other governorates, particularly the North and Mount Lebanon, tend to rely more on older coordinators.

1.4. Percentage Distribution of Teachers by Age Category

The following chart illustrates the distribution of teachers by age.
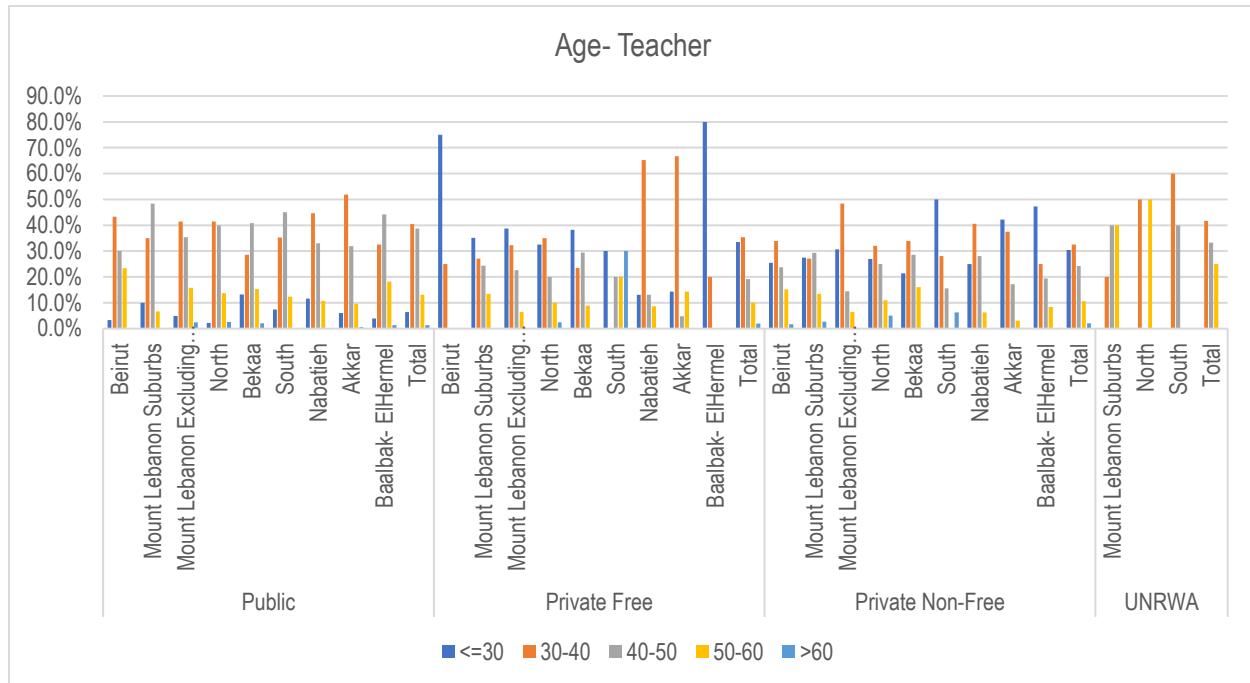
Chart (4): Distribution of Teachers by Age

The most common age group among teachers is 30–40 years, representing 43.6%, while younger age groups (20–30 years) constitute only 6.9% of the total. Older age groups (50 years and above) make up 21.4% of all teachers.

In the public sector, the largest proportion is in the 30–40 years age group, accounting for 43.6%, with lower representation among both younger (23–30 years) and older age groups. The majority of teachers in the private free sector fall within the 20–30 years and 31–40 years age groups, particularly in the governorates of Mount Lebanon (suburbs), North, and Bekaa, with reduced presence in older age groups.

In the private non - free sector, there is relatively balanced representation across age groups, with a strong presence of the 40–49 years group. In Beirut, this sector is dominated by teachers in the 40–50 years group, comprising 35.6%, followed by the 30–40 years group at 25.4%.

Governorates like Akkar, Baalbek-Hermel, and North show a lack of younger teachers (20–30 years), unlike South and Nabatiyeh, where the 20–30 years age group represents the largest share of teachers in the private non free sector.

Overall, the results indicate that both public and private sectors rely heavily on older teaching staff, emphasizing the need for strategies to attract younger professionals. The private sector demonstrates greater flexibility in integrating younger coordinators compared to the public sector, which shows a significant shortage of younger professionals. The private based sector displays greater dynamism in employing younger coordinators, while the public sector underrepresents younger age groups, highlighting an urgent need for programs to rejuvenate the workforce.

2. Gender Results

2.1. Percentage Distribution of Principals by Gender Category

The following chart illustrates the distribution of principals by gender.
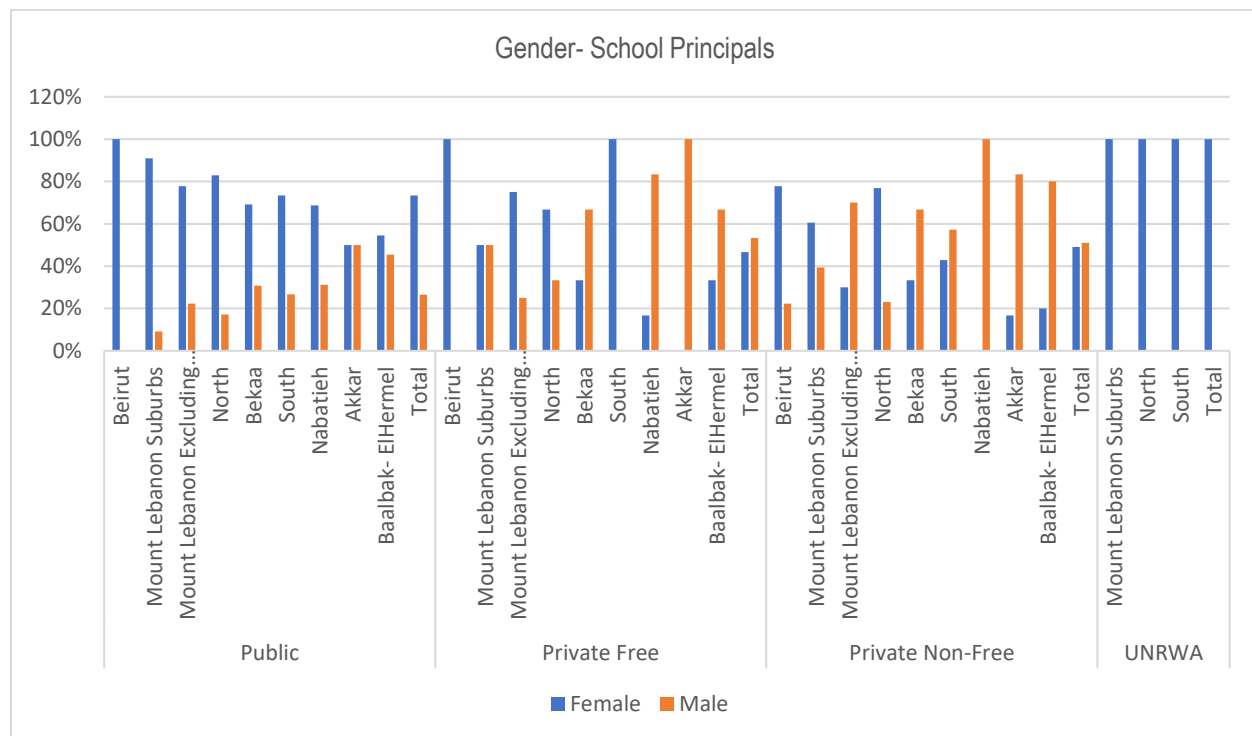
Chart (5): Distribution of Principals by Gender

In the public sector, females constitute 73.5%, while males account for 26.5%. In the private free sector, there is a relative gender balance, with females representing 46.7% and males 53.3%. Similarly, in the private non free sector, females make up 49%, and males 51%. The UNRWA sector, however, is entirely represented by females, with a 100% female presence.

Across governorates, there is a significant dominance of female principals in Beirut, reaching 100% in both the public and private free sectors. Female principals in the Mount Lebanon

(suburbs) governorate also hold a notable share of 90.9% in the public sector. On the other hand, the Bekaa and Nabatiyeh governorates show relatively higher proportions of male principals compared to other regions in the private free sector. The Akkar governorate demonstrates an equal gender distribution in the public sector, with 50% for each gender.

It is evident that female principals constitute the majority in most educational sectors, except for the private non free sector, which shows a relatively balanced representation, while the UNRWA sector demonstrates complete female dominance.

2.2. Percentage Distribution of Supervisors by Gender Category

Female supervisors represent a total of 75.5%, distributed across sectors as follows: 80.6% in the public sector, 71% in the private free sector, 68.4% in the private non free sector, and 33.3% in the UNRWA sector, which shows the lowest female representation compared to other sectors. Male supervisors make up 24.5% across all sectors.

The high percentage of females in the public sector can be attributed to employment policies encouraging female participation. The following graph illustrates the distribution of supervisors by gender.
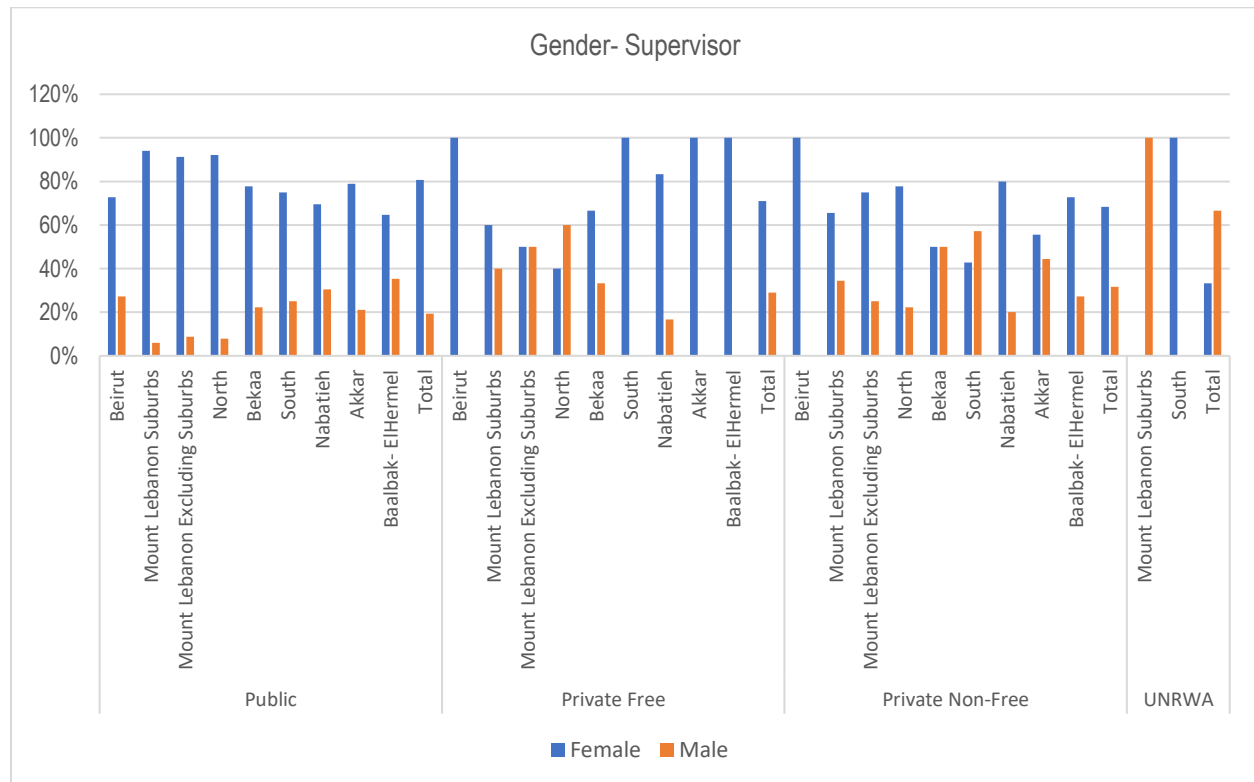
Chart (6): Distribution of Supervisors by Gender

Thus, a greater dominance of female supervisors is observed across all sectors except UNRWA.

The following chart shows the distribution of coordinators by gender.
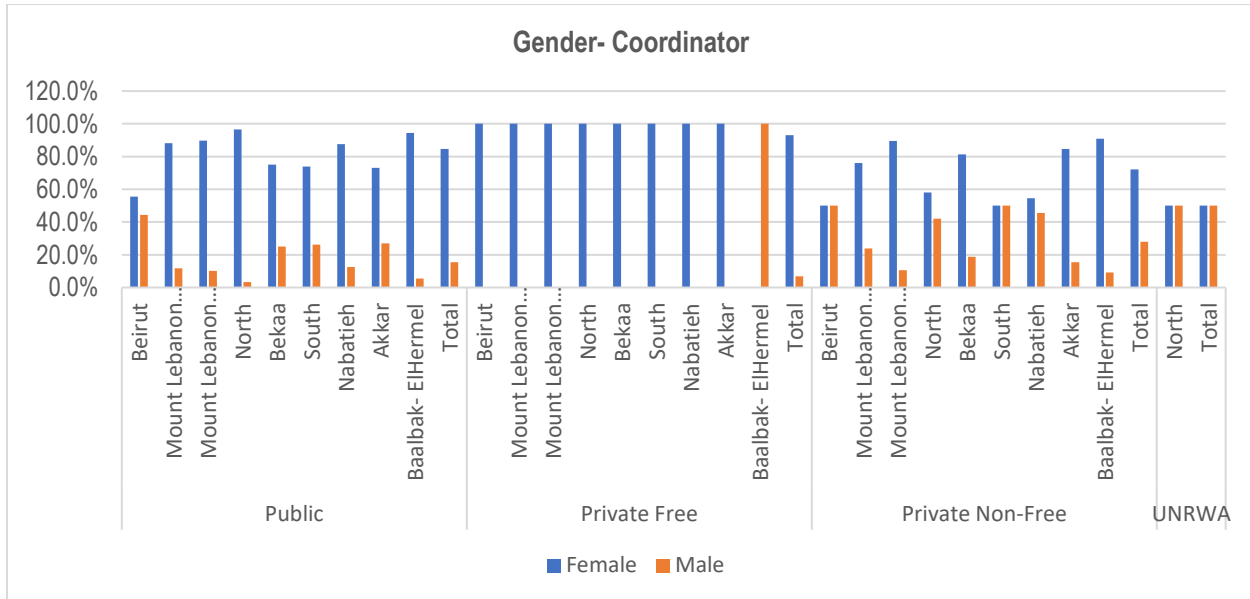
Chart (7): Distribution of Coordinators by Gender

Females represent 80.3% of the total number of coordinators, with 84.6% in the public sector, 93.1% in the private free sector, and 72.1% in the private non free sector. Females make up half of the coordinator sample in UNRWA (50%). Males represent 19.7% of the total number of coordinators across all sectors.

In the public sector, the percentage of females is notably higher than that of males in all governorates, ranging from 55.6% in Beirut to 96.6% in the North, with an overall average of 84.6% for females and 15.4% for males. In the free private sector, females form the majority in most governorates, with the percentage reaching 100% in the majority of the governorates, except for Baalbek-Hermel where males represent 6.9%. In the private non free sector, the percentages vary more widely, with Beirut and the North showing equal gender distribution (50% for each), while other governorates show a clear predominance of females, such as Mount Lebanon (except for the suburbs) with 89.5%. In UNRWA schools, the percentages are equal for males and females, each at 50%, in the North. Overall, females account for 80.3% compared to 19.7% for males across all sectors and governorates.

The overall results indicate that females represent the majority in all sectors, with higher percentages in the public and free private sectors. UNRWA shows a relative balance between the genders.

2.4.   Percentage Distribution of Teachers by Gender

The following chart shows the distribution of teachers by gender.
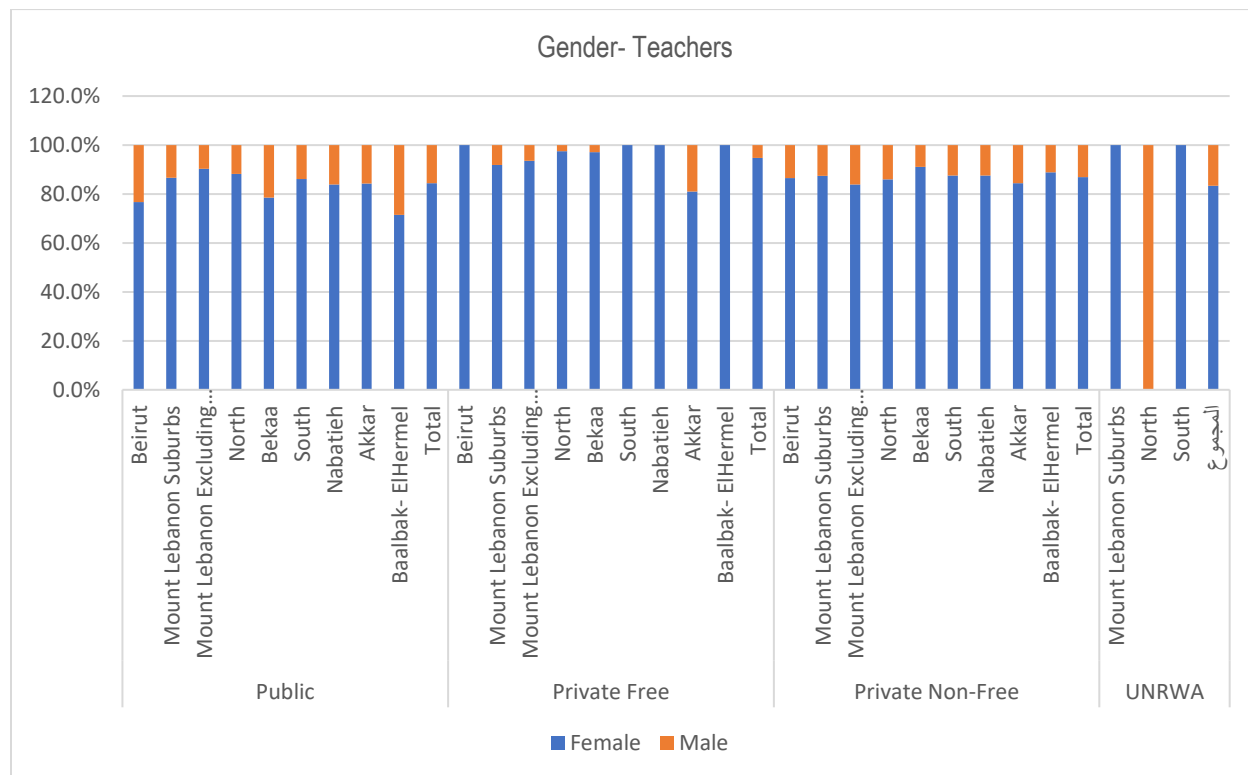
Chart (8): Distribution of Teachers by Gender

The total number of female teachers in the sample is 86.4%, with 84.4% in the public sector, 94.7% in the free private sector, and 86.9% in the non-free private sector. In UNRWA, the percentage is 83.3%. In contrast, the total number of male teachers is 13.6%.

Female teachers represent 84.5% of the teachers in Beirut Governorate, particularly in the free private sector, where the percentage of female teachers is 100%. In Mount Lebanon (suburbs), females account for 88% of the total number of teachers. In the North Governorate, the percentage of males is slightly higher in the non-free private sector, as well as in the Beqaa and Baalbek-Hermel governorates, where the percentage of males is relatively high in the public sector. Females are strongly represented in all sectors in the South and Nabatieh Governorates.

Overall, females represent the vast majority in all governorates and sectors, especially in the public sector in Beirut and Mount Lebanon, with a significant increase in the percentage of females in the free private sector. Males are more prominent in the public sector in the Beqaa and Baalbek-Hermel Governorates compared to others. There is a large presence of females among teachers in the free private sector, while the non-free private sector shows a relatively balanced gender distribution. In the UNRWA sector, there is a varied distribution across categories, with females dominating in the categories of principals and teachers.

These results indicate a pivotal role for females in the education sector, with clear disparities between sectors and governorates. The overall distribution reflects a culture that encourages females in formal education, while the private sector shows a relatively balanced gender representation in some categories.

3. Results of Employment Status

3.1. Percentage Distribution of Principals by Employment Status

The following chart shows the distribution of principals by employment status.
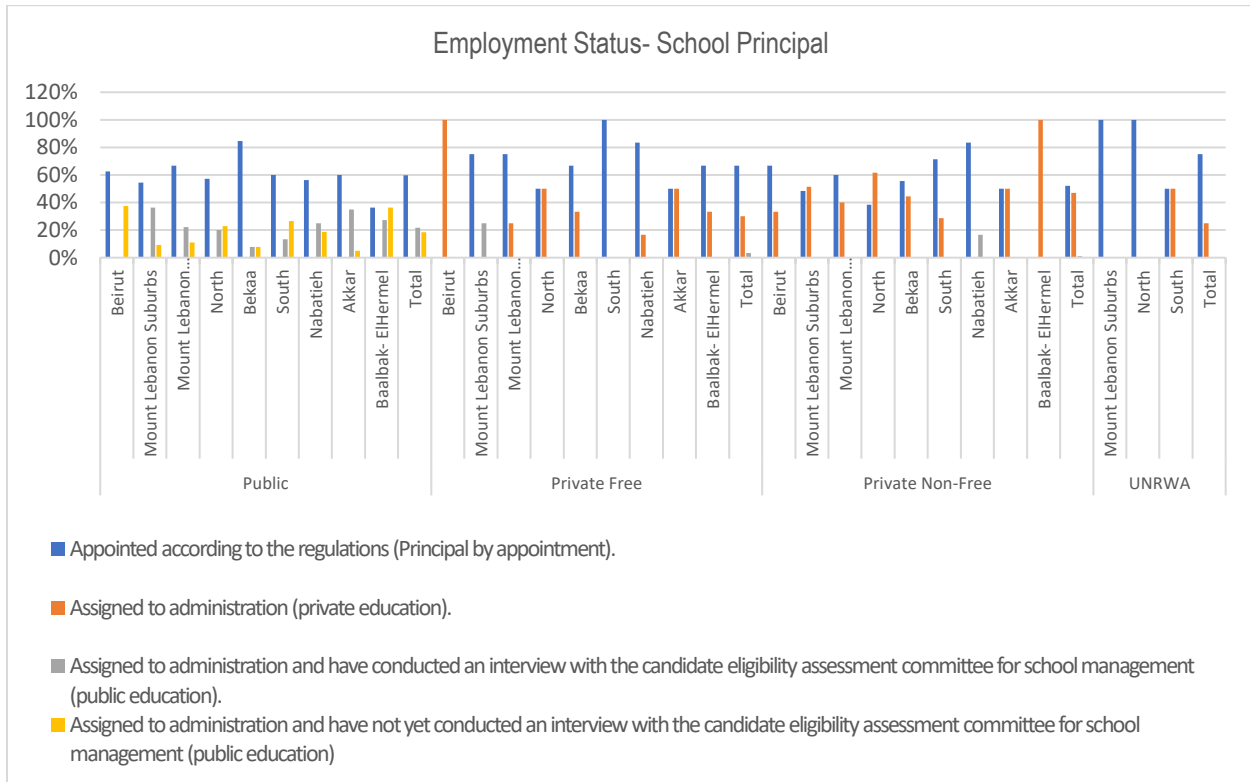
Chart (9): Distribution of Principals by Employment Status

The distribution of school principals by employment status across all sectors and governorates is classified as follows: those "appointed according to regulations" constitute 58.1% of the total workforce. Principals "assigned to administration" in the private education sector represent 20.1%, while those "assigned to administration with an interview" in the public sector account for 12.2%, and those "assigned to administration without an interview" make up 9.7%.

The public education sector holds the largest share (52.7%), with a significant concentration of "appointed according to regulations" principals (59.9%), followed by those "assigned to administration with an interview" (21.8%) and "assigned to administration without an interview" (18.4%). In Mount Lebanon (excluding suburbs), those appointed according to regulations make up 66.7%, followed by those assigned with interviews (22.2%) and without interviews (11.1%).

In Beirut, 62.5% of public-school principals are appointed according to regulations, while 37.5% are assigned without interviews. In the North, 57.1% are appointed according to regulations.

The private, non-free education sector ranks second (35.1%), with a high percentage of "assigned to administration" principals (46.9%), while the majority are "appointed according to regulations" (52%). For the free private education sector, which represents 10.8% of the total, the majority are "appointed according to regulations" (66.7%) compared to 30% "assigned to administration." In the North, the proportions are evenly split between those appointed according to regulations and those assigned to administration (50% each).

In the UNRWA sector, which accounts for 1.4% of the total, the majority are "appointed according to regulations" (75%).

In the Bekaa, 84.6% of public-school principals are "appointed according to regulations," followed by those assigned to administration with or without interviews (15.4%, equally split). In free private education, the majority are "appointed according to regulations" (66.7%) compared to 33.3% assigned to administration. In private, non-free education, those appointed according to regulations make up 55.6%, compared to 44.4% assigned to administration.

In the South, 60% of principals are "appointed according to regulations," followed by those assigned without interviews (26.7%) and with interviews (13.3%). In free private education, all principals are "appointed according to regulations" (100%), while in private, non-free education, 71.4% are appointed according to regulations, compared to 28.6% assigned to administration. In the UNRWA sector, the proportions are evenly split between those appointed according to regulations and those assigned to administration.

In Nabatieh, 56.3% of public-school principals are "appointed according to regulations," followed by those assigned with or without interviews (43.7%), of which 25% are appointed after interviews. In free private education, 83.3% are "appointed according to regulations," compared to 16.7% assigned to administration, with similar proportions in private, non-free education.

In Akkar, 60% of public-school principals are "appointed according to regulations," followed by those assigned with or without interviews (40%). In free and private non-free education, the proportions are evenly split between those appointed according to regulations and those assigned to administration.

In Baalbek-Hermel, the lowest percentage of principals appointed according to regulations in public education is recorded (36.4%), while those assigned with or without interviews account for the remaining 63.6%, of which 27.3% were assigned after interviews. In free private education, 66.7% are "appointed according to regulations," while 33.3% are assigned to administration. In private, non-free education, all principals are assigned to administration (100%).

The findings indicate that the public education sector represents the largest share of principals (52.7%), with a predominance of "appointed according to regulations" (59.9%). The private, non-free education sector ranks second (35.1%), showing a near balance between those appointed according to regulations and those assigned to administration. Most principals in free

private education are "appointed according to regulations," while most principals in the UNRWA sector are also "appointed according to regulations."

It is evident that "appointed according to regulations" constitutes the largest proportion of principals in most governorates, with a significant decline observed in Baalbek-Hermel.

3.2. Percentage Distribution of Supervisors by Employment Status

The vast majority of supervisors are in permanent positions (84.8%), reflecting significant job stability. The proportion of contractors is no more than (12%) of the total, while lower proportions are seen in other categories such as "temporary" or "hired".

Public education shows very high proportions of supervisors in permanent positions (100% in most governorates). Private education, whether free or non-free, relies more on contracts compared to public education, especially in areas like the North and Akkar, as shown in the following chart:
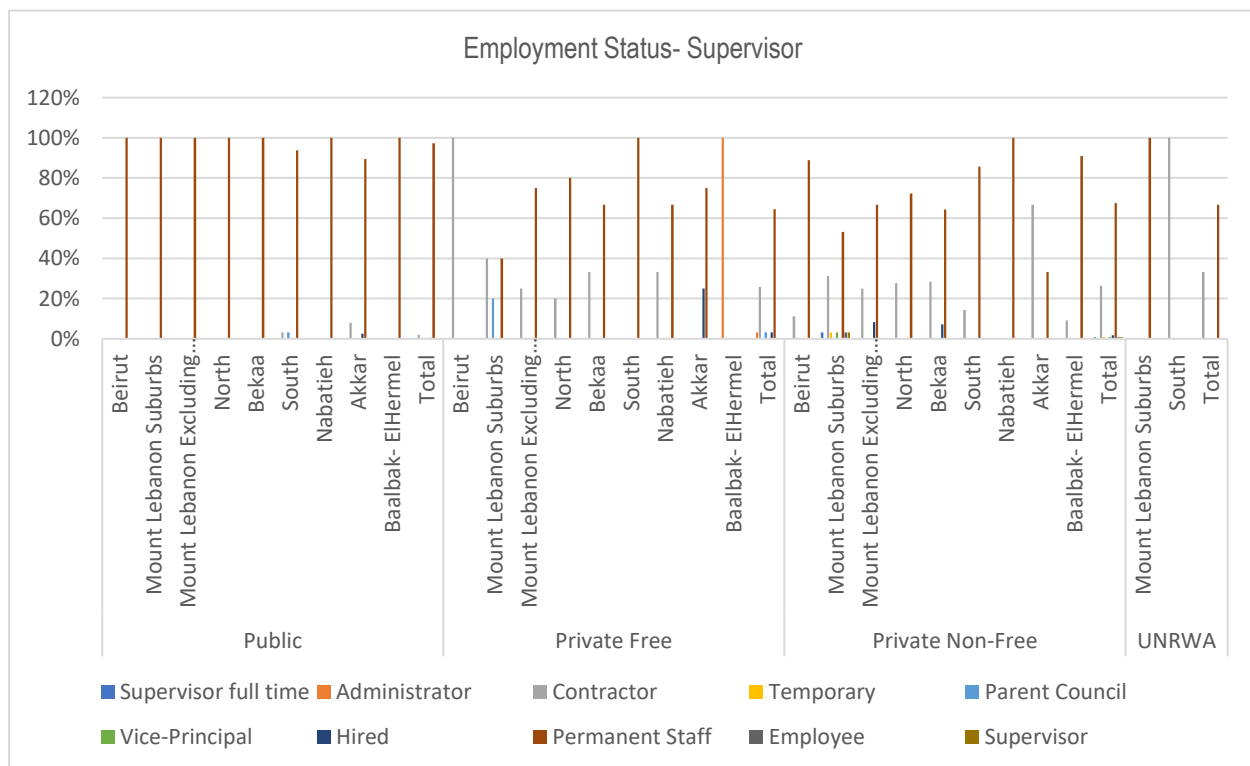
Chart (10): Distribution of Supervisors by Employment Status

The governorates of Akkar and the South show higher percentages of contracted supervisors compared to other governorates. In the private non-free education sector, a significant percentage of supervisors are working on contracts, such as in Akkar (66.7%).

In UNRWA, all supervisors are part of the permanent staff, except for a few cases on contracts.

In comparison, the public education sector shows significant stability through reliance on permanent staff supervisors and principals. The percentages of contracted supervisors are very limited in this sector.

Private education relies on a mix of permanent staff and contracted workers, with notable differences between the free and non-free sectors.

The governorates of Baalbek-Hermel and the North show higher reliance on acting or contracted supervisors.

3.3. Percentage Distribution of Coordinators by Employment Status

The "Permanent Staff" category is the largest employment group for coordinators, representing (72.4%) of the sample. This category is most common in the public sector, with (79.3%). Contracted coordinators form the second largest employment group, representing (22.6%) of the sample. This group is more prominent in the private non-free sector, with (32.1%). Other categories (Temporary, Part-time, Parent Council, or Hired) together represent a small portion of the sample, at (3.6%), with each individual category contributing less than (2%). The following chart illustrates these results:
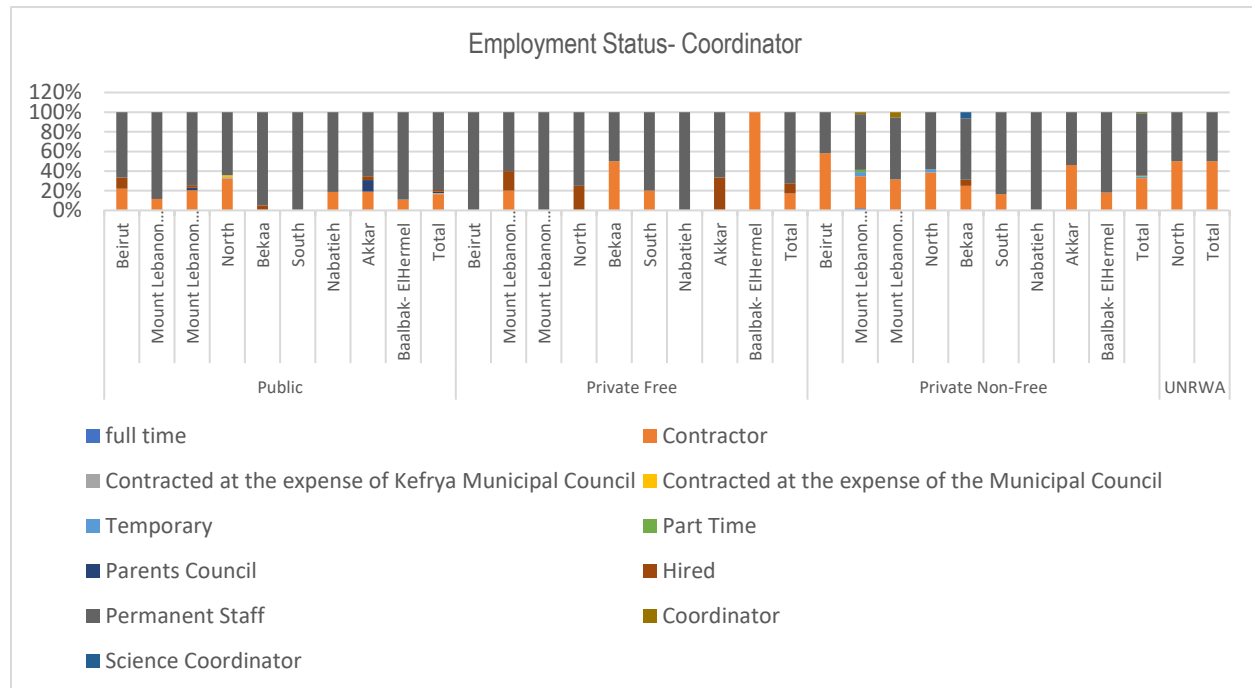
Chart (11): Distribution of Coordinators According to Employment Status

According to the sectors, the public sector relies primarily on permanent staff (79.3%), reflecting job stability. The percentage of contracted coordinators is 16.7%, making them the second largest group of coordinators. The free private sector is similar to the public sector, with

the "permanent staff" category dominating at 72.4%, while contracted coordinators represent a notable minority at 17.2%, and "externally hired" coordinators account for 10.3%, being more present in this sector than in others.

The private non-free sector shows a more diverse employment distribution compared to the public and free private sectors. Permanent coordinators make up the majority at 62.4%, while contracted coordinators represent a much higher percentage (32.1%) compared to other sectors, indicating greater flexibility in hiring. The results from UNRWA do not show significant trends due to the small sample size (only two coordinators).

It is concluded that coordinators in the "permanent staff" category constitute the majority across all sectors, with the highest concentration in the public sector (79.3%). It is also concluded that the private non-free sector has a higher representation of contracted coordinators, making up 32.1% of the private non-free sector sample, which is significantly higher than in the public sector (16.7%) or the free private sector (17.2%).

In the public sector, there are employees hired through Parent Councils (1.6%) and externally hired (1.6%).

The high percentage of coordinators in the permanent staff category in the public education sector (79.3%) indicates a commitment to stability and continuity, which likely enhances educational quality through experienced leadership. The 32.1% of contracted coordinators in the private non-free sector indicates a flexible employment model. Hiring by Parent Councils (1.6%) and externally hired staff (1.6%) in the public sector reflects a collaborative approach, which can improve decision-making and student support.

3.4. Percentage Distribution of Teachers According to Employment Status

The following chart shows the distribution of teachers according to their employment status.
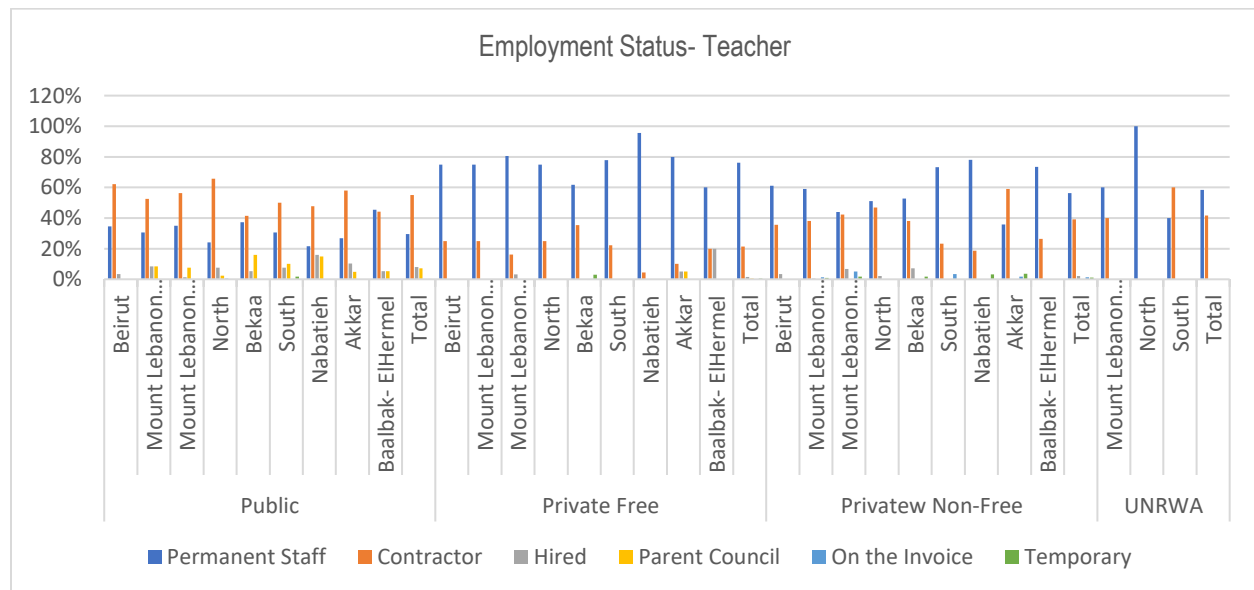
Chart (12): Distribution of Teachers by Employment Status

In the public sector, "contracted" teachers, under various titles according to the responses of the surveyed teachers, make up the majority at 70.5%, while "permanent" teachers constitute 29.5%. In free private education, the majority are "permanent" teachers at 76.2%, while in non-free private education, the percentage of "permanent" teachers is lower than in the free private sector but higher than in the public sector, at 56.4%. The UNRWA is similar to the non-free private sector, with "permanent" teachers representing 58.3%.

"Permanent teachers" make up nearly a third of the teachers in Beirut at 34.5% of the total teachers in the public sector. In the free private sector in Beirut, the percentage of "permanent teachers" is high at 75%. In the non-free private sector in Beirut, "permanent teachers" also represent a high percentage at 61%.

In Mount Lebanon – suburbs, "permanent teachers" in the public sector form less than a third at 30.5%. In the free private sector, "permanent teachers" represent 75%, while in the non-free private sector, the percentage is 59%.

In Mount Lebanon – excluding suburbs, "permanent teachers" in the public sector represent 35%. In the free private sector, they make up 80.6%, and in the non-free private sector, they represent 44.1%.

In the North governorate, "permanent teachers" constitute a quarter of the teachers in the public sector at 24.2%. In the free private sector, "permanent teachers" represent 75%, while in the non-free private sector, "permanent teachers" make up 51%.

In the Bekaa governorate, "permanent teachers" form the second-highest percentage among the provinces in the public sector at 37.2%, compared to 61.8% in the free private sector and 52.7% in the non-free private sector. In the South governorate, "permanent teachers" in the public sector make up 30.5%, compared to 77.8% in the free private sector, which is the most common status, and 73.3% in the non-free private sector, the second-highest in this sector.

In Nabatieh governorate, "permanent teachers" represent the lowest percentage among the provinces in the public sector at 21.5%, and this category dominates in the free private sector at 95.7%, as well as in the non-free private sector, being the most common employment status at 78.1%.

In Akkar governorate, "permanent teachers" represent nearly a quarter of the sample at 26.8% in the public sector, 80% in the free private sector, and the lowest percentage among the provinces in the non-free private sector at 35.7%. In Baalbek-El Hermel, this category records the highest percentage in the public sector at 45.5%, while it forms 60% in the free private sector and the second-highest percentage at 73.5% in the non-free private sector.

It can be concluded that the dominant employment status for teachers in the public sector is contracting under various titles (70.5%) (contracted, hired, parent council, on invoice, and temporary), which is the highest percentage among all sectors.

4. Results of the Highest Academic Degree

4.1. Percentage Distribution of Principals by Academic Degree

The most common academic qualifications in the public education sector are a bachelor's degree (29.3%), a teaching diploma (27.9%), and the combined percentage of holders of master's and doctoral degrees is 16.3%, reflecting a reliance on academic competencies. The chart illustrates these results.
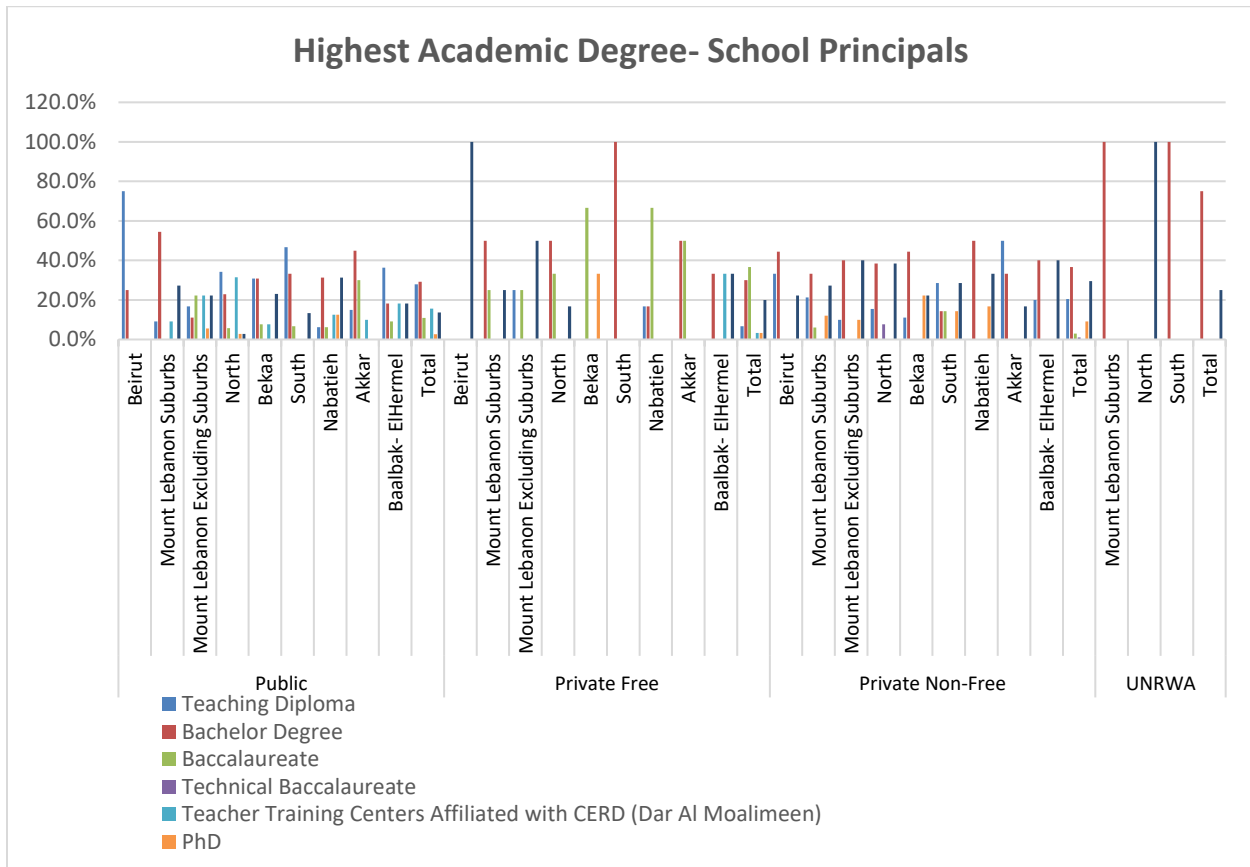
Chart (13): Distribution of Principals by Academic Degree

In the free private education sector, the most common qualification is the baccalaureate at 36.7%, while the percentage of those holding higher degrees (master's and doctorate) is low, comprising only 23.3%. In private non-free schools, the most common qualification is a bachelor's degree at 36.7%, followed by a master's at 29.6%, and a doctorate at 9.2%, indicating a greater emphasis on advanced qualifications compared to the free tuition sector. In UNRWA schools, 75% of principals hold a bachelor's degree, while 25% have a master's degree.

Across the governorates, in Beirut, 75% of principals in the public sector hold a teaching diploma and 25% hold a bachelor's degree, while in private free schools, all principals hold a master's degree. In private non-free tuition schools, 77.8% hold degrees, including 33.3% with a bachelor's and 22.2% with a master's degree. In Mount Lebanon suburbs, 54.5% of public sector

principals hold a bachelor's degree, and 27.3% hold a master's degree. In other parts of Mount Lebanon, the percentages of principals with a master's degree, teacher training centers' degree, and a baccalaureate are equal at 22.2% each in the public sector.

In the North, there is a relatively balanced distribution between principals with teaching diplomas, bachelor's degrees, and teacher training qualifications, but the percentage of those with a master's degree is minimal (2.9%), the lowest among regions. In the Bekaa region, there is a relative balance between those with teaching diplomas and bachelor's degrees (30.8% each), with a notable percentage holding a master's degree (23.1%) in the public sector. In the South, 80% of principals hold teaching or bachelor's degrees, but advanced degrees are less common compared to other governorates. In Akkar, most principals hold bachelor's degrees, with no representation of advanced degrees in the public sector.

Overall, bachelor's degrees are the most common qualification at 32.6%. The public sector shows a relatively balanced distribution of qualifications, reflecting a trend toward enhancing competencies.

4.2. Percentage Distribution of Supervisors by Academic Degree

The following chart shows the distribution of supervisors by academic degree.
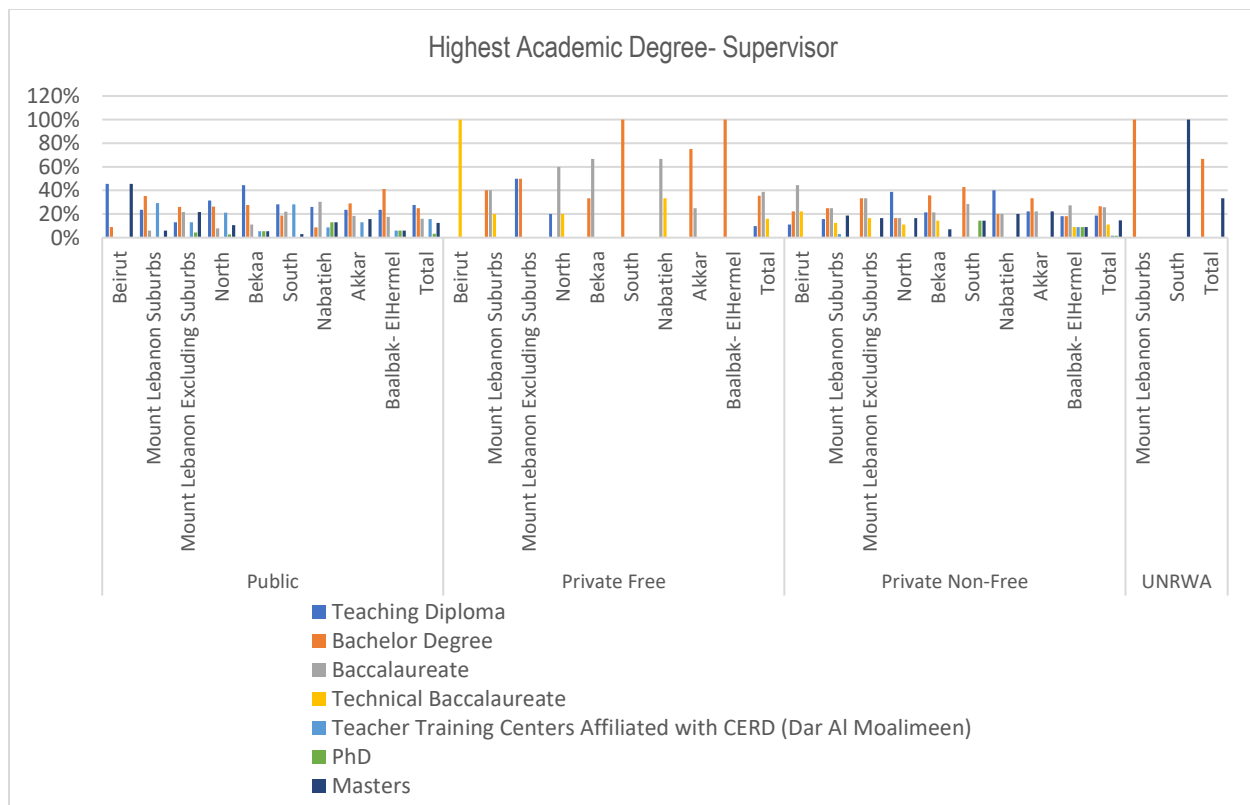
Chart (14): Distribution of Supervisors by Academic Degree

In public education, 27.6% of supervisors hold a teaching degree, and the combined percentage of those holding a Master's or Doctorate is 15.6%. Additionally, 31.8% of supervisors

hold certificates below the university level (Baccalaureate and Teacher Training Centers' Diploma).

In free private education, the most common degree is the baccalaureate, at 38.7%, and there are no supervisors holding a Master's or Doctorate, meaning the majority of supervisors are non-university graduates (54.8%). In contrast, in non-free private education, 26.5% of supervisors hold a bachelor degree, and the percentage of those holding a Master's degree reaches 14.5%, which is the highest among the private sectors, with a limited representation of Doctorate holders (1.7%).

By governorate, in Beirut, public education focuses on higher degrees, with a significant percentage of master's holders (45.5%). Free private education in this governorate is dominated by holders of technical baccalaureates. In Mount Lebanon and the North, there is a balanced distribution between university and lower degrees, with a notable presence of master's holders in the public sector. In the South and Nabatieh governorates, there are high percentages of lower degree holders, especially in public and free private education. Mount Lebanon (excluding suburbs) combines a mix of bachelor's degrees (41%) and teaching diplomas (17.9%).

It can be concluded that the public sector shows a balance between higher and lower degrees, with a slight emphasis on higher competencies. Free private education suffers from a lack of qualifications, with a heavy reliance on baccalaureate holders. The non-free private sector shows relative diversity but lacks a strong representation of higher competencies.

4.3. Percentage Distribution of Coordinators by Academic Degree

The following chart shows the distribution of coordinators by academic degree.
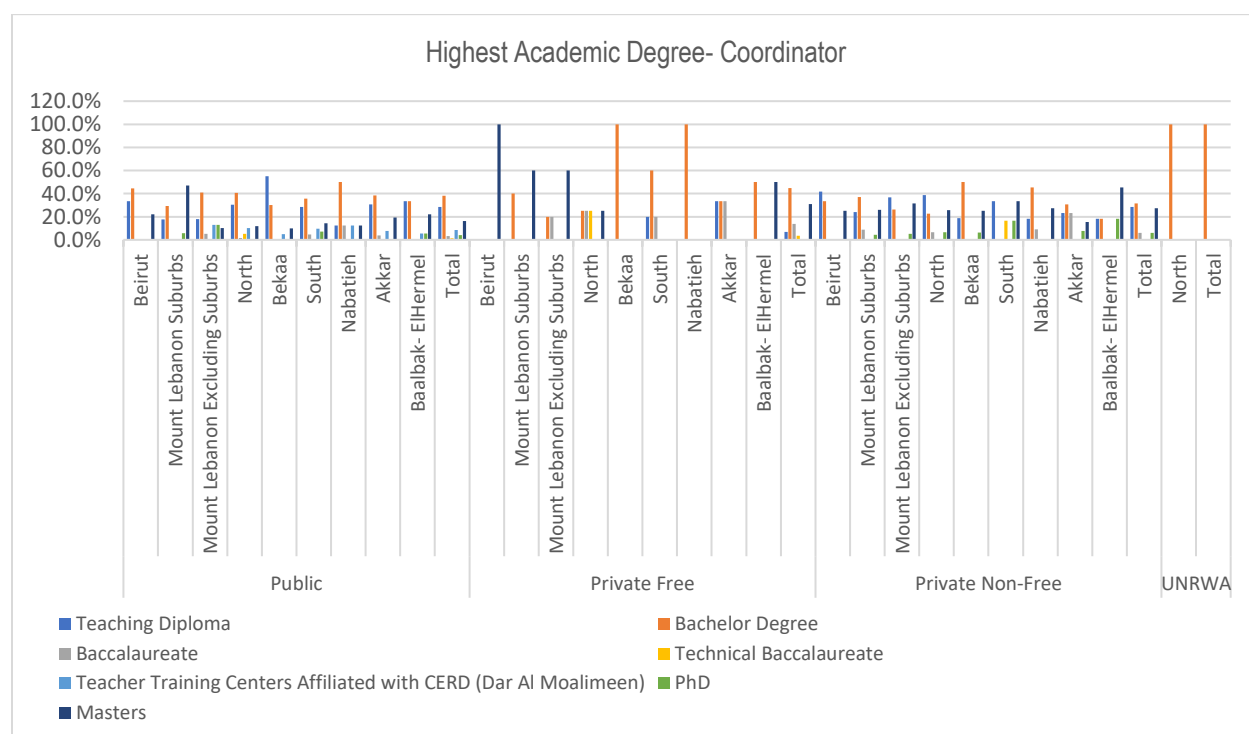
Chart (15): Distribution of Coordinators by Academic Degree

In public education, a bachelor's degree (38.2%) is the most common qualification, and the percentage of those holding a Master's or Doctorate reaches 20.4%. In free private education, 44.8% of coordinators hold a bachelor's degree, while 31% of the sample holds a Master's degree, with no Doctorate holders.

In non-free private education, 31.5% of coordinators hold a bachelor's degree, and 27.3% hold a Master's degree, which is a significant proportion. All coordinators in UNRWA hold a bachelor's degree.

Master's and Doctorate degrees are concentrated in both the public and non-free private sectors, with the public sector leading in all governorates. The UNRWA sector shows a complete absence of higher competencies, except for the bachelor degree. Beirut and the North stand out as the most distinguished regions for higher degrees.

Public education shows a strong focus on higher qualifications, with a balance between university and lower degrees. Meanwhile, free private education suffers from a lack of higher competencies, which impacts the sector's performance. The non-free private sector shows progress in qualifications compared to the free sector but still needs to improve the representation of higher competencies.

4.4. Percentage Distribution of Teachers by Academic Degree

The following chart shows the distribution of teachers by academic degree.
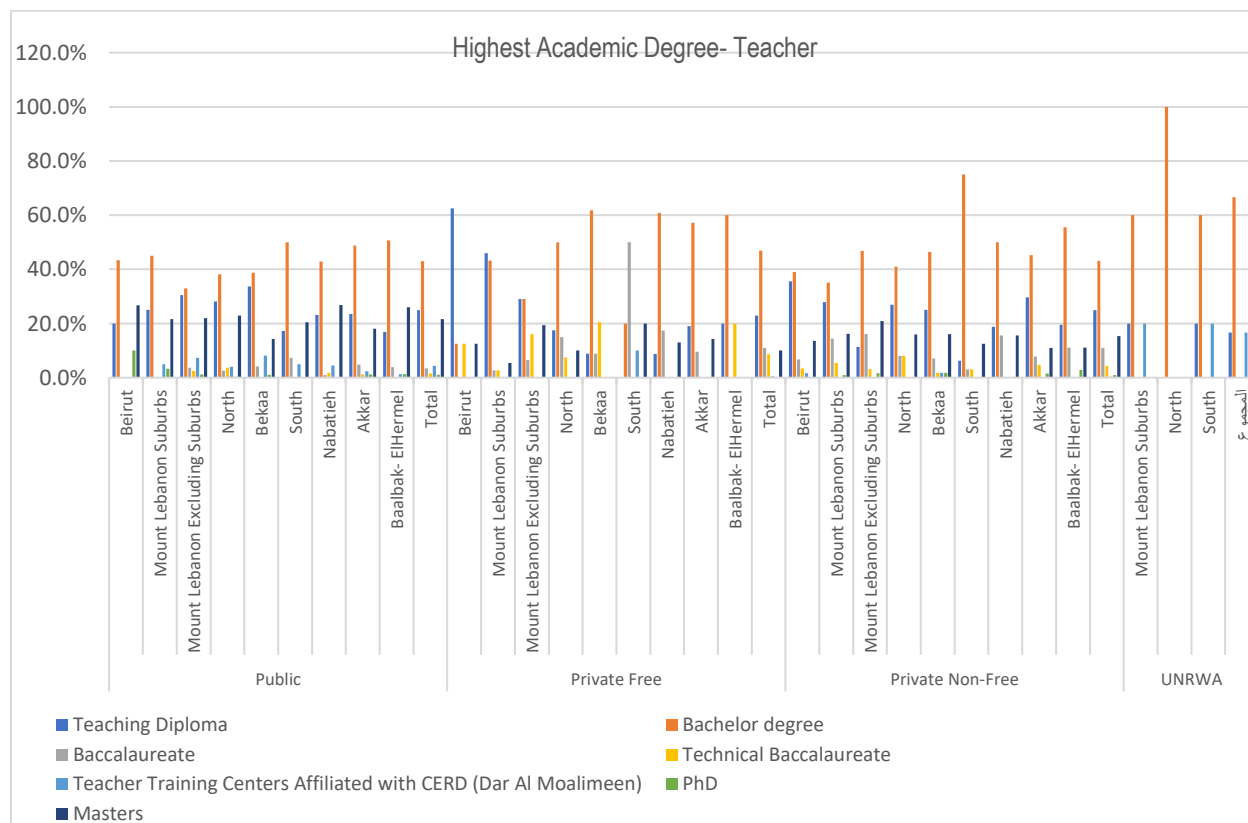
Chart (16): Distribution of Teachers by Academic Degree

In Beirut governorate, the results for the public sector show that 43.3% of teachers hold a bachelor's degree, and 26.7% have a master's degree. In the free private sector, 62.5% hold a teaching diploma, while the non-free private sector has the largest proportion of teachers holding a bachelor's degree at 39%.

In the Mount Lebanon - Suburbs region, 45% of teachers in the public sector hold a bachelor's degree, and 21.7% hold a master's degree. In the free private sector, 45.9% of teachers hold a teaching degree, while 35.1% have a bachelor's degree in the non-free private sector.

In Mount Lebanon - Non-Suburbs, the results for the public sector show that 32.9% of teachers hold a bachelor's degree, and 30.5% have a teaching diploma. In the free private sector, 29% hold either a teaching or bachelor's degree. The non-free private sector has the highest proportion of bachelor's degree holders at 46.8%.

In the North governorate, the results for the public sector show that 38.1% of teachers hold a bachelor's degree, and 28.1% have a teaching diploma. Half of the teachers in the free private sector hold a bachelor's degree (50%), while 41% of teachers in the non-free private sector hold a bachelor's degree.

In the Bekaa governorate, the public sector results show 38.8% of teachers with a bachelor's degree, and 33.7% with a teaching diploma. In the free private sector, 61.8% hold a bachelor's degree, compared to 46.4% in the non-free private sector.

In the South governorate, half of the teachers in the public sector hold a bachelor's degree, and 20.5% have a Master's degree. Half of the teachers in the free private sector hold a high school diploma (Baccalaureate), while 75% in the non-free private sector hold a bachelor's degree.

In Nabatieh governorate, the public sector results show that 42.9% of teachers hold a bachelor's degree, and 26.8% have a Master's degree. This percentage increases in the free private sector, with 60.9% holding a bachelor degree, compared to 50% in the non-free private sector.

In Akkar governorate, the largest percentage of teachers hold a bachelor's degree, with 48.8% in the public sector (compared to 18.1% with a master's degree), 57.1% in the free private sector, and 45.3% in the non-free private sector. The same trend is observed in the Baalbek-Hermel governorate, with the largest proportion holding a bachelor's degree (50.6% in the public sector, compared to 26% with a Master's degree, 60% in the free private sector, and 55.6% in the non-free-private sector).

When we look at the results regarding the highest academic degree held by teachers, we find that across all sectors, the largest percentage is for those holding a bachelor's degree at 43.6%, followed by a teaching diploma at 24.7%, and a Master's degree at 18%.

Based on these results, we conclude that:

- **The bachelor's degree is the most common qualification among teachers across all governorates and sectors.**

- **Master's degree holders make up a significant proportion, especially in the public sector and some governorates such as Beirut and Mount Lebanon.**

- **Rural governorates such as Akkar and Baalbek show a disparity in the proportion of higher-degree holders compared to urban governorates.**

5. Results of the Years of Experience in the Educational Field

5.1. Percentage Distribution of Principals by Years of Experience

The following chart shows the distribution of principals by years of experience in the educational field.
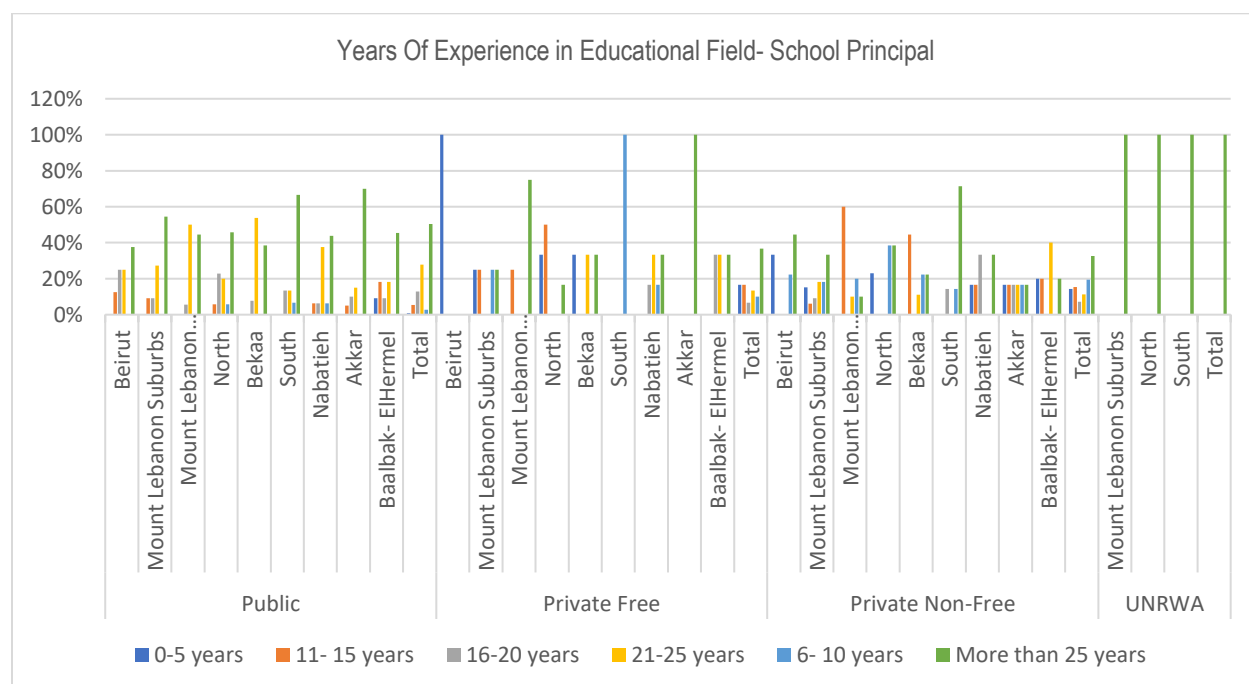
Chart (17): Distribution of Principals by Years of Experience in Education

Years of experience were categorized into five-year intervals. The results show that the largest group in the public sector comprises principals with more than 25 years of experience, accounting for 50.3%, followed by those with 21–25 years (27.9%). The next groups are those with 16–20 years (12.9%), 11–15 years (5.4%), 6–10 years (2.7%), and lastly, 0–5 years, which recorded the lowest percentage (0.7%). More than half of the public sector principals have over 25 years of experience. There is a relatively balanced representation in the 16–25-year range.

The distribution of principals in the free private sector by years of experience is as follows: The largest group is those with more than 25 years of experience (36.7%). Equal percentages were recorded for the groups 0–5 years and 11–15 years (16.7% each). The percentages drop for the 21–25-year group (13.3%), followed by 6–10 years (10.0%) and 16–20 years (6.7%). This indicates

that over one-third of the free private sector principals have more than 25 years of experience, with relatively high representation among those with less than 10 years of experience compared to other groups.

In the non-free private sector, the distribution is as follows: The largest group comprises principals with more than 25 years of experience (32.7%), followed by those with 6–10 years (19.4%), and 11–15 years (15.3%). The 0–5-year group accounts for 14.3%, while the 21–25-year group is 11.2%, and the smallest group is the 16–20-year range (7.1%). This sector exhibits a moderate base of principals with long experience (up to 25 years) in education, with a relatively balanced distribution among mid-range experience groups (11–25 years). All UNRWA principals have over 25 years of experience.

At the governorate level, the results from Beirut indicate a strong representation of the private non-free tuition sector, where 44.4% of principals have more than 25 years of administrative experience. In the North, 45.7% of principals in the public sector have over 25 years of experience, while Nabatieh records the highest proportion in this category at 70%. In the Bekaa region, the public sector leads with 53.8% of principals having 21–25 years of administrative experience.

The findings reveal that the public sector accounts for the largest percentage of principals with extensive administrative experience (over 25 years) across all governorates. The private non-free tuition sector stands out in Beirut and the South for having principals with new (0–5 years) and intermediate (6–10 years) levels of administrative experience.

Overall, the results highlight a clear variation in years of administrative experience across governorates and sectors, with the public sector generally characterized by long-tenured experience and a diverse distribution across the regions.

5.2. Percentage Distribution of Supervisors by Years of Experience

In the public sector, the results highlight stability in leadership roles, with a predominance of supervisors with very long experience (more than 25 years). However, this may limit innovation in administrative approaches. Governorates like Bekaa and Nabatieh show a high concentration of long-experienced supervisors.

In the free private sector, there is a relatively balanced distribution of age groups and experience levels, although the largest group includes those with short experience (0–5 years, 22.6%). This group is notably prominent in Beirut, while in the South, long-experienced supervisors dominate.

The following chart illustrates these results.
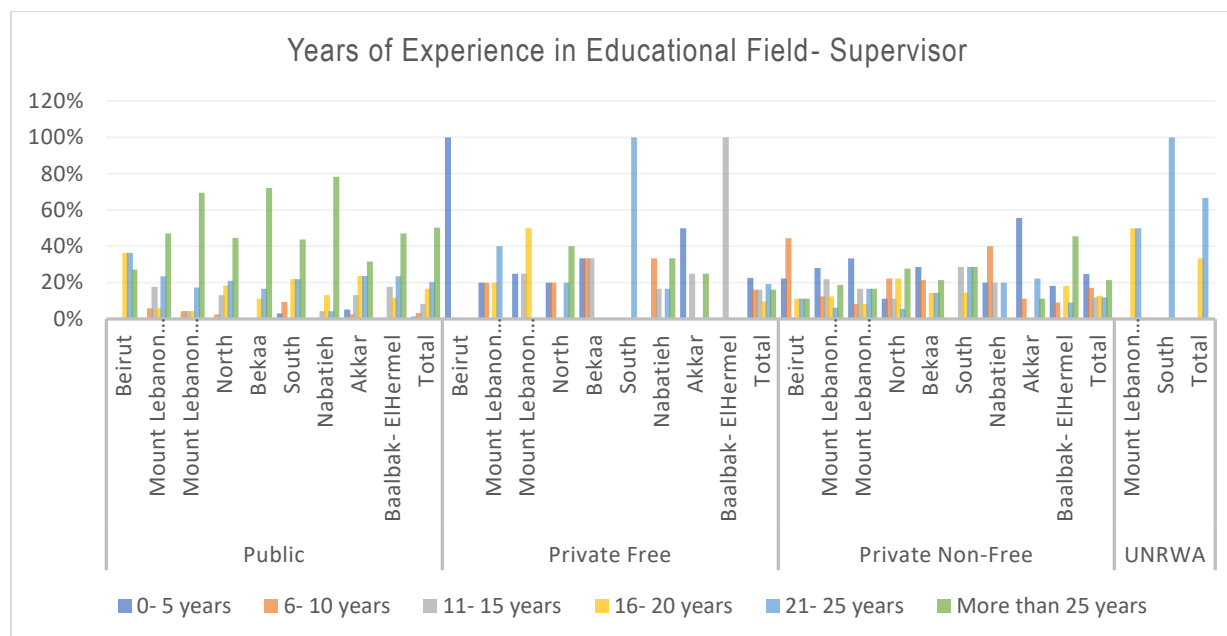
Chart (18): Distribution of Supervisors by Years of Experience in Education

The results for the non-free private sector indicate a notable attraction of new talents, with 24.8% of supervisors having short experience (0–5 years), alongside a significant percentage of very long experience (21.4%). This balance in distribution across different generations reflects administrative diversity across regions. All supervisors in the UNRWA sector have experience ranging between 16 and 20 years.

At the governorate level, the results show strong administrative stability in Beirut and the South due to the clear dominance of very long experience. In contrast, Akkar displays a high percentage of short experience (50%–55.6%), highlighting the presence of new young talents. Bekaa reflects a balance between short and very long experience, indicating diversity in leadership. In suburban Mount Lebanon, there is an overlap between new and veteran staff, creating a dynamic work environment. Meanwhile, Baalbek-Hermel focuses heavily on experienced staff with very long experience.

When comparing sectors, all three sectors (public, free private, and non-free private) rely significantly on less experienced groups (0–5 years). The public sector has the highest percentage in the (0–10 years) range, with a notable weakness in the longer experience categories. On the other hand, the private education sector (both free and non-free) shows relatively better representation of groups with over 20 years of experience compared to the public sector.

At the governorate level, the North and Nabatieh display a significant lack of long-experienced supervisors in the public sector. The free private education sector in Beirut stands out for retaining experienced and stable professionals. Additionally, the non-free private education sector in the South, Bekaa, and Beirut excels in maintaining expert and stable professionals.

5.3. Percentage Distribution of Coordinators by Years of Experience

The following graph illustrates the results of coordinators' distribution by years of experience.
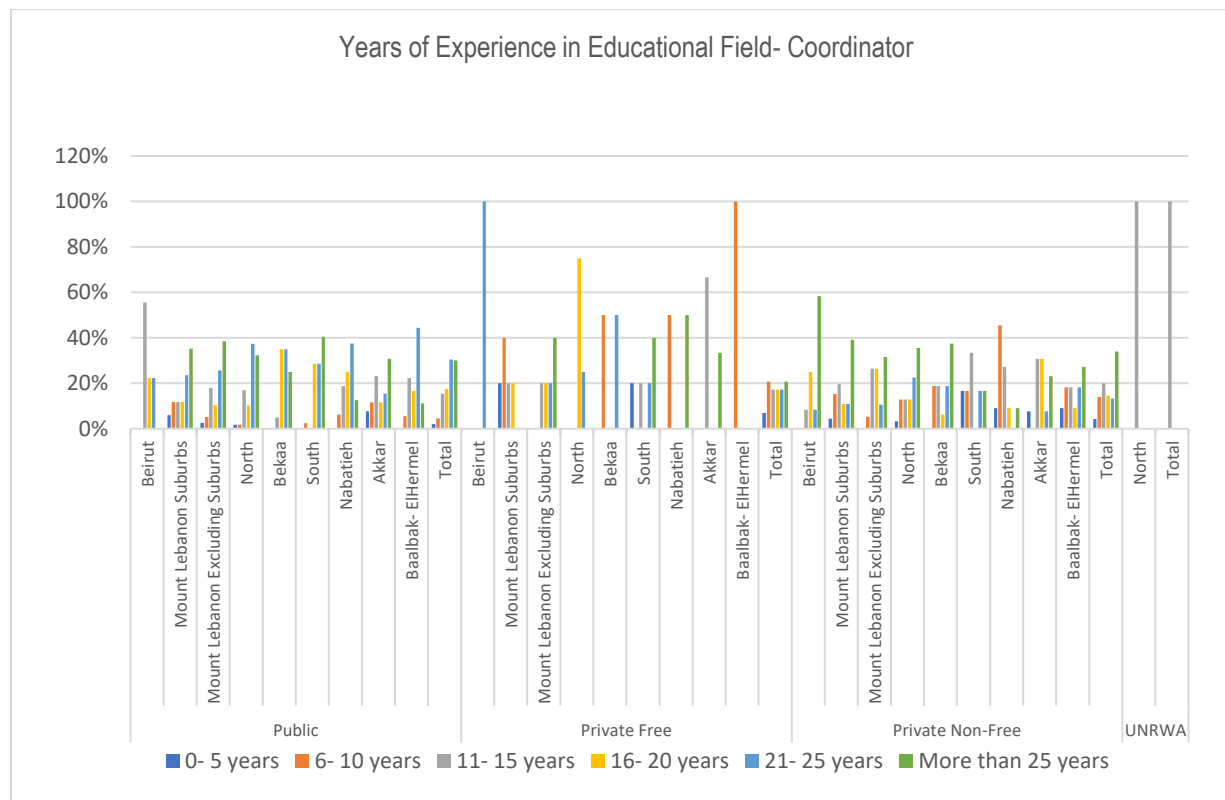
Chart (19): Distribution of Coordinators by Years of Experience

The results for the public sector across governorates indicate that in Beirut, 55.6% of coordinators have 6–10 years of experience, followed by 22.2% with 11–15 years of experience. Notably, there are no coordinators with less than 6 years or more than 15 years of experience, highlighting a limited number of new coordinators.

In suburban Mount Lebanon, there is diverse distribution: 5.9% of coordinators have 0–5 years of experience, 11.8% fall into both the 6–10 and 11–15 years categories, while the largest group (35.3%) has over 25 years of experience, reflecting the presence of highly experienced coordinators.

In the North, only 1.7% have 0–5 years of experience, while the largest proportion (37.3%) has over 25 years. In Bekaa, there are no coordinators with less than 6 years of experience. Instead, the percentages are evenly distributed across the categories, with a focus on those with 11–20 years of experience. The South demonstrates diversity in experience levels, with 40.5% having more than 25 years of experience.

In the free private sector, all coordinators in Beirut have more than 25 years of experience, reflecting the significant presence of highly experienced coordinators. In contrast, suburban Mount Lebanon shows a high percentage (60%) of new coordinators (0–5 years) and 40% with 6–10 years of experience.

In the non-free private sector, Beirut shows a balance across different categories, with a notable 58.3% of coordinators having 16–20 years of experience.

In public schools in Beirut, there is a significant proportion of coordinators with 21–25 years of experience (31.8%) and over 25 years (30.8%). In the South and Nabatieh, the focus is on higher experience categories (16+ years), with 37.7% and 20.7%, respectively. In Baalbek-Hermel, a strong presence is noted in the 21–25 years category (32.3%) across sectors.

Comparing sectors, the public sector has a significant number of coordinators with over 16 years of experience, especially in the South (40.5%) and North (32.2%). The free private sector shows more balanced experience distribution, with noticeable clusters in both early-career coordinators (0–5 years, 20.7%) and those in advanced stages (20+ years: approximately 20% for each). The non-free private sector focuses on experienced coordinators, particularly in Beirut, where 58.3% have more than 25 years of experience.

Beirut contrasts sharply across sectors, with a stronger tendency toward highly experienced coordinators in the public sector compared to private sectors. In Akkar, there is a high percentage (61.5%) of coordinators with less than 5 years of experience. In Baalbek-Hermel, 72.2% of coordinators have less than 10 years of experience, and in Nabatieh, 75% are similarly in this early stage. In Bekaa, coordinators generally have medium experience levels (6–10 years).

In UNRWA schools in the North, there are exclusively two coordinators with over 25 years of experience. In Bekaa's free private sector, there is a unique distribution, with coordinators evenly split between new (0–5 years, 50%) and mid-career coordinators (6–10 years, 50%).

5.4. Percentage Distribution of Teachers by Years of Experience

Teacher responses across governorates show that in the free private sector in Beirut, the vast majority (62.5%) have 0–5 years of experience. This is followed by the public sector, where 43.3% of teachers have 11–15 years of experience. In the non-free private sector, experience levels are distributed across various categories, with 27.1% in the 0–5 years range, as illustrated in the following chart.
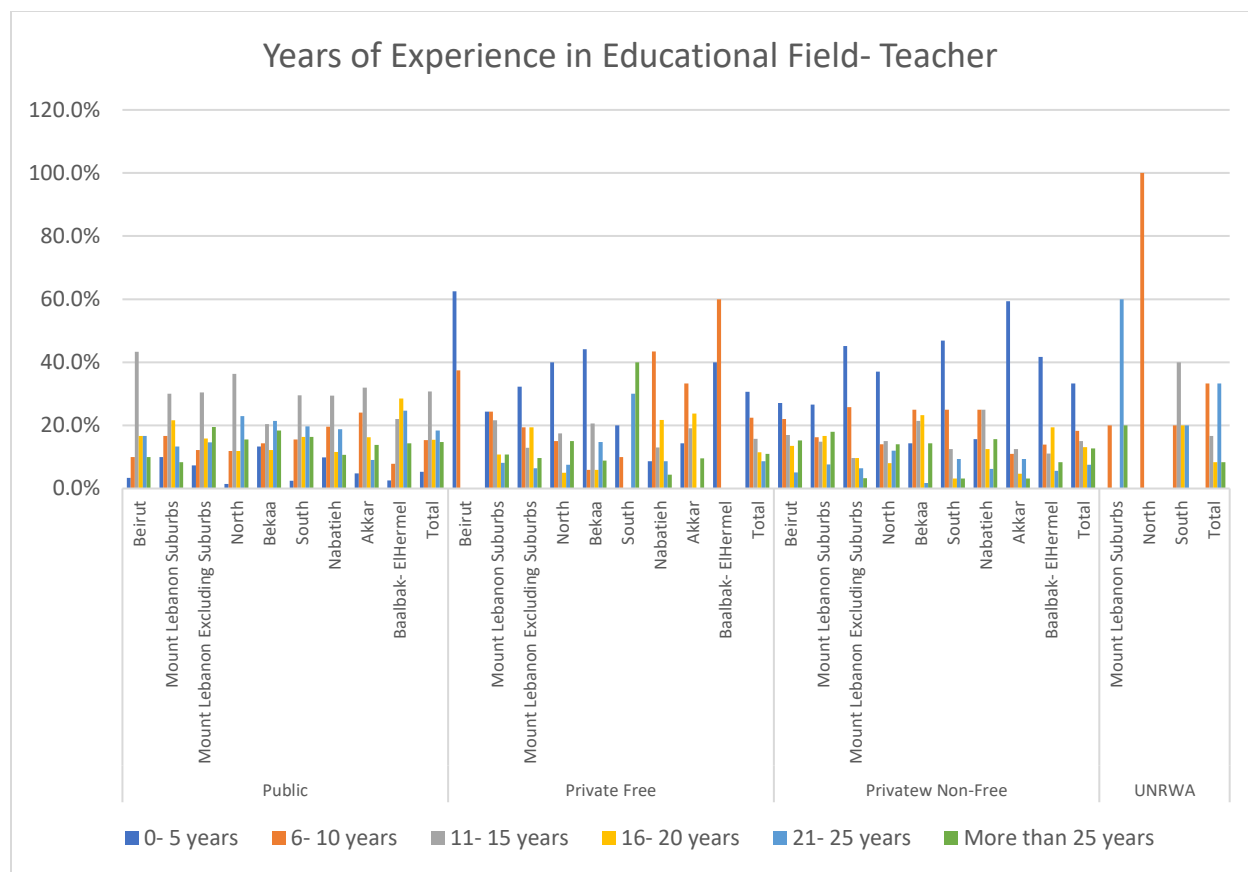
Chart (20): Distribution of Teachers by Years of Experience

In Mount Lebanon suburbs, the public sector results indicated that 30% of teachers have 11–15 years of experience. In the private free sector, 24.3% of teachers fall into both the 0–5 years and 6–10 years categories. In contrast, the most common category in the private non-free sector is 0–5 years, accounting for 26.6%.

For Mount Lebanon (excluding suburbs), the public sector recorded the highest proportion of teachers (30.5%) with 11–15 years of experience. The private free sector reported 32.3% of teachers with 0–5 years of experience, while the dominant category in the private non-free sector was also 0–5 years, at 45.2%.

In the North Governorate, public sector results indicated that the most common category was 11–15 years of experience, at 36.3%. In the private free sector, 40% of teachers have 0–5 years of experience, with almost equal proportions across the private non-free sector, where 37% fall into the 0–5 years category.

In the Bekaa Governorate, the private free sector results resembled those of the North, with the highest proportion (44.1%) being teachers with 0–5 years of experience. In the public sector, the highest percentage (21.4%) was for teachers with 21–25 years of experience. The private non-free sector recorded 25% in the 6–10 years category.

In the South Governorate, the most common category in the public sector was 11–15 years of experience (29.5%). In the private free sector, 40% of teachers had more than 25 years of experience, while in the private non-free sector, 46.9% had 0–5 years of experience.

The Nabatieh Governorate results indicated a similar trend in the public sector, where 11–15 years of experience was the dominant category (29.5%). In the private free sector, 43.5% of teachers had 6–11 years of experience. In the private non-free sector, 25% of teachers fell into each of the 6–10 years and 11–15 years categories.

In Akkar Governorate, the most common category in the public sector was 11–15 years of experience (31.9%). In the private free sector, the highest proportion (33.3%) was for teachers with 6–10 years of experience, while in the private non-free sector, the largest proportion (59.4%) had 0–5 years of experience.

In Baalbek-Hermel, 28.6% of teachers in the public sector had 16–20 years of experience. In the private free sector, 60% of teachers had 6–10 years of experience, while in the private non-free sector, 41.7% fell into the 0–5 years category.

The most common experience category among teachers in Lebanon is 11–15 years, representing 23.6% of all teachers. Teachers in the private sector are more concentrated in the 0–5 years category compared to the public sector, which has a higher proportion of experienced teachers. Rural areas, such as Baalbek and Akkar, show a higher percentage of teachers with long-term experience.

6. Results Based on Years of Experience in Administration

6.1. Percentage Distribution of Principals by Years of Experience in Administration

The following chart illustrates the distribution of principals based on their administrative experience.
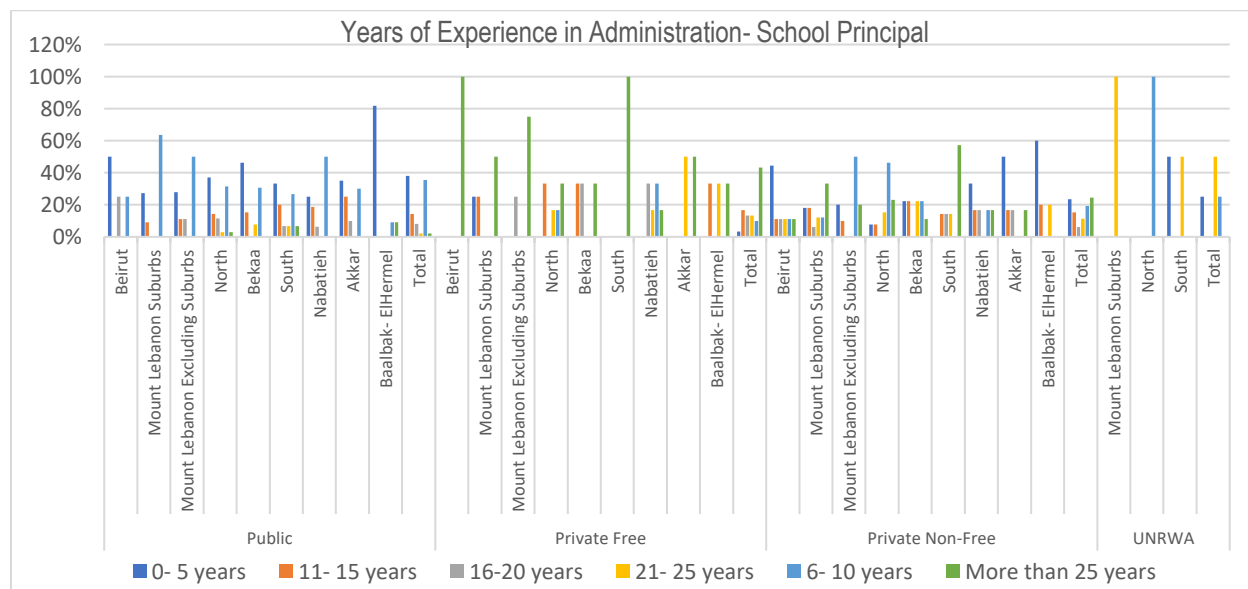
Chart (21): Distribution of Principals by Years of Administrative Experience

The largest group of principals in the public sector comprises those with administrative experience ranging from 0 to 5 years, accounting for 38.1% of the total. This is followed by principals with 6 to 10 years of experience, representing 35.4%. The percentages decrease further with 11 to 15 years of experience at 14.3%, 16 to 20 years at 8.2%, and 21 to 25 years as well as those with more than 25 years of experience both at 2.0%.

This distribution indicates that 73.5% of public-sector principals have relatively recent to mid administrative experience (0–10 years), while those with over 20 years of experience constitute a very small proportion (4%) of the total.

In the private subsidized sector, the scenario is completely different. The majority of principals have held their positions for more than 25 years, accounting for 43.3% of the total. The percentages decline across the other categories, with 16.7% of principals having 11 to 15 years of experience. The number of principals with 16 to 20 years and 21 to 25 years of experience is equal, each representing 13.3%, followed by those with 6 to 10 years at 10.0%, and finally, those with 0 to 5 years of experience at just 3.3%.

This suggests that principals in the private non free sector predominantly fall into two main categories (excluding the least experienced group): those with more than 25 years of experience (43.3%) and those with intermediate experience levels (11 to 25 years).

In the private free sector, the distribution varies significantly from the other sectors. The largest proportion of principals falls into the more than 25 years category (24.5%), followed closely by those with 0 to 5 years of experience (23.5%), the lowest proportion in the private subsidized sector. The 6 to 10 years category accounts for 19.4%, while 11 to 15 years makes up 15.3%. The percentages then decline in the 21 to 25 years category (11.2%) and the 16 to 20 years category (6.1%).

This indicates a relatively uneven distribution in this sector, with the highest combined percentage (48%) split between principals with more than 25 years (24.5%) and those with 0 to 5 years (23.5%) of experience.

Results from the UNRWA sector reveal that 50% of principals have 21 to 25 years of experience, while the remaining are equally distributed between the 0 to 5 years and 6 to 10 years categories, each accounting for 25%.

Across all sectors, principals with 0–5 years and 6–10 years of experience make up approximately 55.9% of the total number of principals. Principals with more than 25 years of experience represent 14.3%, with those in the 0–5 years category forming the largest group in most governorates, particularly in the public sector, which dominates in the short experience categories. Additionally, principals with 6–10 years of experience represent a significant portion across most sectors.

The private non free sector has the highest proportion of principals with long experience (more than 25 years), while the private free sector shows a relatively balanced distribution across all categories. The UNRWA sector relies on principals predominantly with 21–25 years of experience.

The following chart illustrates the distribution of supervisors based on years of experience in supervision.
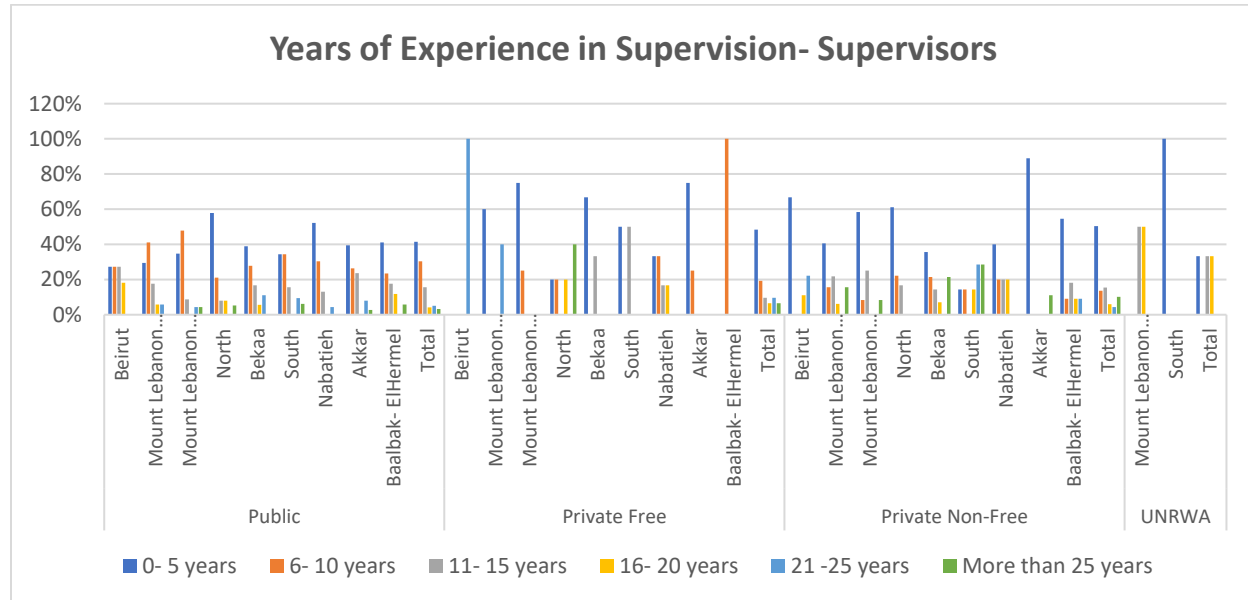
Chart (22): Distribution of Supervisors by Years of Experience in Supervision

The largest percentage of supervisors in the public sector is found in the group with recent experience in supervision (0-10 years), representing 71.9%, with a weak representation from those with long experience (8.3%) in the more than 20 years category. Within this sector, the highest concentrations of less experienced supervisors are found in the northern and Nabatieh governorates, where more than 50% belong to the lower experience categories. In comparison, Baalbek-Hermel and the South have a more varied distribution of experience compared to other governorates.

In the private free sector, there is a clear dominance of those with recent experience (0-5 years), making up 48.4%, with varying representation for those with medium and long experience. Beirut stands out with supervisors having the longest experience (100% in the 21-25 years category).

Mount Lebanon (suburbs) and the North show a strong presence of less experienced supervisors, with some balance in longer experience groups. The Bekaa and Akkar show clear dominance of supervisors with recent experience. Nabatieh shows a relatively balanced distribution across experience groups.

In the private non-free sector, there is a focus on the more recent experience group (0-5 years), with 50.4%, and a moderate presence of those with longer experience (10.3%). Beirut again stands out with supervisors in the 21-25 years category (100%). Mount Lebanon (both sections) and the North show strong representation of less experienced supervisors, with some balance in

longer experience categories. The Bekaa and Akkar show clear dominance of less experienced supervisors, while Nabatieh again shows a balanced distribution across categories.

The UNRWA supervisor data indicates a diversity of experience, with clear representation from both medium and long experience groups compared to other sectors, with a focus on recent experience in the South, where 100% of supervisors fall within the 0-5 years range, indicating complete reliance on less experienced supervisors. There is an equal representation between those with 11-15 years and 16-20 years of experience in Mount Lebanon (suburbs), indicating medium and advanced experience without representation of recent or long experience groups. The longest experience groups (21 years and above) are absent in this sector.

From the supervisor data, it can be concluded that the public sector has a higher percentage of less experienced staff compared to the private non-free sector, which shows a more varied distribution. Beirut has strong representation from supervisors with longer experience, while the North and Nabatieh governorates focus on less experienced staff.

The private non-free sector records a higher percentage of those with longer experience. Supervisors with recent experience make up the majority in all three sectors (public, free private, and non-free private), with the public sector showing the highest percentage in the 0-10 years category and a noticeable lack of long experience groups. Both private sectors (free and non-free) feature a higher number of supervisors with advanced experience (more than 20 years) compared to the public sector, especially in the North and Nabatieh governorates, where there is a significant lack of supervisors with long experience.

The free private education sector, particularly in Beirut, maintains a stable and experienced workforce. In contrast, the non-free private sector benefits from expanding the use of this experienced workforce in governorates such as the South, Bekaa, and Beirut, which also maintain experienced staff.

7. General Summary of Demographic Data findings

7.1. Age Variable

Nearly half of the principals in the public sector (48.3%) belong to the age group of 40–50, followed by the 50–60 age group, with a complete absence of younger age groups. Supervisors in the public sector exhibit similar age group distributions as principals. Conversely, the private (free and non-free) sectors show higher representation in the 50–60 age group and include both younger age groups and those over 60.

Overall, this distribution indicates a higher tendency toward older principals in all sectors, with a noticeable lack of younger principals in the public sector. Regarding coordinators, the 30–40 age group is more prevalent compared to principals and supervisors (35.3%). This age group is also the most common among teachers (43.6%).

7.2. Gender Variable

The results highlight a pivotal role for women in the education sector, with a clear dominance in most educational sectors, especially in school leadership and teaching roles within the public sector. The private sector demonstrates a relative gender balance among school principals, while UNRWA-affiliated schools show an absolute dominance of women. The overall distribution reflects a culture of encouraging women in public education, with some balance observed in specific private sectors.

7.3. Employment Status

Approximately 40% of public school principals are in acting roles, meaning they have not undergone formal preparation programs in educational and school administration. Additionally, over two-thirds of public-sector teachers are contracted employees (70.5%) under various designations. This is significant and calls for immediate solutions, especially since many of these teachers have not undergone organized training in education.

7.4. Educational Qualifications

Analysis of the distribution of academic qualifications among principals, supervisors, coordinators, and teachers across different sectors indicates that most public school principals and supervisors hold at least a bachelor's degree, which overwhelmingly dominates this sector. In contrast, the non-free private sector shows a higher representation of those with advanced degrees (Master's), while the public sector remains dominated by bachelor's degree holders. In the free private sector, sub-bachelor qualifications, such as the baccalaureate, are more prevalent, reflecting a relative deficiency in higher-level competencies.

Overall, noticeable disparities in the distribution of academic qualifications exist across different regions. Public education exhibits a relative balance in academic credentials with a slight inclination toward enhancing higher-level qualifications, whereas free private education demonstrates a marked weakness in representing advanced degree holders.

7.5. Years of Experience in Education

The public sector heavily relies on personnel with extensive experience, with the largest proportion of principals having over 25 years of experience. Similarly, the free private sector features a significant representation of principals with long experience (over 25 years), yet there is also noticeable representation of those with shorter experience (0–5 years). The non-free private sector exhibits a more balanced distribution across different experience categories.

An analysis of principals, supervisors, and coordinators across various regions reveals that longer experience dominates many areas, particularly in the public sector, while shorter and medium experience levels provide a better balance in some private sector regions. The results also show significant variations in experience distribution across sectors and governorates.

7.6. Years of Experience in Administration/Supervisors' Roles

In the public sector, recent administrative experience (0–10 years) predominates, accounting for a large percentage (73.5%), with limited representation of longer experience. When compared to principals who have not received formal training in school management, a considerable portion of those with limited experience in administration are also untrained.

In the free private sector, the majority of principals have over 25 years of experience (43.3%). The non-free private sector shows a relative balance, with emphasis on both shorter and longer experience levels (24.5%). UNRWA-affiliated schools primarily focus on principals with 21–25 years of experience (50%).

For supervisors, the public sector leans heavily on newer personnel, while the free and non-free private sectors display a wider range of experience. Beirut stands out for its representation of longer-experienced personnel.

Second: Human Resources in Schools

To determine the size and distribution of human resources in the sample schools and highlight the gaps and needs related to the number of staff, the researchers directed a set of questions to school principals through a questionnaire. These questions covered all job categories in the school, including administrative, educational, and support staff. The results of the principals' responses revealed the reality of human resources in schools, which will be detailed in the following sections. It is noteworthy that there is one principal in each school across different sectors.

1. Total Number of Staff in the School (All Job Categories/Anyone Working at the School)
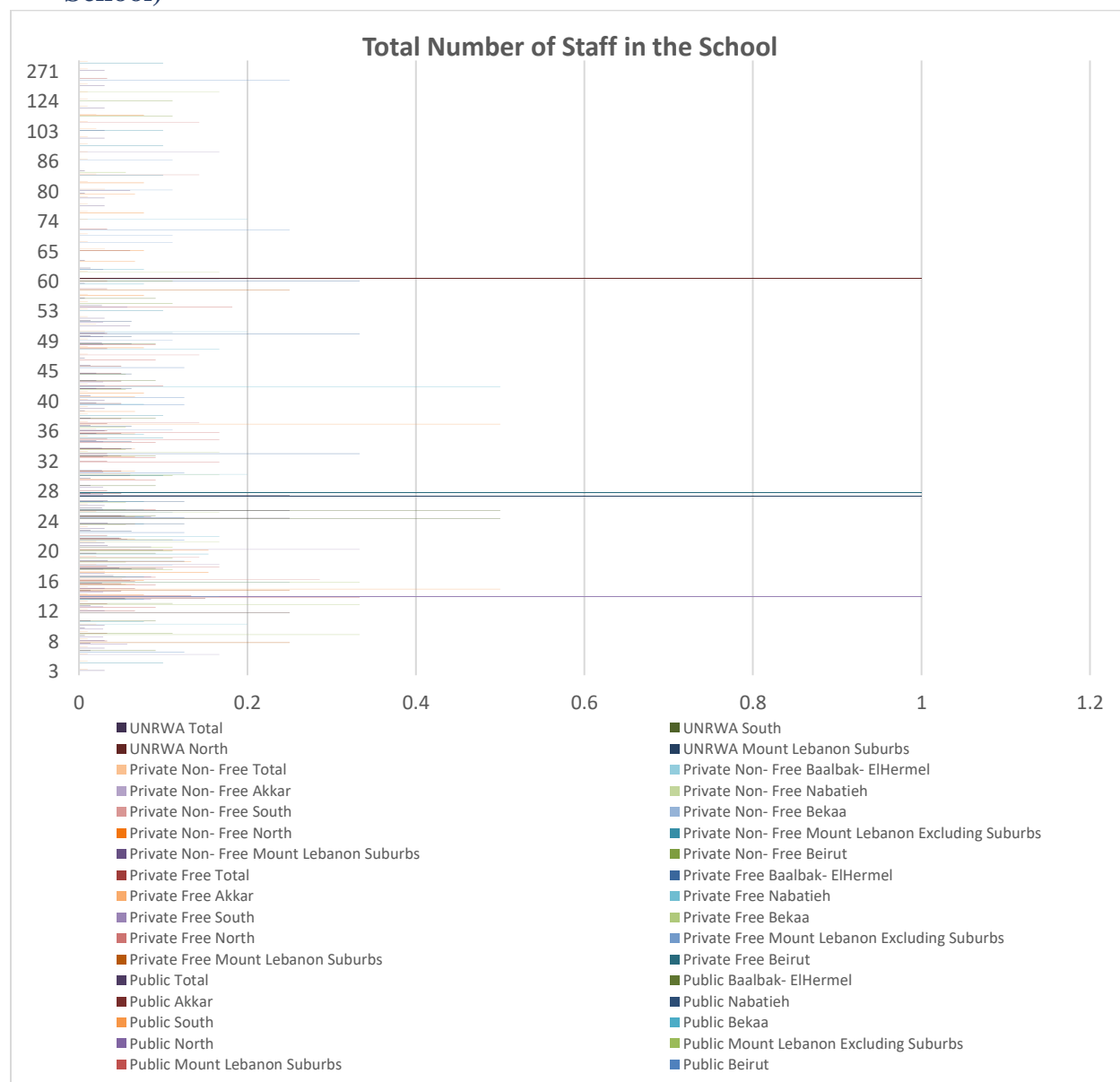
Chart (23): Total Number of Staff in the School

The total number of staff in the schools shows a noticeable variation across different educational sectors in various Lebanese governorates. In Beirut, the distribution of staff in the public, private, and non-fee-paying sectors varies, with the largest number in the public sector, representing 44.4% of schools. In Mount Lebanon, the free private sector dominates at 67.3%, while the public sector represents only 22.4%. In the North, the public sector comprises 63.6% of schools, while in the South, it represents 60.0%. In the Bekaa, the public sector makes up 52.0%, while the free private sector stands out as a major force. In Akkar, the public sector holds the leading position.

Overall, the public sector represents the majority in most governorates, with a limited presence of the free private sector, while the non-fee-paying private sector plays a prominent role in high-population areas.

2. Number of teaching staff in the school

2.1. Number of Assigned General Supervisors
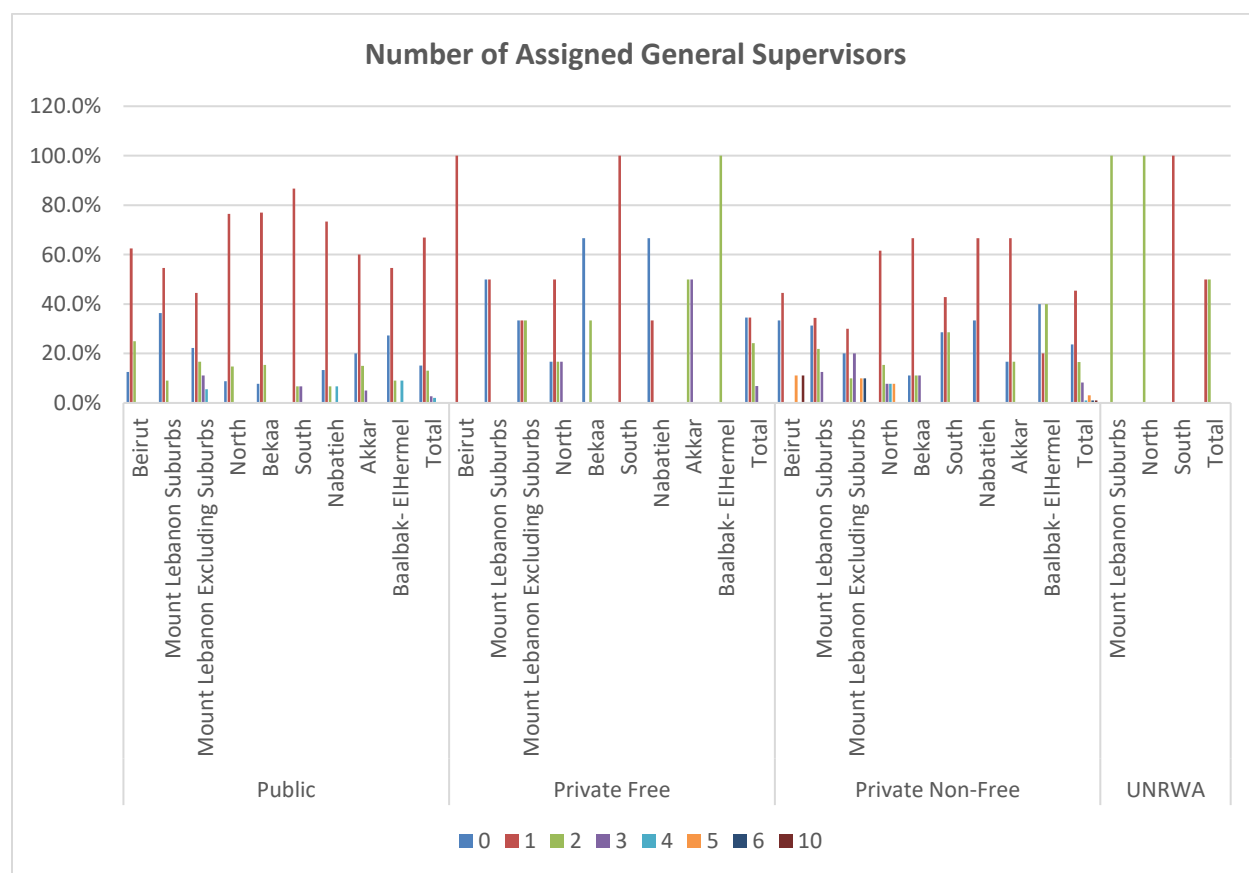
Chart (24): Number of Assigned General Supervisors

In Beirut Governorate, the public education sector is characterized by a significant number of schools relying on a single assigned general supervisor, representing (62.5%) of schools. There is also a smaller proportion relying on multiple assigned general supervisors, while schools without assigned general supervisors form a very small percentage. In the private free education sector,

there is only one school with a single assigned general supervisor, while the non-free private sector shows considerable variation in the distribution of assigned general supervisors.

In Mount Lebanon (suburbs), the public education sector mainly relies on a single assigned general supervisor (54.5%), with a very small percentage relying on multiple assigned general supervisors. The private free sector has half of its schools without any assigned general supervisors, and the other half with a single assigned general supervisor. The non-free private sector is divided between a single assigned supervisor, no supervisors, and three assigned general supervisors.

In Mount Lebanon (excluding suburbs), the public sector shows diversity in the distribution of assigned general supervisors, with a large proportion relying on a single assigned general supervisor and a very small proportion relying on more than three assigned general supervisors. The private free sector has limited distribution of assigned general supervisors, while the non-free private sector has a balanced distribution between schools without assigned general supervisors and those with four or more general supervisors.

 the North, the public education sector primarily relies on a single assigned general supervisor (76.5%), with a very small percentage relying on assigned general supervisors. The private free sector is limited, while the non-free private sector predominantly relies on a single assigned general supervisor.

In Bekaa, the public sector relies on a single assigned general supervisor (76.9%), with a very small percentage of schools having no assigned general supervisors. The private free sector has most of its schools without assigned general supervisors, while the non-free private sector shows a large reliance on a single general supervisor.

In the South, the public education sector mainly relies on a single assigned general supervisor (86.7%), with a very small percentage relying on two or three assigned general supervisors. The private free sector has very limited distribution of assigned general supervisors, while the non-free private sector is divided between schools without general supervisors and those with a single assigned general supervisor.

Overall, it is evident that most schools in all governorates rely on a single assigned general supervisor, with varying distributions of assigned supervisors across sectors.

2.2.   Number of Supervisors (Who Do Not Teach)

In the public education sector in Beirut Governorate, there is variation in the number of supervisors who do not teach. About 25% of schools do not have any supervisors who are not also teaching, reflecting a need for improvement in the distribution of supervisors to ensure better administrative efficiency. Schools with a single supervisor represent (12.5%), indicating the need for more personnel to ensure fairer distribution of responsibilities. Schools with two supervisors form (50%) of the sector, showing a noticeable need for broader distribution of supervisors. Schools with four supervisors represent (12.5%), highlighting the necessity of efficiently allocating their roles based on school needs.

The private free sector in Beirut includes only one school with a single supervisor, reflecting the sector's limitation in this regard.

The non-free private sector in Beirut shows diversity, with schools without a supervisor, schools with one supervisor, and schools with three supervisors, indicating a variation in the distribution of supervisors based on school needs.
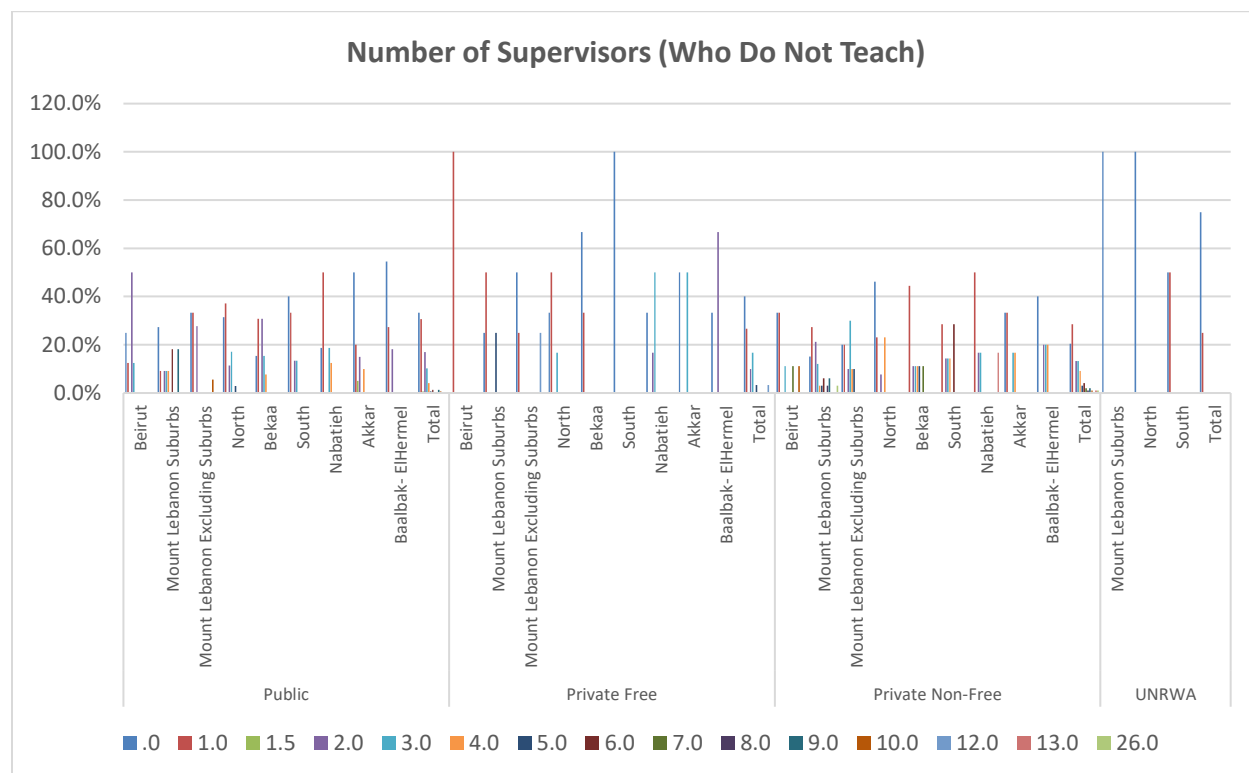
Chart (25): Number of Supervisors (Who Do Not Teach)

In Mount Lebanon, the public sector has the highest number of supervisors who do not teach, representing (22.4%) of the total supervisors in the governorate. Schools without a supervisor represent (27.3%) of the sector. The private free sector is limited in the distribution of supervisors, while the non-free private sector constitutes more than (67.3%) of the total number of supervisors, indicating significant variation in the distribution across schools.

In the North, Bekaa, and the South, the public sector shows large proportions of supervisors who do not teach.

2.3. Number of Coordinators Who Do Not Teach (Only Coordination Tasks)

The number of coordinators shows significant variation across different regions and educational sectors. In Beirut, In the sample, public sector schools have 8 coordinators, representing (44.4%) of the total number, all of whom do not teach. In the sample, only one free private school reported having a coordinator who does not teach while the non-free private sector has 9 coordinators, forming (50%) of the total coordinators. The total number of coordinators in Beirut
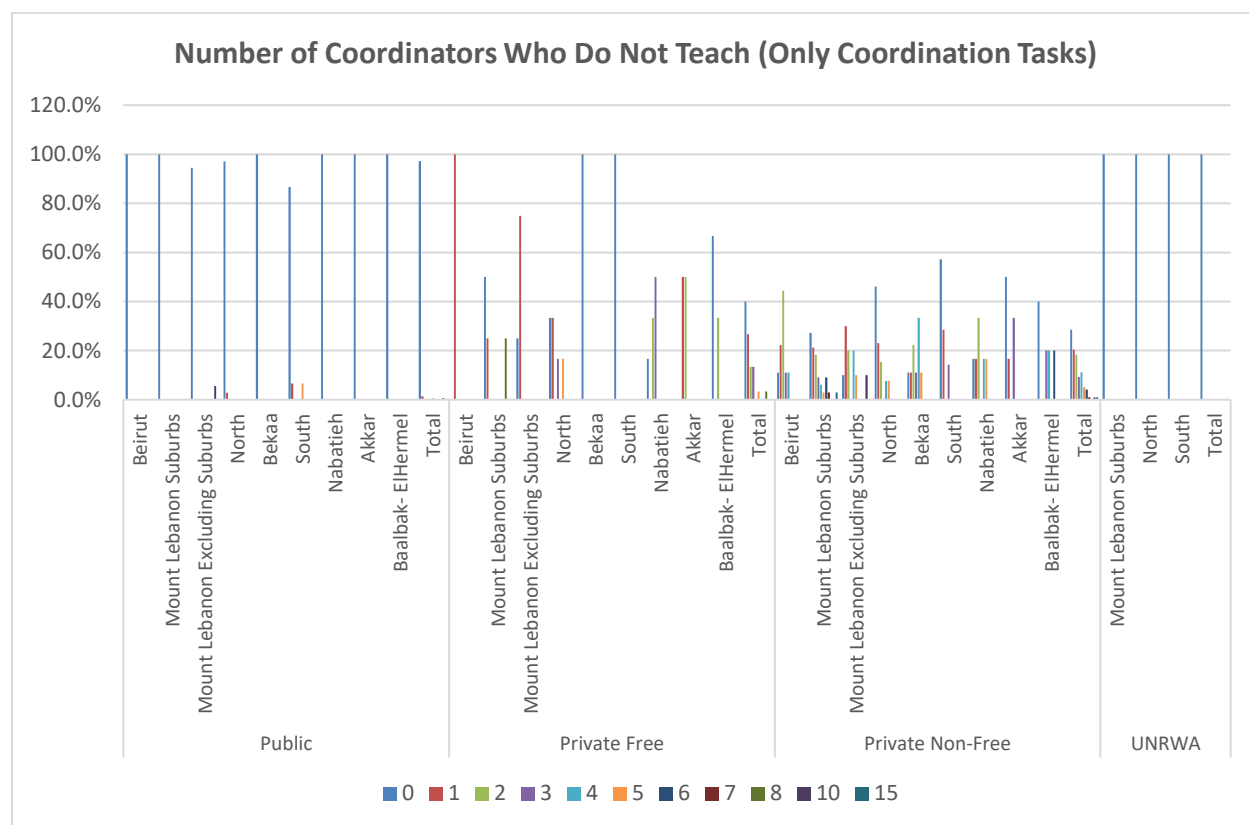
Chart (26): Number of Coordinators Who Do Not Teach (Only Coordination Tasks)

In Mount Lebanon (suburbs), the public sector has the largest number of coordinators who do not teach, representing (22.4%) of the total. The private free sector has 4 coordinators, representing (8.2%), while the non-free private sector has 33 coordinators, forming (67.3%) of the total. The total number of coordinators in Mount Lebanon (suburbs) is 49, with (46.9%) in the public sector and (16.3%) in the private free sector.

In Mount Lebanon (excluding suburbs), the public sector clearly dominates, representing (53.1%) of the total coordinators. The private free sector has 4 coordinators, representing (12.5%), while the non-free private sector has 10 coordinators, forming (31.3%) of the total. In the North, the public sector constitutes (61.8%) of the total coordinators, while the private free sector has 6 coordinators, representing (10.9%). The non-free private sector includes 13 coordinators, making up (23.6%).

In Bekaa, the public sector represents (68%) of the total number of coordinators who do not teach, while in the South, the public sector forms (80%) of the total number. In Nabatieh, the public sector represents (64.3%), and in Akkar, it forms (82.1%).

2.4.   Number of Laboratory Technicians (Who Do Not Teach in The School)
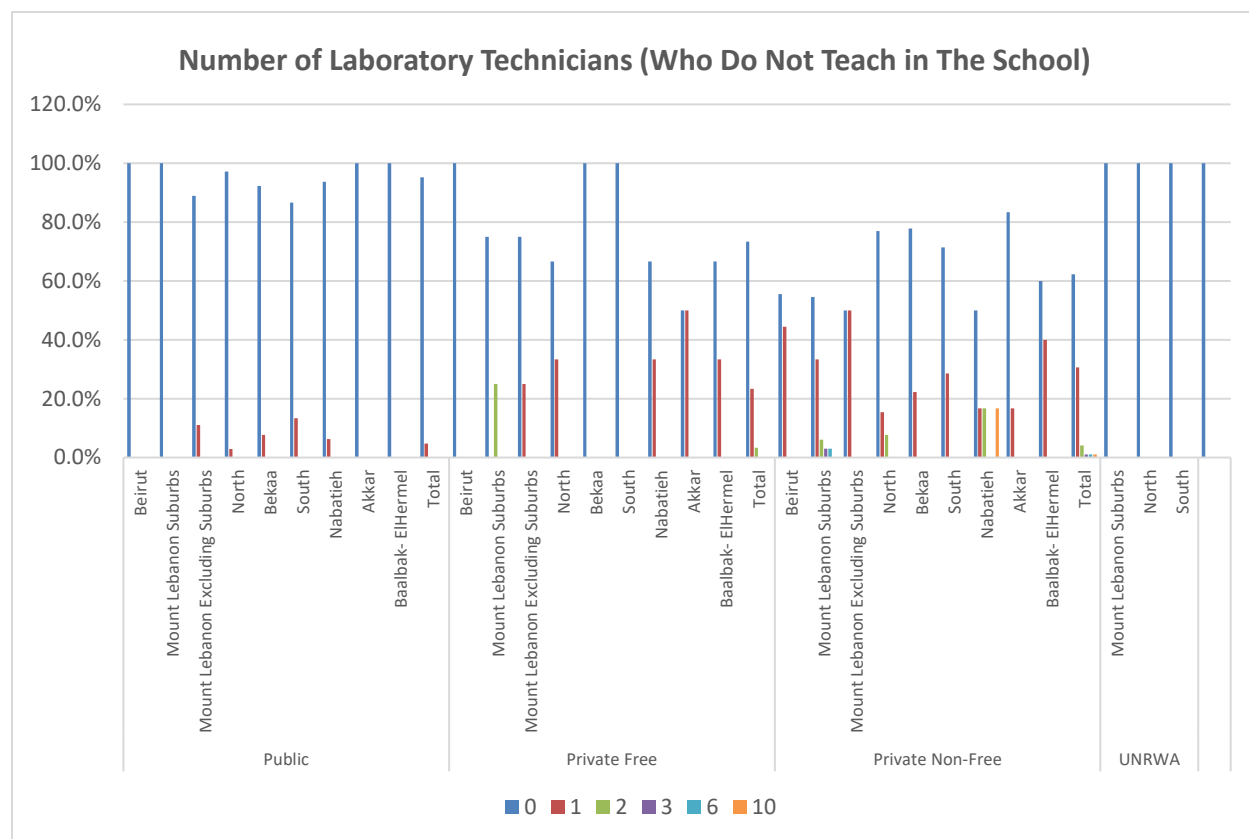
Chart (27): Number of Laboratory Technicians (Who Do Not Teach in The School)

The data from Beirut indicates that 95.2% of public schools do not have laboratory supervisors who provide instruction, while 4.8% of schools do have one. In the free private sector, none of the schools have laboratory supervisors providing instruction. Conversely, in the non-free private sector, 55.6% of schools lack laboratory supervisors, while 44.4% have one laboratory supervisor.

In Mount Lebanon (suburbs), 100% of public schools lack laboratory supervisors. In the rest of Mount Lebanon, 88.9% of public schools face a shortage, while 11.1% of schools have one laboratory supervisor.

In the North, 97.1% of public schools do not have laboratory supervisors, while 2.9% have one supervisor. In the Bekaa, 92.3% of public schools suffer from this shortage, with 7.7% of schools employing one laboratory supervisor.

In the South, 86.7% of public schools lack laboratory supervisors, while 13.3% have one. In Nabatieh, 93.8% of public schools are without laboratory supervisors, while 6.3% employ one supervisor. Akkar and Baalbek-Hermel record a complete absence of laboratory supervisors in public schools, with 100% lacking this role.

Across educational sectors, the public sector shows a significant shortage, with 95.2% of schools lacking laboratory supervisors. In the free private sector, 73.3% of schools are without laboratory supervisors, while in the non-free private sector, 62.2% of schools face a shortage. Similarly, UNRWA schools report a total absence of laboratory supervisors, with 100% of their schools lacking this position.

2.5.   Number of Librarians (Who Do Not Teach in The School)
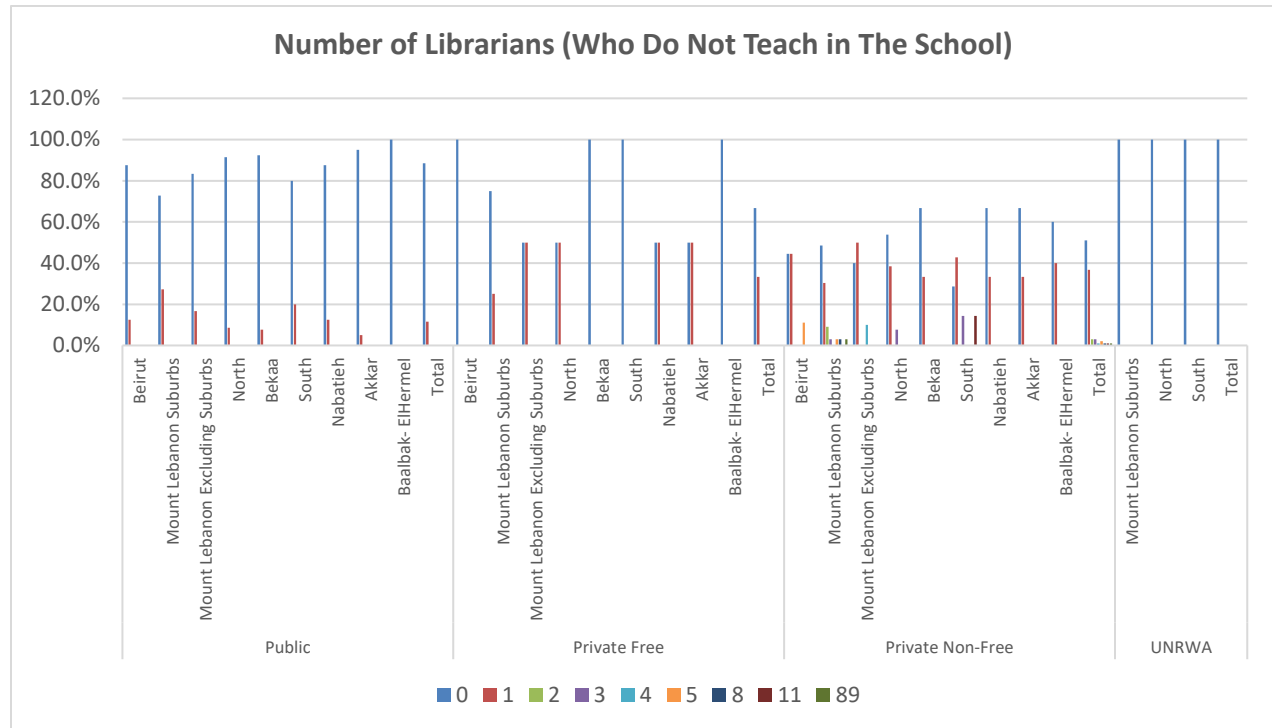
Chart (28): Number of Librarians (Who Do Not Teach in The School)

In Beirut, the public sector dominates with 87.5% of schools lacking librarians, while the private non-free sector shows more variation in librarian distribution. The private free sector has no librarians. Overall, 66.7% of schools in Beirut lack librarians.

In Mount Lebanon (suburbs), the public and private free sectors make up the majority of schools without librarians. The private non-free sector exhibits a broader distribution, with 30.3% of schools having one librarian and 12.1% having more than one. Overall, 57.1% of schools in the governorate lack librarians.

In other parts of Mount Lebanon, the public sector accounts for 83.3% of schools without librarians, while the private sector shows a moderate distribution among schools with zero or one librarian. Overall, 65.6% of schools in this area lack librarians.

In the North, the public sector accounts for the majority of schools without librarians at 91.4%, while the private sectors exhibit relatively diverse distribution. Overall, 78.2% of schools in the North lack librarians.

In the Bekaa region, the public sector dominates with 92.3% of schools lacking librarians, while the private sector shows a balanced distribution among schools with zero or one librarian. Overall, 84% of schools in the Bekaa region lack librarians.

In the South, the public sector represents a large portion of schools without librarians (80%), while the private non-free sector shows greater representation of schools with librarians. Overall, 68% of schools in the South lack librarians.

In Nabatieh, the public sector exhibits clear dominance in schools without librarians, with 87.5% lacking them. The private sector shows a moderate distribution between schools with and without librarians. Overall, 75% of schools in Nabatieh lack librarians.

In Akkar, the public sector shows the highest proportion of schools without librarians (95%). The private sector exhibits relative balance but with limited representation. Overall, 85.7% of schools in Akkar lack librarians.

Analysis indicates that public sector in all governorates account for the largest share of schools without librarians, with relatively greater diversity in librarian distribution within the private non-free sector.

3. Number of Administrative Staff (Not Included in Question 8 and Its Subsections)
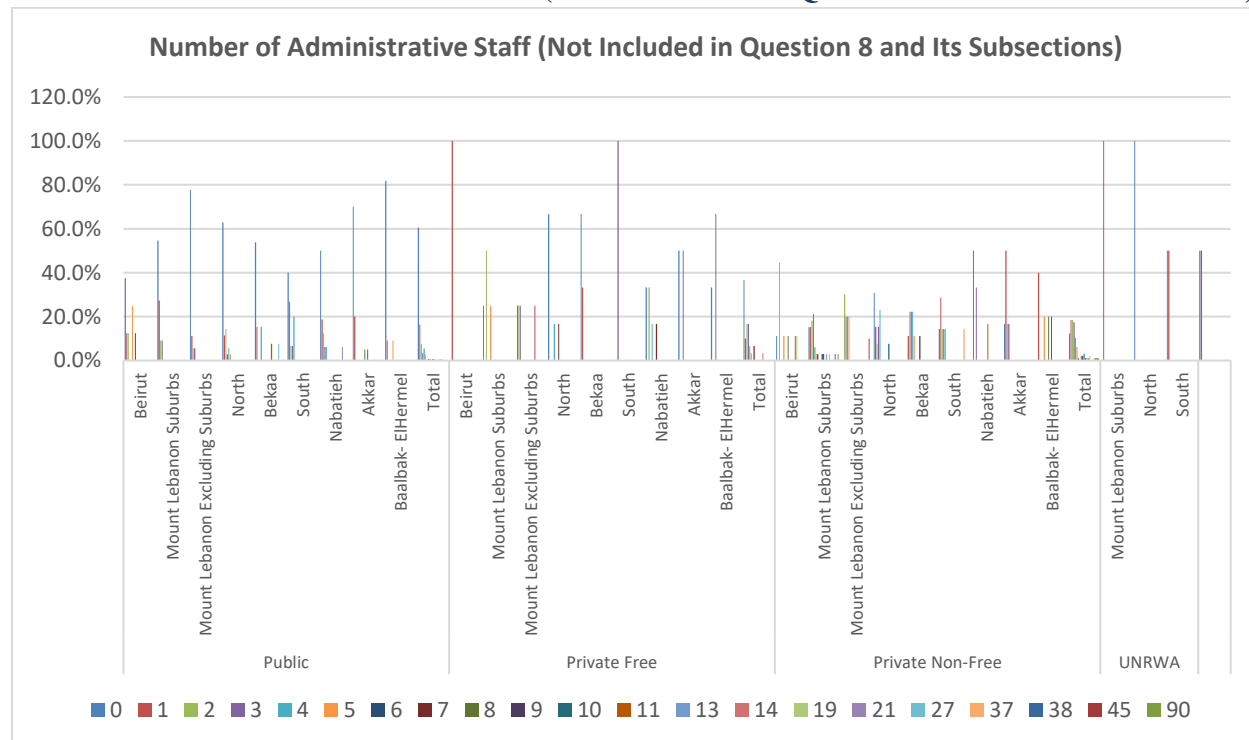
Chart (29): Number of Administrative Staff

In Beirut, the public sector has the highest percentage of schools without administrative staff at 37.5%. Meanwhile, the private non-free sector displays greater diversity, with 44.4% of schools employing administrative staff.

In Mount Lebanon (suburbs), 54.5% of public schools lack administrative staff, indicating a significant shortage, while the private free sector shows a balanced distribution. The private non-free sector is notable for a broader range, with 21.2% of schools employing three administrative staff members.

In other parts of Mount Lebanon, 77.8% of public schools lack administrative staff. The private free-tuition sector demonstrates a balanced distribution, while the private non-free sector highlights diversity, with 30% of schools employing two administrative staff members.

In the North, 62.9% of public schools lack administrative staff, reflecting a severe shortage. The private free-tuition sector has limited representation, while the private non-free sector demonstrates diverse staff distribution, with a significant proportion of schools employing four administrative staff members.

In the Bekaa region, a significant proportion of public schools (53.8%) lack administrative staff. The private free sector shows limited distribution, while the private non-free sector displays significant variation among schools.

In the South, 40% of public schools lack administrative staff, with better diversity in staff numbers compared to other governorates. The private non-free sector reflects uneven distribution, while the private free sector is limited to a single school.

In Nabatieh, 50% of public schools lack administrative staff. The private free sector shows relative balance, while the private non-free sector demonstrates significant variation in staff numbers.

In Akkar, the public sector shows the highest shortage, with 70% of schools lacking administrative staff. Both the private free-tuition and private non-free sectors exhibit wide variation in staff distribution.

In Baalbek-Hermel, the public sector faces severe shortages, with 81.8% of schools lacking administrative staff. The private free sector is extremely limited, while the private non-free sector shows a wide range of staff numbers.

3.1.   Number of IT Workers (Who Do Not Teach in The School)

In Beirut, in the sample, each of the eight public sector schools employs one IT worker. In private free schools, there is one school with four IT workers. In the private non-free sector, schools are distributed based on varying numbers of IT workers.

In Mount Lebanon (suburbs), the public sector includes 11 schools with one IT worker each. In the private free sector, only a few schools employ IT workers in varying numbers. The private non-free sector exhibits the greatest variety, with schools employing up to four IT workers.

In Mount Lebanon (excluding suburbs), public education includes very few schools without IT workers, with the majority having one IT worker. The private free-tuition sector shows greater diversity, with schools employing IT workers in different numbers. Meanwhile, the private non-free sector has a significant proportion of schools with larger numbers of IT workers.
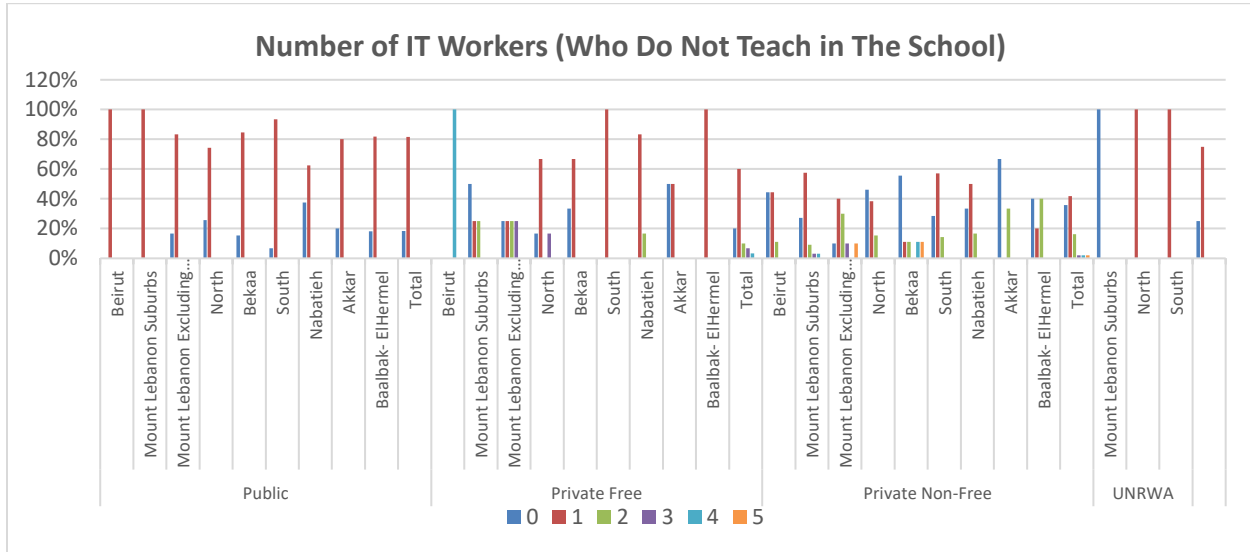
Chart (30): Number of IT Workers (Who Do Not Teach in The School)

In the North and Bekaa, public education represents a high percentage of schools without IT workers. The private free-tuition sector has limited IT staff in a few schools, while the private non-free sector displays greater diversity in the distribution of IT workers.

In the South, the public sector dominates with a significant proportion of schools having only one IT worker. In Nabatieh and Akkar, the public sector includes most schools without IT workers, with only a few other schools employing IT staff.

Overall, public education maintains the highest percentage of schools with only one IT worker. In contrast, the private free-tuition and private non-free sectors exhibit greater diversity, with some schools employing varying numbers of IT workers.

3.2. Number of Other Administrative Staff (Who Do Not Teach in The School)

In Beirut, there are five public schools, with 62.5% lacking additional administrative staff. Some other schools employ 2, 5, or 6 administrative staff members. In the private free sector, one school has no administrative staff. In the private non-free sector, three schools lack administrative staff, while others employ 1, 3, or 7 staff members.

In Mount Lebanon (suburbs), 72.7% of public schools have no additional administrative staff, while some employ 1 or 2 staff members. In the private free sector, half of the schools lack administrative staff, while others employ 2 or 6 staff members. In the private non-free sector, 36.4% of schools lack administrative staff, with the rest employing 1 or 2 staff members. All UNRWA schools employ 1 administrative staff member.
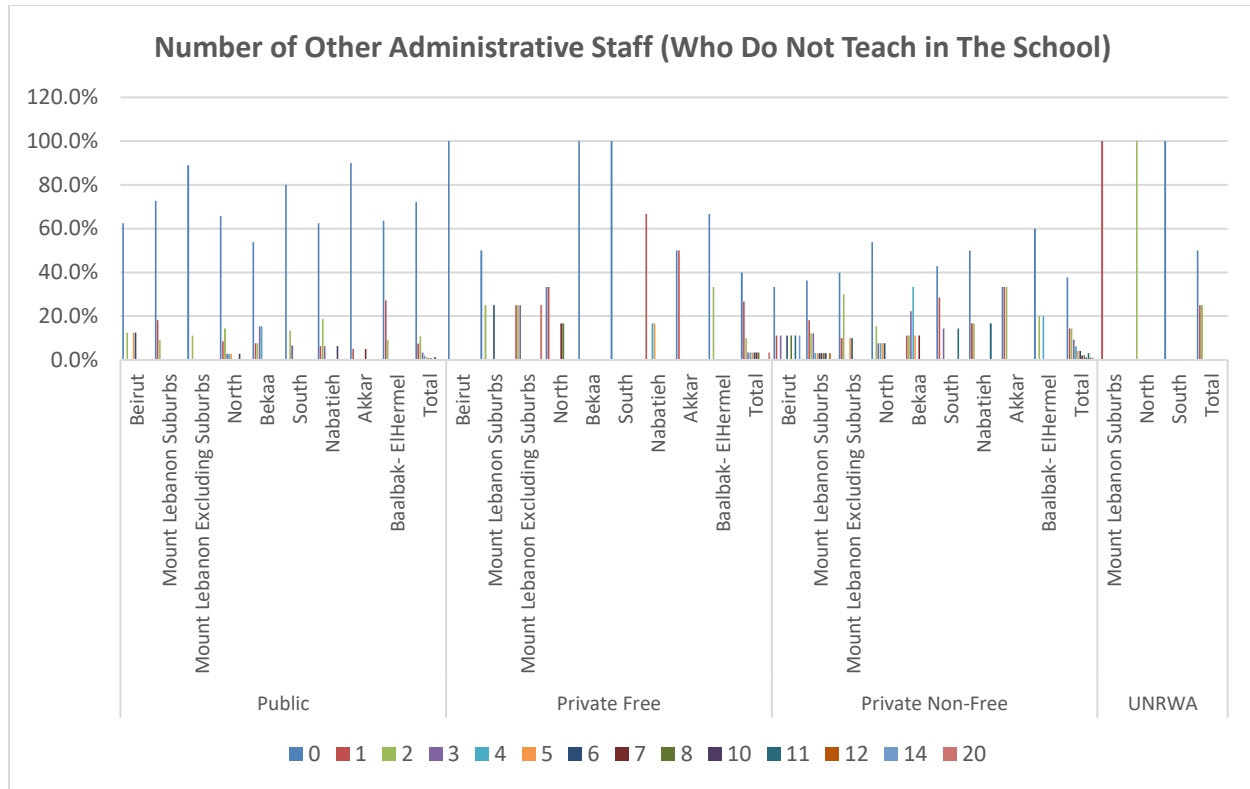
Chart (31): Number of Other Administrative Staff (Who Do Not Teach in The School

In Mount Lebanon (excluding suburbs), 88.9% of public schools lack administrative staff, while some employ 2 staff members. In the private free sector, schools employ 1, 2, or 3 staff members. In the private non-free sector, 40% of schools lack administrative staff, while others employ 1, 2, or 4 staff members.

In the North, 65.7% of public schools lack administrative staff, while some employ 1 or 2 staff members. In the private free sector, 33.3% of schools lack administrative staff, while others employ 1 or 6 staff members. In the private non-free sector, over half of the schools lack administrative staff, while others employ 2 staff members. All UNRWA schools employ 2 administrative staff members.

In Bekaa, more than half of public schools lack administrative staff, while some employ 1 or 2 staff members. In the private free-tuition sector, all schools lack administrative staff. In the private non-free sector, some schools lack administrative staff, while others employ 1, 2, or 3 staff members.

In the South, 80% of public schools lack administrative staff, while some employ 1 or 2 staff members. In the private free sector, all schools lack administrative staff. In the private non-free sector, some schools lack administrative staff, while others employ 1, 3, or 5 staff members. UNRWA schools do not employ additional administrative staff.

In Nabatieh, 62.5% of public schools lack administrative staff, while some employ 1, 3, or 5 staff members. In the private free sector, some schools employ 1 staff member, while others

employ 5 or 6 staff members. In the private non-free sector, some schools lack administrative staff, while others employ 1, 3, or 10 staff members.

In Akkar, 90% of public schools lack administrative staff, while one school employs 3 staff members. In the private free sector, all schools employ 1 staff member. In the private non-free sector, 85.7% of schools lack administrative staff, while others employ 1 staff member.

In Baalbek-Hermel, 63.6% of public schools lack administrative staff, while others employ 2 or 5 staff members. Half of the private free schools employ 1 staff member, while others employ 2 staff members. In the private non-free sector, 75% of schools lack administrative staff, while one school employs 1 staff member.

Overall, the public sector suffers from a significant shortage of administrative staff across most governorates, while the private non-free sector exhibits greater diversity in the distribution of administrative staff.

4. Number of technical staff not involved in teaching at the school

4.1. Number of Psychologists
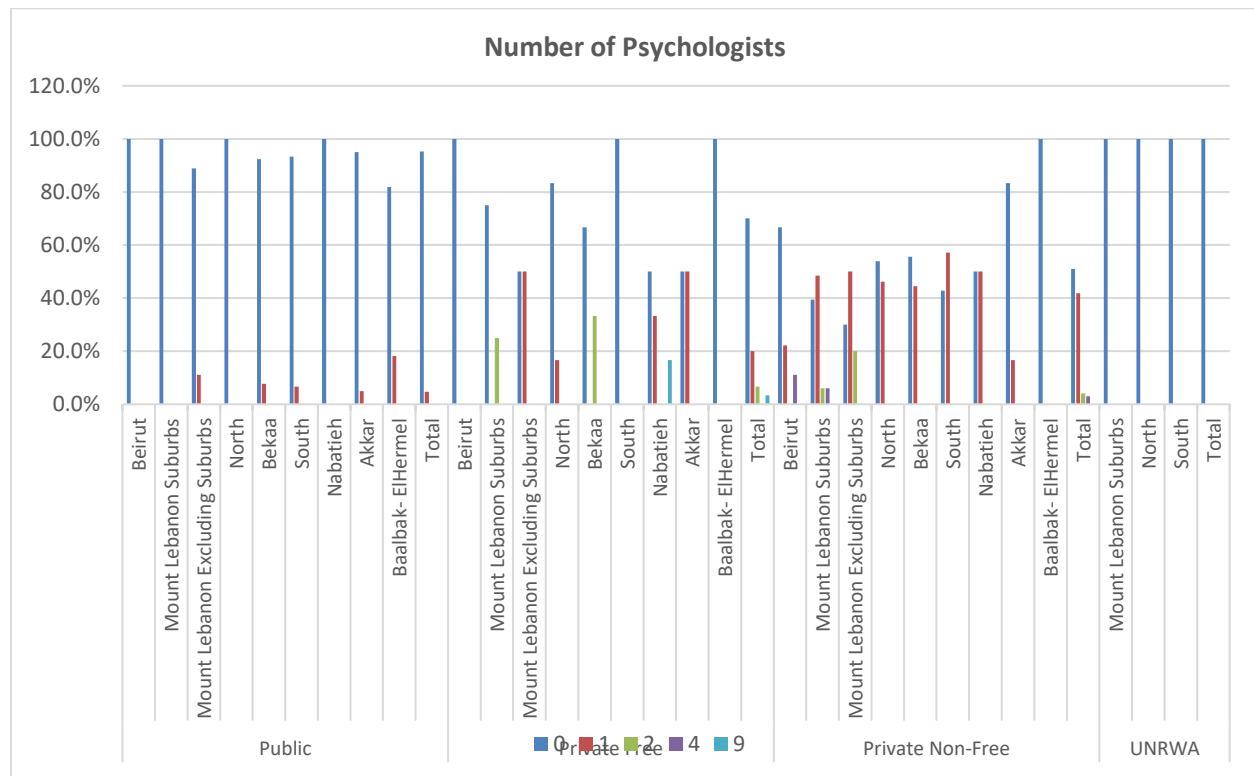
Chart (32): Number of Psychologists

The results indicate that none of the eight public schools in Beirut have a psychologist, representing nearly half of the total schools in the governorate. Similarly, the single free private school lacks psychologists. Among the nine non-free private schools, six have no psychologists, two have one psychologist each, and one school has four psychologists. Overall, out of 18 schools

In Mount Lebanon (suburbs), the 11 public schools lack psychologists. Of the four free private schools, three lack psychologists, and one has a single psychologist. Among 33 non-free private schools, 13 lack psychologists, 16 have one psychologist each, and two have two psychologists. Out of 49 schools in this region, 28 lack psychologists, 16 have one psychologist each, and three have two psychologists.

In Mount Lebanon (excluding suburbs), among 18 public schools, 16 lack psychologists, and two have one psychologist each. Of the four free private schools, two lack psychologists, and two have one psychologist each. Among 10 non-free private schools, three lack psychologists, five have one psychologist each, and two have two psychologists. Out of 32 schools, 21 lack psychologists, nine have one psychologist each, and two have two psychologists.

In the North, all 35 public schools lack psychologists. Of the six free private schools, five lack psychologists, and one has a psychologist. Among 13 no-free private schools, seven lack psychologists, and six have one psychologist each. In total, 48 out of 55 schools lack psychologists, and seven have one psychologist each.

In Bekaa, among 13 public schools, 12 lack psychologists, and one has a psychologist. Of the three free private schools, two lack psychologists, and one has a psychologist. Among nine non-free private schools, five lack psychologists, and four have one psychologist each. Out of 25 schools, 19 lack psychologists, five have one psychologist each, and one has two psychologists.

In the South, among 15 public schools, 14 lack psychologists, and one has a psychologist. The single free private school lacks psychologists. Among seven non-free private schools, four lack psychologists, and three have one psychologist each. Out of 25 schools, 21 lack psychologists, and four have one psychologist each.

In Nabatieh, all 16 public schools lack psychologists. Among six free private schools, three lack psychologists, and three have one psychologist each. Of the six non-free private schools, three lack psychologists, and three have one psychologist each. Out of 28 schools, 22 lack psychologists, and six have one psychologist each.

In Akkar, of 20 public schools, 19 lack psychologists, and one has a psychologist. Among two free private schools, one lacks a psychologist, and one has a psychologist. Of six non-free private schools, five lack psychologists, and one has a psychologist. Out of 28 schools, 25 lack psychologists, and three have one psychologist each.

In Baalbek-Hermel, of 11 public schools, nine lack psychologists, and two have one psychologist each. All three free private schools lack psychologists. Among five non-free private schools, none have psychologists. Out of 19 schools, 17 lack psychologists, and two have one psychologist each.

In total, the public sector encompasses 147 schools, most of which lack psychologists. The free private sector includes 30 schools, most of which also lack psychologists. Among 98

non- free private schools, around half lack psychologists. All four UNRWA schools lack psychologists. Out of 279 schools nationwide, most face a significant shortage of psychologists.

4.2.   Number of Social Workers
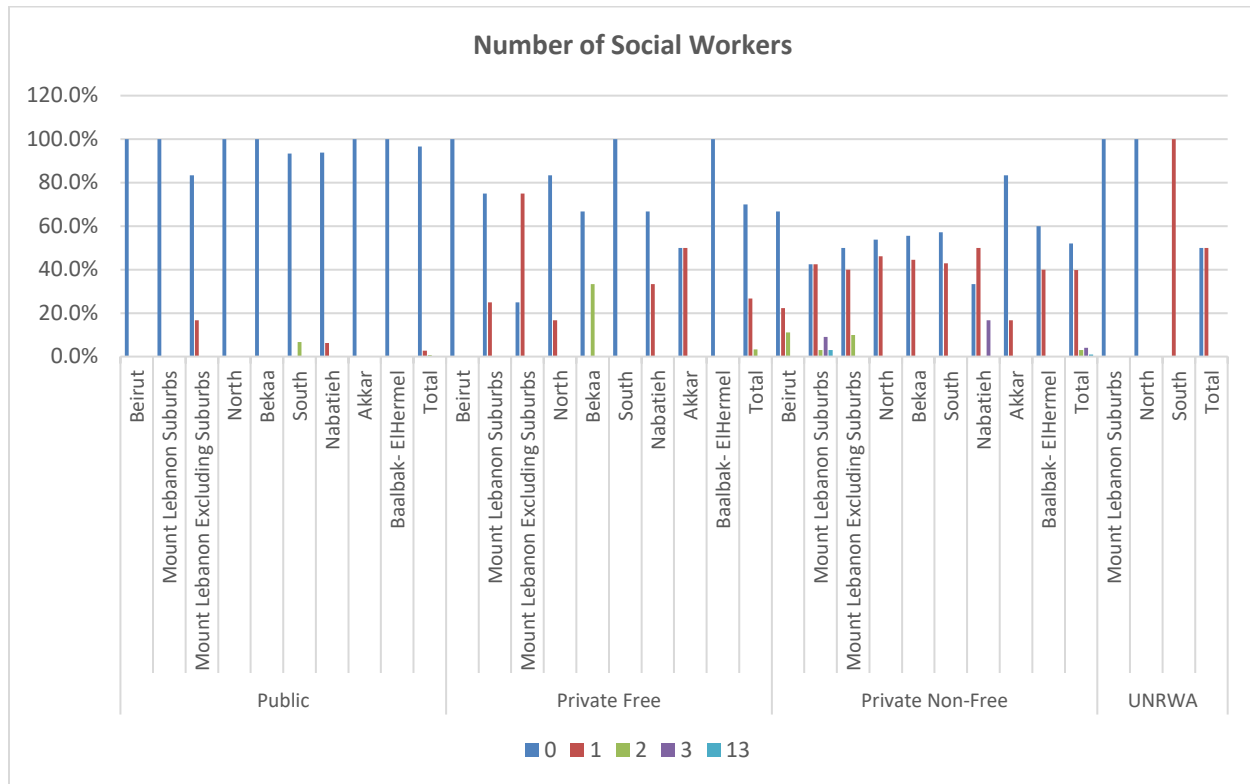
Chart (33): Number of Social Workers

In Mount Lebanon, no public schools have social workers. Among four free private schools, one has a social worker. In non-free private schools, half lack social workers, four in ten have one social worker, and one in ten has two. Each UNRWA school in this area has one social worker.

In the North, none of the public schools have social workers. One out of six free private schools has a social worker. Around half of the non-free private schools have social workers, while the other half do not. UNRWA schools in this area lack social workers.

In Bekaa, none of the public schools have social workers. One out of three free private schools has a social worker. Among nine non-free private schools, four have social workers, while the others do not.

In the South, most public schools lack social workers. Free private schools entirely lack social workers. Of the seven non-free private schools, three have social workers. Each UNRWA school in the region has one social worker.

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In Nabatieh, most public schools lack social workers. Of six free private schools, two have social workers. Half of the non-free private schools have social workers, and one school has two.

In Akkar, none of the public schools have social workers. Of two free private schools, one has a social worker. Of six non-free private schools, one has a social worker, and the others lack them.

In Baalbek-Hermel, none of the public or free private schools have social workers. Among five non-free private schools, two have social workers.

Overall, there is a significant shortage of social workers in public and free private schools, while non-free private schools show relatively better, though still insufficient, coverage.

4.3.   Number of Educational Counselors (In the School)
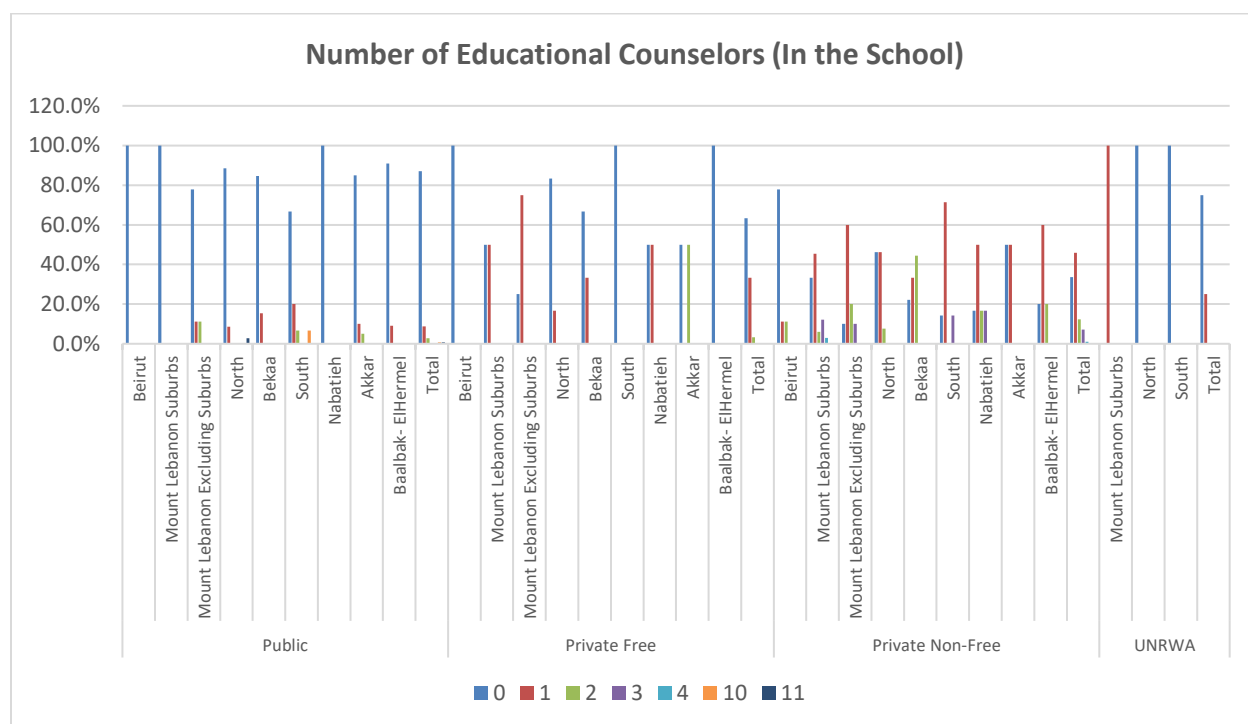
Chart (34): Number of Educational Counselors (In the School)

The number of educational counselors varies significantly across sectors. In Beirut, all eight public schools lack counselors. The single free private school also lacks a counselor. Of nine non-free private schools, seven lack counselors, one has a counselor, and one has two.

In Mount Lebanon (suburbs), all public schools lack counselors, while half of the free private schools have one counselor each. Non-free private schools exhibit a mix, with many lacking counselors and others having one or two counselors.

In Mount Lebanon (excluding suburbs), public schools predominantly lack counselors, while private schools in both sectors have better coverage, though still unevenly distributed.

In the North, most public schools lack counselors, while private schools, particularly non-free ones, show slightly better provision.

In Bekaa, public schools have the highest proportion of schools without counselors, followed by non-free private schools.

In the South, public schools predominantly lack counselors, while non-free private schools show a higher presence.

In Nabatieh and Akkar, public schools lack counselors in most cases, with varying coverage in private schools.

Overall, public schools maintain the highest proportion of schools without educational counselors. Non-free private schools show better distribution, but gaps remain significant.

5. Staff who are involved in teaching at the school

5.1. Number of Supervisors Also Teaching at the School
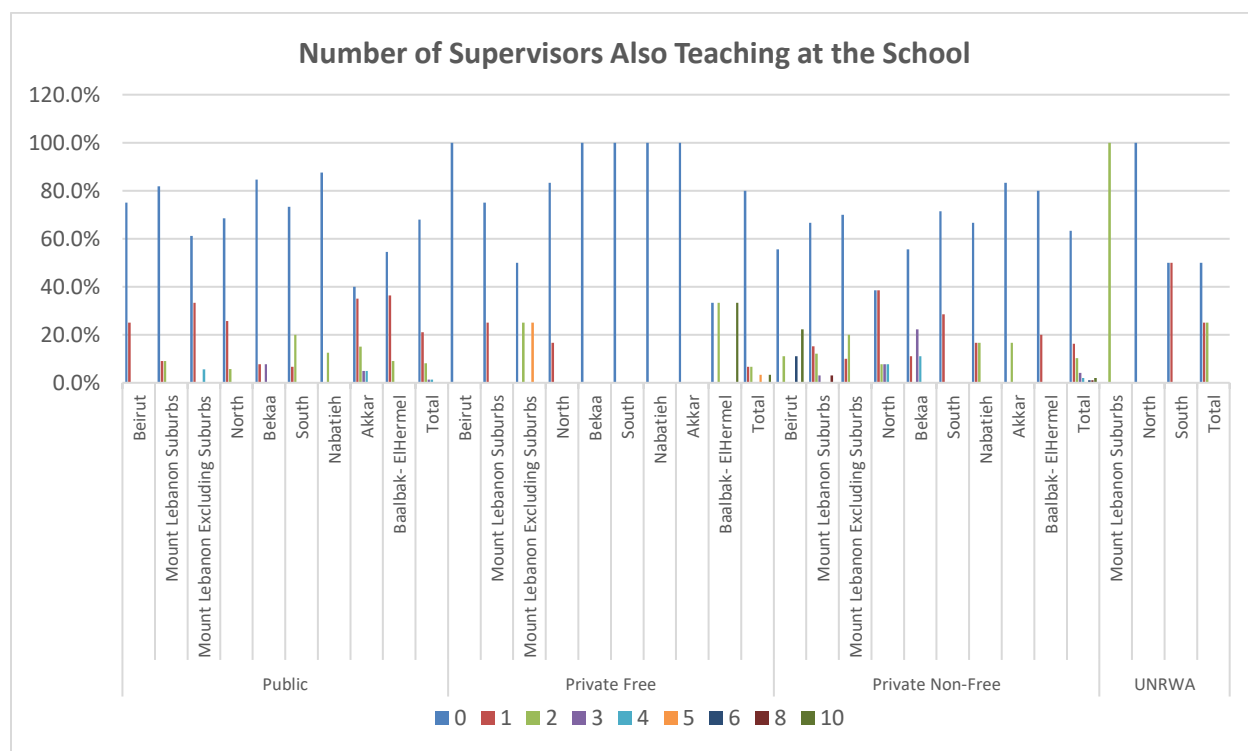
Chart (35): Number of Supervisors Also Teaching at the School

In Beirut, there are 8 public schools, of which 6 do not have a supervisor who teaches, and 2 have one supervisor each. In the free private sector, there is one school with one supervisor. In the non-free private sector, there are 9 schools, 5 of which do not have a supervisor, 1 has 2 supervisors, 1 has 4 supervisors, and 2 have 6 supervisors. In total, there are 18 schools in Beirut,

of which 12 have no supervisor, 2 have one supervisor, 1 has two, 1 has four, and 2 have six supervisors.

In Mount Lebanon - Suburbs, there are 11 public schools, of which 9 do not have a supervisor, 1 has one supervisor, and 1 has two. In the free private sector, there are 4 schools, 3 of which have no supervisor, and 1 has one supervisor. In the non-free private sector, there are 33 schools, 22 of which have no supervisor, 5 have one supervisor, 4 have two, 1 has three supervisors, and 1 has five. In UNRWA schools, there is 1 school with 2 supervisors. In total, there are 49 schools in the district, 34 of which have no supervisor, 7 have one supervisor, 6 have two, 1 has three, and 1 has five.

In Mount Lebanon (excluding suburbs), there are 18 public schools, 11 of which have no supervisor, 6 have one supervisor, and 1 has three. In the free private sector, there are 4 schools, 2 of which have no supervisor, 1 has two, and 1 has five. In the non-free private sector, there are 10 schools, 7 of which have no supervisor, 1 has one supervisor, and 2 have two. In total, there are 32 schools in this district, 20 of which have no supervisor, 7 have one supervisor, and 3 have more than one.

In the North, there are 35 public schools, 24 of which have no supervisor, 9 have one supervisor, and 2 have two. In the free private sector, there are 6 schools, 5 of which have no supervisor, and 1 has one supervisor. In the non-free private sector, there are 13 schools, 5 of which have no supervisor, 5 have one supervisor, 1 has two, 1 has three, and 1 has four. In UNRWA schools, there is 1 school with 1 supervisor. In total, there are 55 schools in the North, 35 of which have no supervisor, 15 have one supervisor, 3 have two, 1 has three, and 1 has four.

In the Bekaa, there are 13 public schools, 11 of which have no supervisor, 1 has one supervisor, and 1 has two. In the free private sector, there are 3 schools, all of which have no supervisor. In the non-free private sector, there are 9 schools, 5 of which have no supervisor, 1 has one supervisor, 2 have two, and 1 has three. In total, there are 25 schools in the Bekaa, 19 of which have no supervisor, 2 have one supervisor, 3 have two, and 1 has three.

In the South, there are 15 public schools, 11 of which have no supervisor, 1 has one supervisor, and 3 have 3 supervisors. In the free private sector, there is 1 school with one supervisor. In the non-free private sector, there are 7 schools, 5 of which have no supervisor, and 2 have one supervisor. In UNRWA schools, there are 2 schools, 1 with one supervisor and 1 with two. In total, there are 25 schools in the South, 18 of which have no supervisor, 4 have one supervisor, and 3 have 3 supervisors.

In Nabatieh, there are 16 public schools, 14 of which have no supervisor, and 2 have two. In the free private sector, there are 6 schools with no supervisor. In the non-free private sector, there are 6 schools, 4 of which have no supervisor, 1 has one supervisor, and 1 has two. In total, there are 28 schools in Nabatieh, 24 of which have no supervisor, 1 has one supervisor, and 3 have two.

In Akkar, there are 20 public schools, 8 of which have no supervisor, 7 have one supervisor, 3 have two, 1 has three, and 1 has four. In the free private sector, there are 2 schools with no

supervisor. In the non-free private sector, there are 6 schools, 5 of which have no supervisor, and 1 has two. In total, there are 28 schools in Akkar, 15 of which have no supervisor, 7 have one supervisor, 4 have two, 1 has three, and 1 has four.

In Baalbek-Hermel, there are 11 public schools, 6 of which have no supervisor, 4 have one supervisor, and 1 has two. In the free private sector, there are 3 schools, 1 with no supervisor, 1 with one supervisor, and 1 with two. In the non-free private sector, there are 5 schools, 4 of which have no supervisor, and 1 has one supervisor. In total, there are 19 schools in Baalbek-Hermel, 11 of which have no supervisor, 5 have one supervisor, and 2 have two.

Overall, most schools in Lebanon suffer from a lack of supervisors who teach, with the vast majority of schools, especially in the public sector, not having any supervisors.

5.2. Number of Coordinators Also Teaching in the School
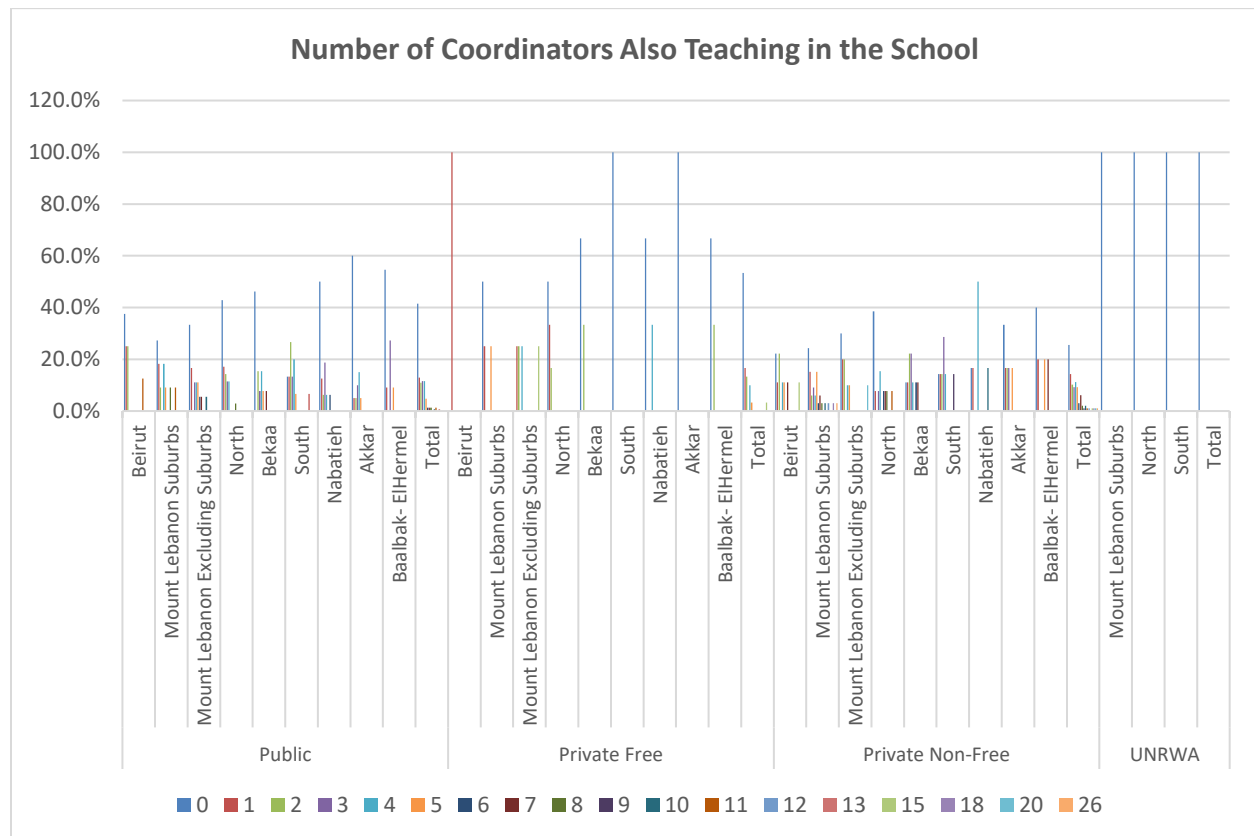
Chart (36): Number of Coordinators Also Teaching in the School

The number of coordinators also teaching in Lebanese schools varies between sectors. In Beirut, the public sector comprises a large proportion of schools, with a certain percentage of schools lacking coordinators who teach. The free private sector has only one school with a coordinator. The non-free private sector exhibits diversity in the distribution of coordinators across schools.

In Mount Lebanon - Suburbs, the majority of public schools lack coordinators, and the free private sector also contains schools without coordinators. The non-free private sector includes schools with varying numbers of coordinators.

In Mount Lebanon (excluding suburbs), the public sector shows a significant proportion of schools without coordinators. The free private sector is split between schools with one coordinator, while the non-free private sector has schools with two coordinators.

In the North and Bekaa, the public sector has a large proportion of schools without coordinators, while the private sectors (both free and non-free) show a mixed distribution of coordinators.

In the South, Nabatieh, Akkar, and Baalbek-Hermel, there is variability in the number of coordinators between schools, with some schools having coordinators and others not.

In total, the public sector accounts for most schools without coordinators, while the non-free private sector shows greater diversity in the distribution of coordinators.

5.3. Number of Librarians Also Teaching in the School
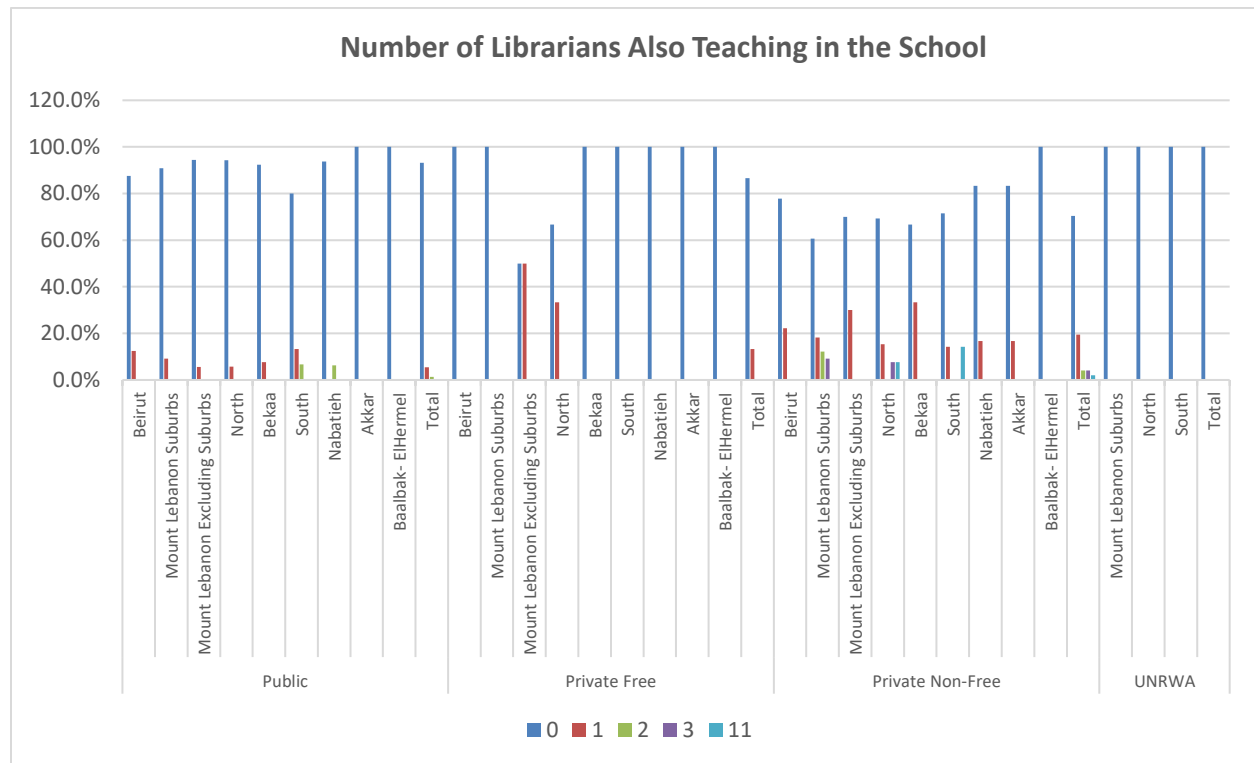
Chart (37): Number of Librarians Also Teaching in the School

There are 7 schools in Beirut's public sector without a librarian who teaches, and 1 school with a librarian who teaches. In the free private sector, there is 1 school without a librarian who teaches. In the non-free private sector, there are 7 schools without a librarian who teaches, and 2 schools with 1 librarian who teaches.

In Mount Lebanon (Suburbs), there are 10 schools in the public sector without a librarian who teaches, and 1 school with a librarian who teaches. In the free private sector, there are 4 schools without a librarian who teaches. In the non-free private sector, there are 20 schools without a librarian, 6 schools with one librarian, 4 schools with two librarians, and 3 schools with three librarians.

In Mount Lebanon (excluding suburbs), there are 17 schools in the public sector without a librarian who teaches, and 1 school with a librarian. In the free private sector, there are 2 schools without a librarian, and 2 schools with 1 librarian. In the non-free private sector, there are 7 schools without a librarian, and 3 schools with one librarian.

In the public sector, out of 147 schools, 137 schools do not have librarians who teach, 8 schools have 1 librarian, and 2 schools have 2 librarians. In the free private sector, out of 30 schools, 26 schools do not have librarians who teach, and 4 schools have 1 librarian. In the non-free private sector, out of 98 schools, 69 schools do not have librarians, 19 schools have 1 librarian, 4 schools have 2 librarians, 4 schools have 3 librarians, and 2 schools have 4 librarians. In UNRWA schools, none of the 4 schools have librarians who teach.

The overall result shows that most schools (84.6%) do not have librarians who teach, with relative progress in the non-free private sector.

5.4. Number of IT workers who also teach at the school
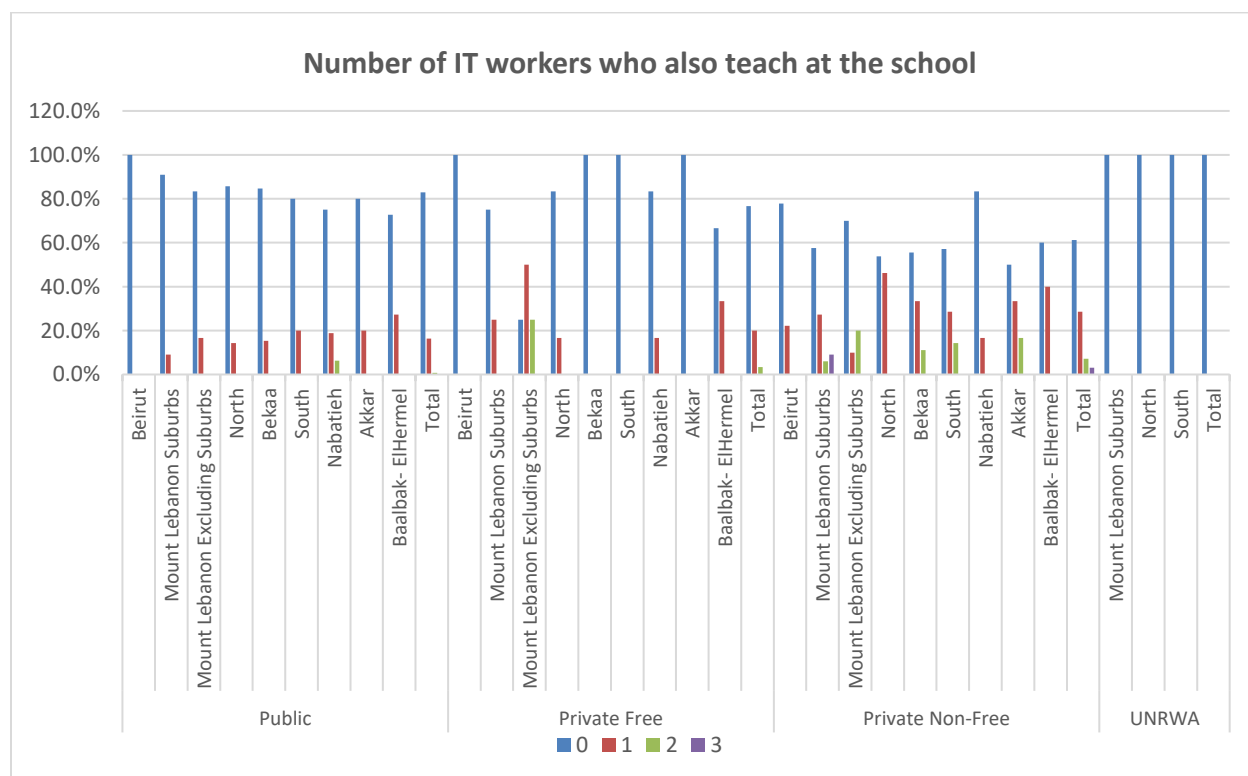
Chart (38): Number of IT workers who also teach at the school

In Beirut, the public sector does not have any IT workers teaching, reflecting the lack of full integration of IT into the educational process. The free private sector has only one school, which also does not have any IT workers teaching. The non-free private sector includes seven schools without IT workers teaching, with two schools having only one IT worker. In total, 88.9% of schools in Beirut do not have IT workers teaching.

In Mount Lebanon - Suburbs, the public sector includes 11 schools, 10 of which do not have IT workers teaching, making up 90.9%. The free private sector includes four schools, 75% of which do not have IT workers teaching, while the non-free private sector consists of 19 schools, 57.6% of which do not have IT workers teaching. UNRWA schools report 100% of schools without IT workers teaching.

In Mount Lebanon (excluding suburbs), the public sector includes 18 schools, 15 of which do not have IT workers teaching, representing 83.3%. The free private sector includes four schools, 75% of which do not have IT workers, while the non-free private sector contains 10 schools, with 70% of these schools lacking IT workers.

Thus, it can be observed that the public sector suffers from the limited use of IT workers in the educational process, while the free private sector shows greater balance with limited integration of IT workers. The non-free private sector shows more diversity in using IT workers, with a reasonable proportion of schools relying on them.

5.5. Number of laboratory technicians who also teach
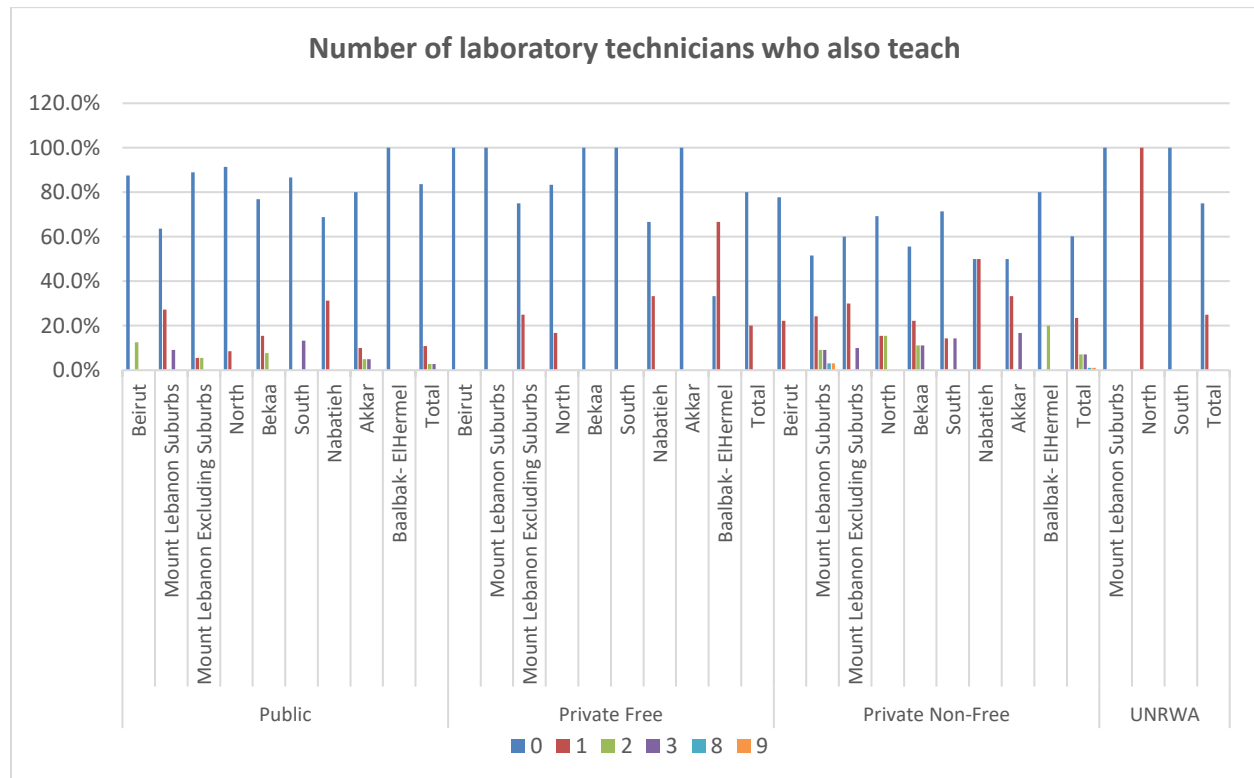
Chart (39): Number of laboratory technicians who also teach

In public schools in Beirut, there are seven schools that do not have laboratory technicians who teach, and one school that has a laboratory technician. In the free private sector, there is one school without laboratory technicians who teach. In the non-free private sector, seven schools do not have laboratory technicians, while two schools have one laboratory technician. Overall, the majority of schools in Beirut do not have laboratory technicians teaching, with a small percentage containing technicians.

In Mount Lebanon (suburbs), there are seven schools in the public sector without laboratory technicians who teach, three schools with one laboratory technician, and one school with a laboratory technician. In the free private sector, there are four schools without laboratory technicians who teach. In the non-free private sector, 17 schools lack laboratory technicians, while eight schools have one laboratory technician, and three schools have multiple technicians. The overall results indicate diversity between schools with and without laboratory technicians.

In Mount Lebanon (excluding suburbs), 16 public schools do not have laboratory technicians, and one school contains a laboratory technician. The free private sector includes three schools without laboratory technicians, while one school has a laboratory technician. In the non-free private sector, six schools do not have laboratory technicians, while three schools have one laboratory technician. Overall, most schools in the province do not have laboratory technicians.

In the North, 32 public schools do not have laboratory technicians, while three schools have a laboratory technician. In the free private sector, five schools do not have laboratory technicians, and one school has a laboratory technician. In the non-free private sector, nine schools lack laboratory technicians, while four schools have one or more laboratory technicians. The overall results indicate that the vast majority of schools do not have laboratory technicians.

In the Bekaa, ten public schools do not have laboratory technicians, and two schools have a laboratory technician. In the free private sector, three schools lack laboratory technicians. In the non-free private sector, five schools lack laboratory technicians, and three schools have one or more technicians. The overall results indicate that a large proportion of schools do not have laboratory technicians, with some schools containing them.

In the South, 13 public schools lack laboratory technicians, and two schools have a laboratory technician. In the free private sector, one school does not have a laboratory technician. In the non-free private sector, five schools lack laboratory technicians, while two schools contain one or more laboratory technicians. The overall results indicate that very few schools contain laboratory technicians.

The results in Nabatieh show that most schools do not have laboratory technicians, with a smaller percentage containing technicians. Similarly, the results in Akkar show that the vast majority of schools lack laboratory technicians, with a small percentage having technicians. The results in Baalbek-Hermel indicate that most schools do not have laboratory technicians, with only a few schools containing technicians.

Most public schools do not have laboratory technicians teaching, with only a few schools containing one or more technicians. In the free private sector, most schools do not

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have laboratory technicians, but a small percentage have technicians. The non-free private sector shows more diversity, with a larger proportion of schools having one or more technicians. UNRWA schools show that the vast majority do not have laboratory technicians, with a small percentage containing one technician.

5.6. Number of other administrators who also teach at the school
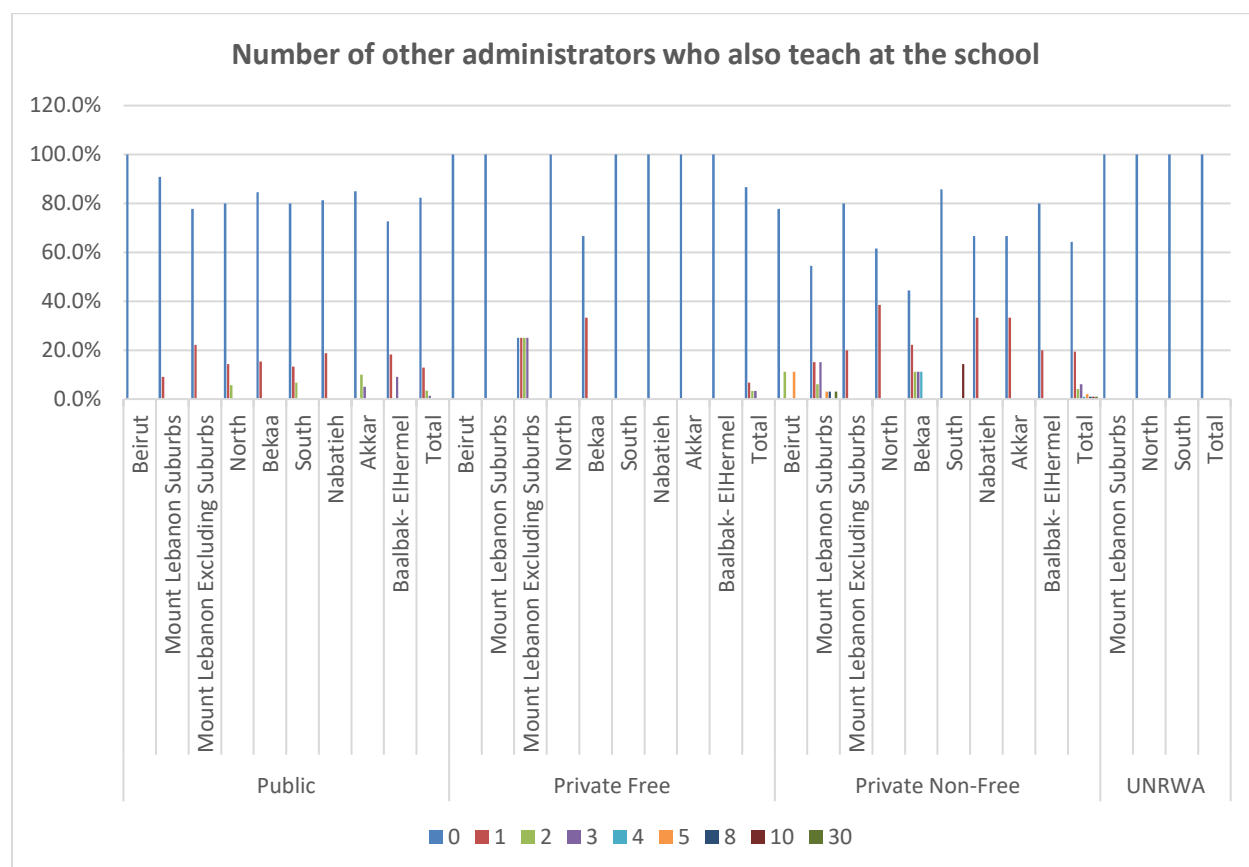
Chart (40): Number of other administrators who also teach at the school

In the public sector, there are 121 schools without administrators who teach, 19 schools with one administrator, 5 schools with two administrators, and 2 schools with three administrators. No schools have more than three administrators. The total for the public sector refers to 147 schools out of the total number of schools.

In the free private sector, 26 schools do not have administrators who teach, 2 schools have one administrator, 1 school has two administrators, and 1 school has three administrators. No schools have more than three administrators. The total for the free private sector refers to 30 schools out of the total number of schools.

In the non-free private sector, 63 schools do not have administrators who teach, 19 schools have one administrator, 4 schools have two administrators, 6 schools have three administrators, 1 school has four administrators, 2 schools have five administrators, 1 school has six administrators,

and 1 school has seven administrators. The total for the non-free private sector refers to 98 schools out of the total number of schools.

In UNRWA schools, 4 schools do not have administrators who teach, and no schools have any administrators who teach. The total for UNRWA schools refers to 4 schools out of the total number of schools.

The data above indicate that schools without administrators who teach represent the vast majority. The number of administrators who teach is significantly lower across all sectors, with a relative concentration in the non-free private sector.

6. Number of contracted teachers in all designations
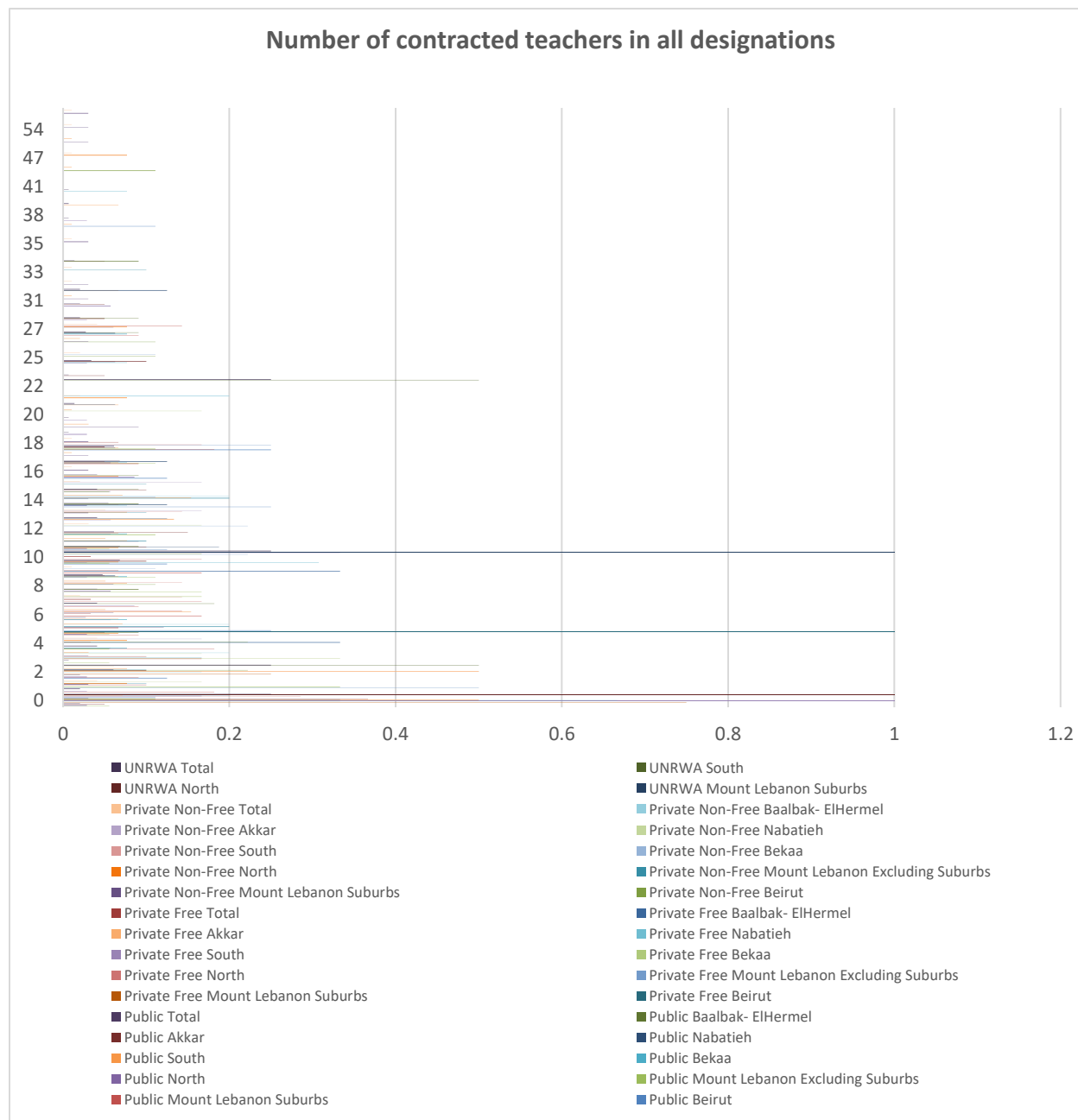
Chart (41): Number of contracted teachers in all designations

The public sector in Beirut includes schools with a variety of numbers of contracted teachers, with some schools having two contracted teachers, others having ten, and still others with fourteen or eighteen contracted teachers. The free private sector includes one school with five contracted teachers. The non-free private sector includes schools with various numbers of contracted teachers, including some with forty-five contracted teachers.

In Mount Lebanon (suburbs), the public sector includes schools with contracted teachers, including schools with nineteen teachers and others with six teachers. The free private sector includes schools with contracted teachers, as well as one school with only one teacher. The non-free private sector includes schools with five contracted teachers, as well as others with two or three teachers. The UNRWA sector includes one school with ten contracted teachers.

In Mount Lebanon (outside suburbs), the public sector includes schools with three contracted teachers. The free private sector includes schools with contracted teachers, with some schools having two teachers. The non-free private sector includes schools with contracted teachers, as well as schools with two or three teachers.

In the North, the public sector includes schools with three contracted teachers. The free private sector includes schools with contracted teachers. The non-free private sector includes schools with contracted teachers. The UNRWA sector includes one school.

In Bekaa, the public sector includes schools with contracted teachers, as well as some schools with two or more teachers. Both the free and non-free private sectors include schools with contracted teachers.

In the South, the public sector includes schools with contracted teachers. The free private sector includes one school. The non-free private sector includes schools with contracted teachers. The UNRWA sector includes two schools.

In Nabatieh, the public sector includes schools with contracted teachers. Both the free and non-free private sectors include schools with contracted teachers.

In Akkar, the public sector includes schools with contracted teachers. The free private sector includes two schools. The non-free private sector includes schools with contracted teachers.

In Baalbek-Hermel, the public sector includes schools with one teacher in most cases. Both the free and non-free private sectors include schools with contracted teachers.

Overall, the distribution of contracted teachers varies significantly across different educational sectors and regions. In the public sector, schools exhibit considerable variation in the number of contracted teachers, ranging from as few as one to as many as eighteen. The free private sector typically has a limited number of contracted teachers, with some schools employing as few as one. In contrast, the non-free private sector often employs a higher number of contracted teachers, with some schools having as many as forty-five. UNRWA schools, present in certain regions such as Mount Lebanon and the South, employ a modest number of contracted teachers, with some schools having as few as one or two.

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7. Support staff (the remaining school employees)

7.1. Number of support staff
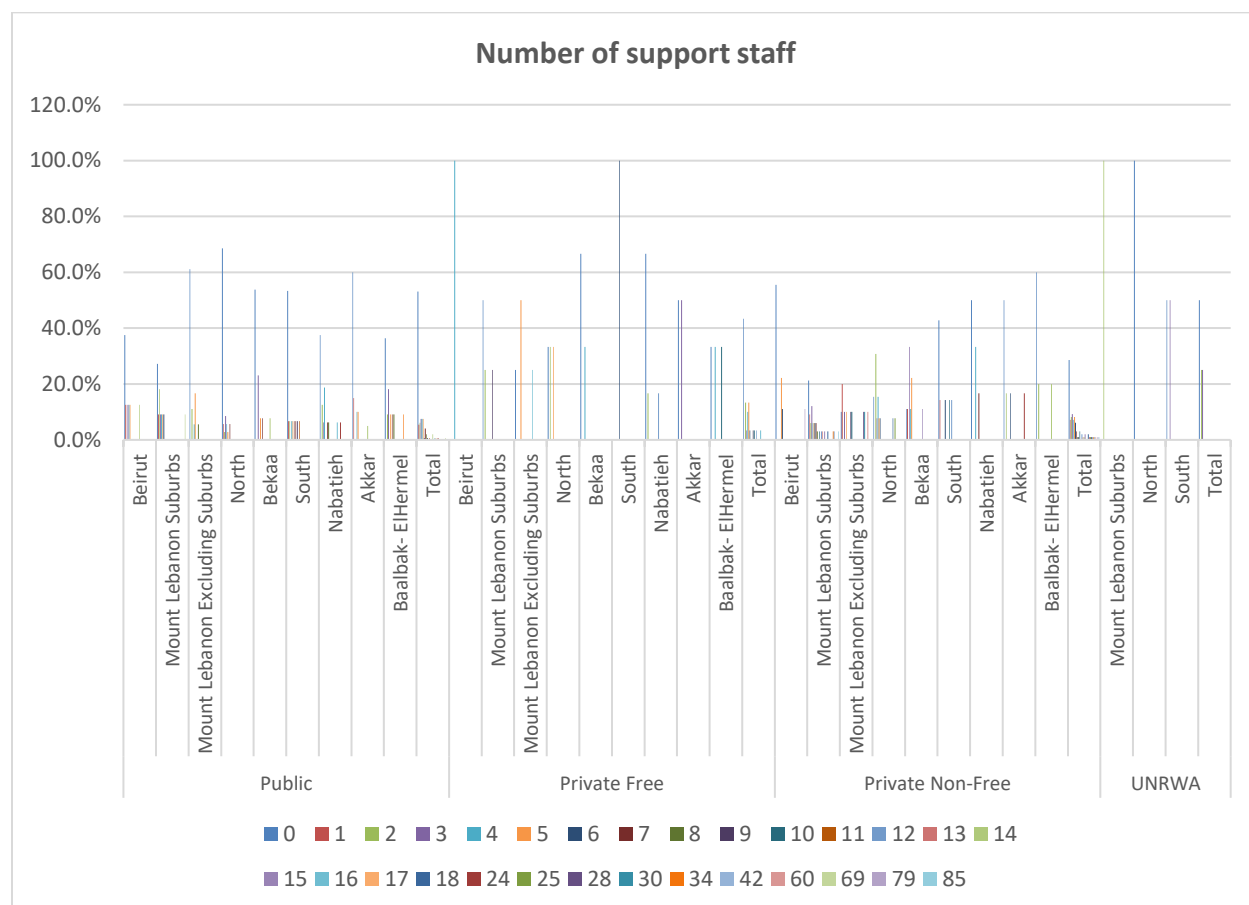
Chart (42): Number of support staff

In the suburbs of Mount Lebanon, there are 11 schools in the public sector. The majority of these schools do not have support staff, while some schools have 2 support staff members, or a varying number of support staff ranging from 1 to 6. The public sector represents 22.4% of the total number of schools. In the free private sector, there are 4 schools, some of which do not have support staff, while others have 2 or 9 support staff members. The free private sector represents 8.2% of the total number of schools. In the non-free private sector, there are 33 schools. The majority of these schools do not have support staff, with some schools having a diverse number of support staff members. The non-free private sector represents 67.3% of the total number of schools. In the UNRWA sector, there is one school with 2 support staff members, representing 2.0% of the total number of schools. We conclude that the non-free private sector is the most represented in terms of both the number of schools and the number of support staff.

In Mount Lebanon (excluding suburbs), the public sector represents 56.3% of the schools in the region. A large proportion of these schools do not have support staff, while some schools have one support staff member. In the free private sector, 12.5% of the schools are represented, and half of these schools have 5 support staff members. In the non-free private sector, 31.3% of

the schools are represented, with some schools having one support staff member or a varying number of support staff. We conclude that the public education sector is the largest in terms of the number of schools in the region, but it faces a shortage of support staff, while the free private sector shows a balance.

In the North, the public sector represents 63.6% of the schools in the region, with a large proportion lacking support staff, while some schools have one support staff member. In the free private sector, 10.9% of the schools are represented, with some schools lacking support staff. In the non-free private sector, 23.6% of the schools are represented, with some schools having a varying number of support staff members. The UNRWA sector contains only one school, which does not have any support staff. The conclusion is that the public sector is the largest in terms of the number of schools in the North, but it suffers from a shortage of support staff.

In Bekaa, the public sector represents 52% of the schools. Nearly half of the public schools lack support staff, while some schools have 3 support staff members. In the free private sector, it represents 12% of the total number of schools, with some of these schools lacking support staff.

In the non-free private sector, it represents 36% of the schools, with some schools having a varying number of support staff members. The conclusion is that the public sector is the largest, but it faces a serious shortage of support staff.

In the South, the public sector represents 60% of the total schools in the region, with some schools lacking support staff. The free private sector represents 4% of the total number of schools, and all of these schools have 6 support staff members. The non-free private sector represents 28% of the schools, with some of these schools lacking support staff. The UNRWA sector represents 8% of the schools, some of which have one support staff member. The conclusion is that the public and non-free private education sectors are the most represented in the South, but they face a significant shortage of support staff.

In Nabatieh, the public sector represents 57.1% of the total schools, with some schools lacking support staff. In the free private sector, it represents 21.4% of the total number of schools, with some of them lacking support staff. In the non-free private sector, it represents 21.4% of the schools, with some of them lacking support staff. The conclusion is that the public education sector is the most represented, but it faces a shortage of support staff.

In Akkar, the public sector represents 71.4% of the total schools, with some schools lacking support staff. In the free private sector, it represents 7.1% of the total number of schools, with some of them lacking support staff. In the non-free private sector, it represents 21.4% of the total number of schools, with some of them lacking support staff. The conclusion is that the public education sector is the most represented in Akkar, but it suffers from a clear shortage of support staff.

In Baalbek-Hermel, the public sector represents 57.9% of the total schools in the region. Some of the public schools lack support staff. In the free private sector, it represents 15.8% of the total schools, with some of these schools lacking support staff. In the non-free private sector, it represents 26.3% of the total schools, with some schools lacking support staff. The conclusion is

that the public education sector represents the largest proportion, but it suffers from a major shortage of support staff.

7.2. Number of Guards
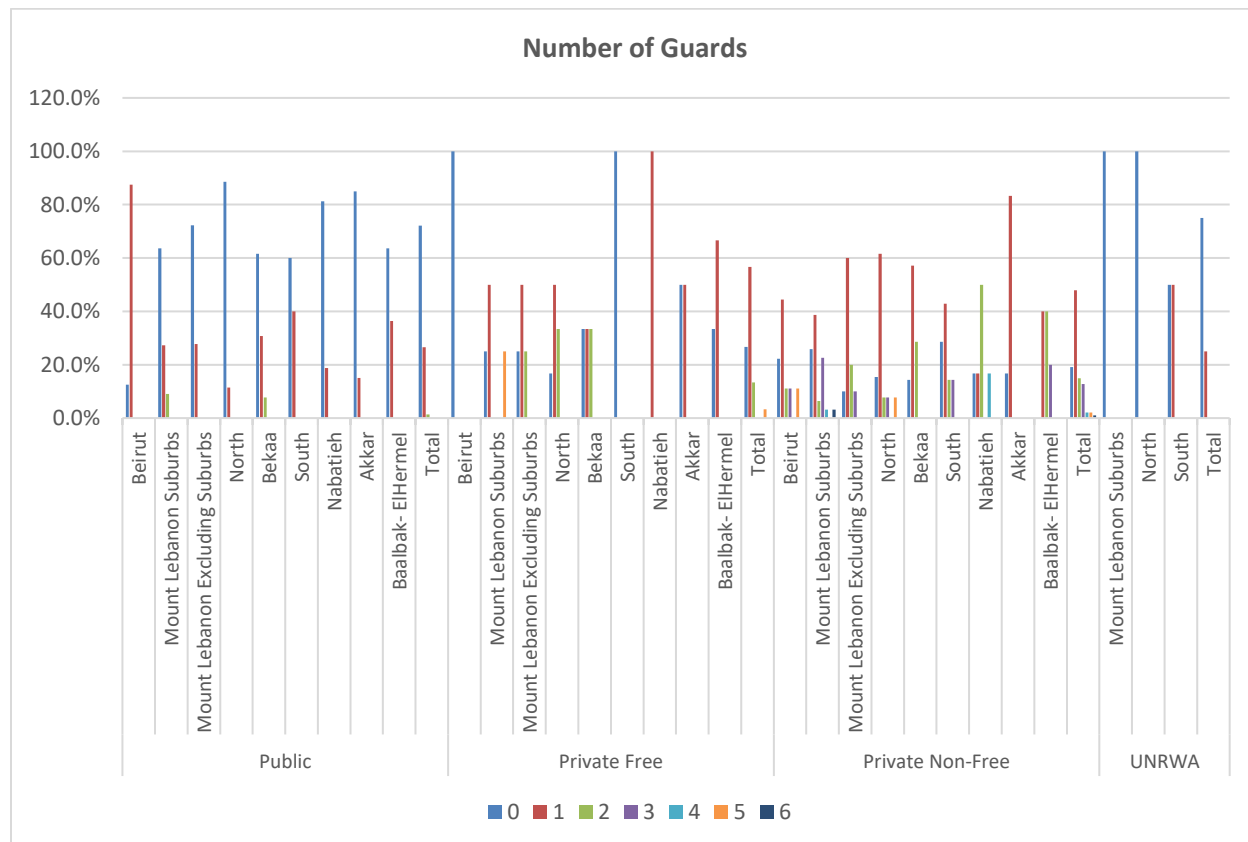
Chart (43): Number of guards

In Beirut, most schools in the public sector have one guard, while some schools have no guard at all. In the free private sector, no schools have guards. In the non-free private sector, some schools have one guard, while others have no guards, and some have more guards.

In Mount Lebanon suburbs, many schools in the public sector do not have guards, while other schools have one or more guards. In the free private sector, some schools have one guard, while other schools have none. In the non-free private sector, some schools have one guard, while others have no guards, and some have three guards.

In Mount Lebanon excluding suburbs, many schools in the public sector do not have guards, while other schools have one guard. In the free private sector, there is an equal distribution between schools with zero, one, or two guards. In the non-free private sector, some schools have one guard, while others have no guards.

In the North, many schools in the public sector do not have guards, while other schools have one guard. In the free private sector, some schools have one guard, while other schools have

two guards. In the non-free private sector, some schools have one guard, while others have no guards.

In the Bekaa, many schools in the public sector do not have guards, while other schools have one guard. In the free private sector, there is an equal distribution between schools with zero or one guard. In the non-free private sector, some schools have one guard, while others have two guards.

In the South, many schools in the public sector do not have guards, while other schools have one guard. In the non-free private sector, some schools have one guard, while others have no guards.

In Nabatieh, many schools in the public sector do not have guards, while other schools have one guard. In the free private sector, all schools have one guard. In the non-free private sector, some schools have two guards.

In Akkar, many schools in the public sector do not have guards, while other schools have one guard. In the free private sector, there is an equal distribution between schools with zero or one guard.

In Baalbek-Hermel, many schools in the public sector do not have guards, while other schools have one guard. In the non-free private sector, some schools have two guards, while others have three guards.

Overall, it appears that the distribution of guards in schools varies greatly by governorate and education sector. Public schools have the highest proportion of schools with no guards, especially in Beirut and Akkar. Private education, especially non-free, shows a relatively better distribution of guards.

Third: Analysis of the Research Question Results

Research Question: **"What are the key differences in preparedness between Lebanon's public and private schools for implementing the developed curriculum?"**

To address the research question regarding the differences in readiness levels between public and private schools for implementing the developed curricula in Lebanon, the analysis relied on the results of all research-related questions. These questions aimed to explore strengths and weaknesses, as well as the opportunities and challenges associated with implementing these curricula. It is worth noting that all percentages mentioned in this study are based solely on the responses of the study sample, and the results will be presented in detail in the following sections.

1. **Analysis of the Results for the Second Research Question: What are the main differences in leadership competencies required for the effective implementation of the developed curricula between public and private schools?**

1.1. **How efficient is leadership in the process of applying the developed curricula?**

1.1.1. *How effective is the school principal in guiding the implementation of the updated curriculum?*

Human resource planning focuses on forecasting the required number of staff for the school, distributed across various positions based on specific qualifications and within a certain timeframe to achieve the school's goals. This process facilitates identifying staff members in terms of their numbers, qualifications, and needs, as well as estimating the optimal use of human resources. It also prepares for addressing shortages, filling gaps, and working on the professional development of all staff.

Planning involves determining the learners' current status and competencies in the school, identifying the need for new staff with new qualifications based on educational and technological developments, and specifying staff shortages for the coming period or surpluses in certain positions, along with ways to handle both scenarios.

Management is a continuous human and social process aimed at utilizing available resources within and outside the institution through planning, decision-making, organizing, coordinating, problem-solving, directing, supervising, monitoring, and evaluating to achieve specified goals with the highest degree of effectiveness and efficiency. These processes are not

separate but are interconnected and interdependent, where each process influences and is influenced by the others.

The planning process begins with defining the tasks and activities required to achieve goals and ends with identifying the simulations that will be used to evaluate what has been successfully accomplished. It includes specifying tasks, supervising them, activating communication channels between the administrative and teaching staff, parents, and the local community, allocating resources, and implementing them within a specific timeframe.

Evaluation is considered a routine activity in the life of the school, with a comprehensive impact on all its elements. When properly utilized, it leads to improved learning outcomes for students, enhances teachers' efficiency, and increases their productivity. This requires the school principal to evaluate all aspects of the educational/learning process within the school, its impact on students' academic achievements and growth, and the quality of education/learning. Additionally, the principal must take the necessary measures to improve the quality of education and increase the school's effectiveness.

Key areas of school evaluation include assessing the quality of the educational/learning process, the quality of students' learning achievements, leadership effectiveness, and strategic planning quality. Evaluation is embedded in the school's culture, reflecting its capacity for development, change, and innovation, thereby enhancing the institutional climate and fostering effective human relationships within the school. Therefore, it is essential to promote a culture of self-evaluation in educational institutions (student self-assessment, principal self-assessment, and teacher self-assessment), which plays a fundamental role in performance improvement and encouraging renewal and innovation.

Among the most important qualities a school principal must possess to succeed as an educational leader is problem-solving ability. A school principal faces various problems that must be addressed appropriately to prevent their escalation, which could disrupt the school's operations. Thus, the principal must be capable of identifying existing issues and resolving potential future problems. For effective management, the principal must demonstrate strong, professional, participatory, and humane leadership. Since the school is inherently a communicative community, the principal must possess communication skills that enhance their effectiveness inside and outside the school, facilitating the participation of all stakeholders in the process of school improvement and development.

What sets one school apart from another is its administrative and educational performance, led by an educational leader who enhances its effectiveness and improves its productivity. The educational leader is the person who takes initiatives to improve and develop the existing situation

and has an institutional vision to achieve goals. Therefore, the educational leader must possess general leadership qualities as well as specific characteristics pertinent to educational work.

The second research question was answered by principals, supervisors, coordinators, and teachers. The presentation of the answers relied on analyzing factors in both the public and private sectors, categorizing them by governorates, and then comparing the two sectors to identify the impact of these factors. A Key Insights of the four questionnaires' results for each aspect of the question was also provided. The answers were as follows:

A. Developing Strategic Plans to Achieve School Objectives

- **Analysis of Principal Questionnaire Results**

The results show that UNRWA schools achieve the highest rates in terms of regularly setting strategic plans across all governorates, reflecting their stability. In the public sector, significant variation exists between governorates, ranging from "never" in Baalbek-Hermel to "always" in Akkar. The free private sector performs well in the governorates where it operates.

- **Analysis of Supervisor Questionnaire Results**

The results indicate that free private education and UNRWA schools are the best in terms of effectively adhering to strategic planning. Meanwhile, public and not free private education show disparities between governorates, especially in the North and Bekaa, with notable excellence in Mount Lebanon and the South across most sectors.

- **Analysis of Coordinator Questionnaire Results**

The findings reveal significant variation in the commitment of public schools to setting strategic plans to achieve their objectives across different governorates. As for not free and free private schools, the governorates surrounding Mount Lebanon, Bekaa, and the North recorded outstanding results, reflecting strong leadership in strategic planning within these sectors.

On the other hand, the public sector suffers from noticeable inconsistencies between governorates; for example, Beirut demonstrates inconsistency in implementation (33.3% always implement it and 33.3% rarely). Free private schools show strong performance in the suburbs of Mount Lebanon and Bekaa (60% always implement). Non- free private schools lead with remarkable results in Beirut (66.7%), the North (67.7%), and Bekaa (62.5%). UNRWA schools are the most committed, particularly in the North, where they recorded a 100% adherence rate.

- **Analysis of Teacher Questionnaire Results**

The results show that the non free private sector outperforms the public and free private sectors in strategic planning across most governorates, particularly in Mount Lebanon, Nabatieh, and Baalbek-Hermel. In Beirut, this sector demonstrates better performance than the public sector, with rates of 55.9% compared to only 33.3%. The standout governorates include Mount Lebanon

(excluding the outskirts), which records the highest commitment (71% in private schools). In Nabatieh, the not free private sector excels with a rate of 71.9%.

Conversely, the public sector exhibits significant variation between governorates, with good performance in Mount Lebanon but weak results in Baalbek-Hermel and the North. The free private sector achieves good rates in most governorates, except in the South, where performance is low. The South, the North, and Baalbek-Hermel face notable challenges across all sectors compared to other governorates.

Key insights

The feedback shows consensus that UNRWA schools and the non free private sector are the most distinguished in strategic planning. On the other hand, the public and free private sectors require improvement in some peripheral governorates, such as the North, the South, and Bekaa, which represent common challenges. There is agreement on the necessity of improving these governorates to advance strategic planning.

Despite this consensus on key points, opinions differ in the detailed evaluation of the various sectors by governorate.

B. How Are Plans for Resource Management, Task Distribution, and Priority Setting Developed?

- **Analysis of Principal Questionnaire Results**

The results indicate that public and non- free private sectors show that school principals efficiently and effectively develop plans for resource management, task distribution, and priority setting. The South and Beirut governorates demonstrate outstanding performance across all sectors. However, Akkar and Baalbek-Hermel report low rates of effective and efficient stakeholder involvement. In some governorates, reliance on individual decisions by principals remains prevalent.

When comparing governorates, Beirut leads in involving all stakeholders in planning related to resource management, task distribution, and priority setting in the public and not free private sectors. Approximately 87.5% of public schools and 88.9% of non- free private schools adhere to effective and efficient planning practices, with distinguished performance in the North and Baalbek-Hermel (100%). The free private sector shows less variation due to relatively standardized mechanisms.

According to principals, the public sector achieves moderate to high rates of stakeholder participation in planning for resource management, task distribution, and priority setting. However, it suffers from significant regional disparities, with notable declines in Akkar and Bekaa. For the free private sector, the results show high participation in most governorates, with notable excellence in schools in the South and Bekaa. The non free private sector demonstrates exceptional stakeholder involvement with effectiveness and efficiency, particularly in governorates like Beirut

and Baalbek-Hermel. UNRWA schools also exhibit full commitment to involving all stakeholders effectively and efficiently, especially in Mount Lebanon and the North.

- **Analysis of Supervisor Questionnaire Results**

The results from the public sector indicate that 39.2% of supervisors believe that "principals develop plans effectively and efficiently," while 38.7% think that "some of them participate effectively and efficiently." Therefore, the total positive feedback (effective and efficient participation) is approximately 77.9%. Meanwhile, 22.1% of supervisors report negative feedback, citing the absence of a clear mechanism or participation without notable effectiveness.

In free private education, the overall percentages reveal that 61.3% of schools believe that "principals develop plans effectively and efficiently," while 22.6% think that "some of them participate effectively and efficiently." Additionally, 3.2% of supervisors state that "there is no clear mechanism for planning," and another 3.2% believe that "some stakeholders participate but without notable effectiveness." Based on these figures, the total effective and efficient participation is approximately 83.9%.

Regarding non- free private education, 56.4% of supervisors report "effective and efficient performance," while 37.6% believe that "some stakeholders perform effectively and efficiently." Furthermore, 1.7% of schools note that "some stakeholders participate but without notable effectiveness." Based on these data, the total effective participation is approximately 94.0%.

UNRWA schools stand out with 100% effective participation in Mount Lebanon and the South, reflecting their organizational excellence.

Outstanding Performance: Beirut leads all sectors with positive rates across all areas, particularly in free and non- free private education (100%). The South achieves the highest positive rates in the public sector (90.7%) and the private sector (100%). Mount Lebanon (suburbs) and the North also show high percentages ranging between. (82%) to (96%). Baalbek-Hermel records medium positive rates (76.5% in the public sector), with excellence in private education (100%).

The private sector clearly excels in effective planning mechanisms compared to the public sector, especially in Beirut and the South. The governorates of the South, Beirut, Bekaa, and the North achieve the highest positive rates in the public sector. In contrast, the lower-performing governorates (Akkar and Baalbek-Hermel) need to develop comprehensive planning mechanisms.

UNRWA schools stand out with 100% effective participation in Mount Lebanon and the South. Beirut stands out among the governorates, especially in both free and non-free private education, with a rate of 100% based on supervisor responses. The overall positive performance for effective participation is approximately 94.0%.

- **Analysis of Teacher Questionnaire Results**

The analysis of the teacher questionnaire shows that the free private sector demonstrates strong reliance on effective participation from all stakeholders, particularly in the North and South

governorates. The non-free private sector shows variation in participation rates across governorates, with some reliance on individual decisions in Beirut. The highest rates of effective participation (13.3% for some stakeholders and 16.4% for all stakeholders) come from this sector, placing it ahead of other sectors. It stands out as a sector with a high level of participation and efficiency in planning, with opportunities to improve in schools that face weaknesses in planning mechanisms or participation.

UNRWA schools demonstrate a positive model for planning mechanisms. Teachers believe that the level of participation in planning is more than 84.9% in schools, either fully or partially, which reflects the relatively advanced planning mechanisms compared to other sectors. There is also a decline in reliance on individual decisions, which make up only 6.8% of the overall situation, an encouraging indicator compared to other sectors. The availability of material and human resources enables schools to achieve wide and effective participation. However, the lack of a clear mechanism hinders efficiency.

- **Analysis of Coordinator Questionnaire Results**
    The analysis of the coordinator questionnaire reveals that most governorates, such as Beirut, the North, and Baalbek-Hermel, have a good level of participation, with a higher percentage of "all stakeholders participating effectively and efficiently." Bekaa is an exception, where 65.0% of schools involve all stakeholders in the planning process.

    Beirut and Bekaa show full participation from all stakeholders in the free private sector, while the North takes a stronger individual decision-making approach. Similar trends are observed in the free private sector, with significant participation in some governorates such as the South and Baalbek-Hermel. However, some principals still make individual decisions or allow limited stakeholder involvement. Schools in the North stand out for involving stakeholders effectively with a rate of 100%.

    We conclude that all respondents agree that the level of participation is high, especially in the non- free private sector and UNRWA sector, with praise for the performance in the South and Beirut. Regarding individual decision-making, some principals have indicated that it is still used in certain governorates. We also observe from the responses of the supervisors that individual decision-making is evident in low-performing governorates, such as Akkar and Baalbek-Hermel. The number of principals who make individual decisions ("individual decisions") is only 6.8% of the overall situation, which is a positive indicator. Coordinators also pointed out that some principals in both the free and not free private sectors make individual decisions.

    Everyone agrees that the percentage of principals who make individual decisions is generally low, but it still exists in some governorates or sectors. There is also a consensus that the UNRWA sector is the best in terms of participation and effective planning.

The not free private sector enjoys a high level of participation and efficiency, but it needs improvement in some governorates.

We conclude that there are high levels of effective participation, with praise for the UNRWA and private sectors. There is geographical variation, with Beirut and the South standing out, and clear weaknesses in Akkar and Bekaa. Regarding individual decisions, they are few overall but still present in some governorates. The non- free private sector performs well but faces challenges in some governorates.

Key Insights

We observe a generally good level of participation across most sectors, despite the private sector outperforming the public sector. This highlights the need to enhance participation in low-performing governorates (Akkar and Bekaa) and provide opportunities to improve performance in areas facing challenges in team involvement. Additionally, leveraging the models of distinguished sectors to improve planning mechanisms is crucial.

Everyone agrees on the importance of participatory management through involving the team in the planning process and the need to develop sustainable solutions to improve the performance of principals in challenging governorates like Akkar and Bekaa.

C- Leadership Model Adopted in the Schools

- **Analysis of Principal Questionnaire Results**

In the public sector, participatory leadership is the most adopted model, appearing in 90.5% of schools. This reflects the preference of public schools for involving individuals in decision-making and teamwork, which enhances the transparency of administrative and educational processes. Distributed leadership, which represents 7.5%, comes in second place and indicates that some schools rely on distributing roles and responsibilities to achieve their goals. Other models, such as individual leadership or centralized leadership, are almost non-existent, signaling a clear shift towards more collaborative and flexible management approaches.

In the free private sector, participatory leadership dominates with 80%, indicating that this sector values the involvement of various parties in the decision-making process. Distributed leadership comes second at 13.3%, reflecting a trend in some schools towards task distribution to facilitate management and improve efficiency. Nevertheless, individual and centralized leadership appear in very small percentages, reinforcing the free private sector's focus on modern management models.

In the non-fee private sector, participatory leadership is the most common model, at 84.7%, reflecting the sector's desire to create a participatory environment that contributes to achieving its educational goals. Distributed leadership represents 12.2%, indicating a limited reliance on this

model. However, individual leadership is shown in small percentages, suggesting that some schools still prefer this traditional approach.

Meanwhile, UNRWA schools fully adopt the participatory leadership model at 100%. This focus reflects UNRWA's nature as an international organization that relies on involving all parties to ensure effective program implementation and achieve educational equity. The absence of any other models strengthens the full commitment to participatory leadership as a core strategy.

The data indicate that participatory leadership is the dominant model across all educational sectors, reflecting a general trend towards involving teachers and administrators in the decision-making process. However, distributed leadership appears significantly in the private sector, suggesting that private schools rely on distributing tasks and responsibilities among teams.

At the governorates level, Beirut schools rely almost entirely on participatory leadership, with 94.4%, and a small contribution from distributed leadership. In Mount Lebanon (suburbs), participatory leadership prevails at 85.7%, while distributed leadership represents 12.2%. In Mount Lebanon (excluding the suburbs), participatory leadership dominates at 90.6%.

In the North, the participatory model appears at 94.5%, with a small contribution from distributed leadership. In the Bekaa, participatory leadership records 88%, with 12% for distributed leadership. The south shows the strongest focus on participatory leadership at 96%.

In Nabatieh, participatory leadership is the most common model at 78.6%, while distributed leadership represents 17.9%. In Akkar, the participatory model represents 75%, followed by distributed leadership at 21.4%. In Baalbek-Hermel, participatory leadership accounts for 78.9%, with occasional contributions from other models.

The focus on participatory leadership as the main model is evident across all governorates and sectors, with some variation in the adoption of distributed leadership. Rural governorates such as Akkar and Baalbek-Hermel show a higher interest in distributed leadership compared to urban governorates like Beirut. This trend requires additional training support to strengthen these models and ensure their effectiveness in various local contexts.

Participatory leadership is predominant in most sectors and governorates, reflecting a collaborative educational environment and indicating enhanced cooperation within schools. However, there are noticeable percentages of schools that rely on individual leadership in some governorates, such as Baalbek-Hermel and Akkar.

Variations in the adoption of participatory leadership across governorates are particularly evident in the private sector. Individual leadership appears in varying percentages in governorates like Akkar and Baalbek-Hermel. There is a distinct contrast between governorates in the private sectors.

- **Analysis of the Supervisor Questionnaire Results**.
    In public schools, the highest rates of participatory leadership are observed in Beirut, the North, and Baalbek-Hermel (81.8% and 88.2%). In Mount Lebanon (suburbs), the lowest rate is

recorded (64.7%), and in Akkar (65.8%) with higher percentages of distributed leadership (23.7%) and individual leadership (7.9%).

In free private schools, principals in major governorates such as Beirut and Mount Lebanon perform excellently (100%), with most governorates showing similar results. However, notable variations are observed in Akkar, where the lowest percentage of participatory leadership is recorded (25%), with a reliance on distributed leadership (25%).

In private non-free schools, the northern governorates record high percentages of participatory leadership (94.4%), while Akkar faces challenges with lower rates (55.6%) and a notable presence of individual leadership (22.2%).

In UNRWA schools, the performance is consistent at 100% participatory leadership. We conclude that participatory leadership is the most common in all sectors, with UNRWA schools standing out.

There are noticeable disparities between governorates, with Beirut, the North, and Mount Lebanon showing stability, while Akkar suffers from a weakness in participatory leadership.

- **Analysis of Teacher Questionnaire Results**
 In the public sector, the most common model is "participatory leadership" (691 teachers), accounting for 67.9% of the sector and 36.3% of the total. The second most common is individual leadership with discussion and consideration of opinions, at 19.2% within the sector and 10.3% of the total (195 teachers). Individual leadership (also among the most common patterns) represents 11.7% of the sector and 6.3% of the total (119 teachers).

In free private schools, the most common model is participatory leadership, at 76.1% within the sector (159 teachers). Individual leadership is recorded at 9.6% (20 teachers), while individual leadership with discussion and consideration of opinions accounts for 13.9% (29 teachers). Other less common models are generally at 0.1% of the total, which aligns with one teacher per model.

In the private non-free sector, participatory leadership leads with a percentage of 69.7%, the highest in Beirut (83.1%) and Mount Lebanon suburbs (75.2%), and the lowest in Nabatieh (43.8%). Meanwhile, distributed leadership is higher compared to other sectors at 22.2%, with the highest percentages in Nabatieh (40.6%) and Bekaa (28.6%), and the lowest in Beirut (10.2%) and Mount Lebanon suburbs (20.3%).

In UNRWA schools, participatory leadership is the most common at 91.7%, with 100% in the North and South governorates, the highest rates, while individual and distributed leadership models are rare in this sector. A slight decrease is observed in Mount Lebanon suburbs (80%). Distributed leadership is only present at a small percentage in Mount Lebanon suburbs (20%).

Results based on the leadership style in different governorates indicate that participatory leadership is the most widespread model across all sectors and governorates. The highest percentages of participatory leadership are recorded in the South and Nabatieh governorates in

most sectors. Baalbek-Hermel and Akkar governorates show low rates of participatory leadership, but they compensate with higher rates of distributed leadership.

A clear variation in the application of distributed leadership is evident across sectors, with the highest rates in the private non-free sector and the public sector. It appears notably in the governorates of Nabatieh, Akkar, and Baalbek-Hermel, especially in the public and private non-free sectors. Baalbek-Hermel governorate shows higher rates of distributed leadership compared to other governorates, possibly reflecting different school management conditions.

The free private sector excels in participatory leadership compared to other sectors. Beirut governorate leads in participatory leadership within the private non-free sector but is lower in the public sector. Akkar governorate shows a mix of moderate participatory leadership and high distributed leadership, which warrants a deeper examination of the reasons.

- **Analysis of Coordinator Questionnaire Results**.
In the public sector, leadership is mostly individual in Beirut governorate, where the principal heavily relies on themselves, with task distribution to the administrative team (44.4%). The next model is dual leadership with the supervisor (33.3%), and participatory leadership is used at a small percentage (11.1%). In the free private schools, participatory leadership is fully utilized (100%). In the non-free private schools, participatory leadership is the dominant model (58.3%), followed by individual leadership with a top-down approach (33.3%), and dual leadership with the supervisor (8.3%).

In Mount Lebanon suburbs, participatory leadership dominates at 64.7% in the public sector, followed by individual leadership at 23.5% and dual leadership with the supervisor at 11.8%. This indicates a preference for involving a larger number of individuals in decision-making in the governorate. In the free private schools, participatory leadership is mainly used (80%), with a small percentage (20%) of individual leadership. In the non-free private schools, dual leadership with the supervisor is the most common model (84.8%), while participatory leadership represents only 2.2%.

In Mount Lebanon (excluding suburbs), participatory leadership seems to be the most used at 61.5%, followed by individual leadership at 30.8%. In the free private schools, only participatory leadership is used (100%). In the non-free private schools, dual leadership with the supervisor is the most common model (73.7%), followed by individual leadership at 15.8%.

In the North governorate, in public sector schools, participatory leadership is the most used model at 66.1%, followed by individual leadership at 23.7%, and dual leadership with the supervisor at 8.5%. A small portion (1.7%) relies on individual leadership depending on the coordinator. In the free private sector, only participatory leadership is used (100%). In the non-free private schools, the dominant model is participatory leadership (87.1%), followed by individual leadership at 9.7% and dual leadership with the supervisor at (3.2%).

In the Bekaa governorate, participatory leadership is the most used in the public sector at (60.0%), followed by dual leadership with the supervisor at (25%) and individual leadership at (15%). The participatory leadership model is fully adopted in the free private schools (100%). In

the non-free private schools, dual leadership with the supervisor is the most common model (75%), followed by individual leadership at (18.8%).

In the South governorate, participatory leadership is the most used model in public sector schools at (59.5%), followed by individual leadership at (26.2%) and dual leadership with the supervisor at (14.3%). Participatory leadership is used in free private schools at (60%), with (40%) of schools adopting individual leadership. Dual leadership with the supervisor (50%) dominates alongside participatory leadership at (50%) in the non-free private schools.

In the Nabatieh governorate, participatory leadership is the dominant model in the public sector at (75%), with individual leadership at (18.8%) and dual leadership with the supervisor at (6.3%). Participatory leadership is used only in free private schools at (50%), equally with individual leadership. In non-free private schools, dual leadership with the supervisor dominates at (90.9%), with no use of participatory leadership in this sector.

In the public sector in Akkar governorate, there is a focus on participatory leadership, which is the most used model at (57.7%), followed by (23.1%) of opinions that found there are leadership based solely on the supervisor, followed by dual leadership with the supervisor at (15.4%), and finally, individual leadership recorded the lowest percentage at (3.8%).

Participatory leadership in free private schools in this governorate represents (33.3%), and dual leadership with the supervisor (66.7%), the two main leadership models. In non-free private schools, participatory leadership is the most commonly used model at (53.8%), followed by individual leadership at (30.8%), and dual leadership with the supervisor at (15.4%). In free private schools, both participatory leadership and dual leadership with the supervisor represent (50%) each. In non-free private schools, dual leadership with the supervisor dominates at (90.9%).

At the governorate level, in Baalbek-Hermel, dual leadership with the supervisor dominates in the public sector at (66.7%), with small percentages for participatory leadership (5.6%) and individual leadership (5.6%), and individual leadership based on the coordinator at (16.7%).

We conclude that participatory leadership is the most common model in both the public and private sectors across most governorates, especially in Beirut and the North, and that the "dual leadership with the supervisor" model is the most common in most governorates across both sectors.

Dual leadership with the supervisor is particularly evident in some governorates like Mount Lebanon (suburbs) and Baalbek-Hermel, as well as in non-free private schools in some governorates like the South and Bekaa. This trend reflects growth in structural and composite leadership.

Key Insights

From the analysis of the results of the four Questionnaires, it appears that participatory leadership is the most widespread model across most sectors and governorates, with both the non-free private sector and the public sector showing high percentages of this type of leadership, with

distinct prominence in some governorates like Beirut, the South, and Nabatieh. Respondents agree that there is a noticeable variance in the percentages of participatory leadership between governorates, where Beirut and the South record high percentages, while governorates like Akkar and Baalbek-Hermel show lower percentages.

Individual leadership seems less prevalent compared to participatory leadership across all governorates and sectors, but it appears at notable rates in some governorates like Akkar and Baalbek-Hermel. Therefore, it is important to study the factors influencing the variation in leadership across governorates in order to develop appropriate strategies, provide training programs for principals to enhance their ability to adopt effective leadership models, and promote participatory leadership to improve school performance.

D. Effectiveness of School Management in Guiding and Supporting the Educational Team

- **Analysis of the Principal Questionnaire Results**

The results show that most school principals in the public education sector believe they support and guide the educational team in a "very effective" or "somewhat effective" manner. For example, in Beirut, (50%) of its schools rate their support effectiveness as "very effective," while in the South, it increases 80%). Governorates like Baalbek-Hermel show variation, with 9.1% classifying administrative effectiveness as "ineffective."

In the private free education sector, nearly all schools classify themselves as either "very effective" or "somewhat effective" in supporting and guiding the educational team in Beirut and the North, with 100% of schools in these areas rating themselves as "very effective," reflecting the professionalism of school principals in managing this sector in these governorates.

Meanwhile, the majority of principals in private non-free education consider themselves "very effective" in supporting and guiding the educational team, with percentages ranging from 66.7% across most governorates. However, there is a slight decline in governorates like Akkar, where the percentage is slightly lower.

UNRWA shows very positive results, with all principals rating their administrative role as "very effective" or "somewhat effective." In the South, the percentages are evenly split between high and medium effectiveness.

In Beirut, 66.7% of principals rate their effectiveness in supporting and guiding the educational team as "very effective," reflecting clear administrative stability. The percentage in Mount Lebanon (suburbs) is 63.3%, indicating relatively good performance. In the North, the percentage is high at 49.1% of principals rating themselves as "very effective," with 5.5% rating it as "needs improvement." Bekaa shows good performance with 56% rating their effectiveness as "very effective." The South demonstrates superiority with 68% rating their effectiveness as "very effective," while Nabatieh shows an equal percentage of high and medium effectiveness. In Akkar, a large percentage (60.7%) finds the effectiveness "ineffective" or "needs improvement," indicating a need for intervention to improve administrative performance. In Baalbek-Hermel, there is a balance between the different ratings, indicating variation in administrative performance

among school principals, and necessitating work on training principals to improve their effectiveness in supporting and guiding the educational team.

We conclude that there is variation across educational sectors in terms of administrative effectiveness in guiding and supporting the educational team. Public education shows significant variation between governorates, while private free education stands out with consistent and positive performance. Private non-free education demonstrates efficiency in most governorates but may need improvement in certain areas like Akkar. Governorates such as the South and Beirut as positive examples of school administration effectiveness in supporting and guiding the educational team. In contrast, governorates like Akkar and Baalbek-Hermel require additional efforts to improve administrative performance and achieve effectiveness in support and guidance.

The results from private free education and UNRWA indicate a strong and stable model across nearly all governorates, reflecting high effectiveness in administration in terms of guiding and supporting the educational team.

The governorates of the South, North, and Bekaa are considered the best-performing in most sectors, especially in the private free education sector and UNRWA. The private free education sector shows stability and high effectiveness in all governorates. In the public sector, however, there is significant variation in performance between governorates, with strong performance in the South and noticeable weaknesses in Akkar and Baalbek-Hermel.

- **Analysis of The Supervisor Questionnaire Results**

According to the supervisors, there is significant variation between governorates in the public sector. The South and Nabatieh show high effectiveness in guiding and supporting the educational team, with rates of (56.3%) and (43.5%) classified as "very effective," respectively, compared to lower rates in Akkar (28.9%) and Bekaa (33.3%).

In the private free education sector, the North, Bekaa, and Baalbek-Hermel stand out with 100% of supervisors rating school management as "very effective", followed by Akkar at 75%. Nabatieh however shows some variation with 66.7% rating as "somewhat effective." The private non-free education sector shows the highest effectiveness in the South (85.7%) and Mount Lebanon (83.3%), while there is relatively low effectiveness in Bekaa, with only 28.6% of supervisors rating school management support as "very effective". UNRWA schools demonstrate consistent effectiveness, with 100% of supervisors rating school management as "very effective" across all governorates.

Key Insights

The data reveals significant variation in school management effectiveness between governorates. The South and Mount Lebanon (excluding the suburbs) perform well in the public sector, while Akkar and Bekaa require improvement. The private free education sector is generally rated positively, with minor variations in Nabatieh. The private non-free education sector achieves high ratings in most governorates, except for Bekaa, which needs improvement. UNRWA schools exhibit consistently high performance, reflecting a unified positive evaluation across all regions and a high level of administrative effectiveness compared to other sectors.

The supervisors' perspectives highlight that the private free education sector is the most effective in guiding and supporting the educational team, followed by the private non-free education sector, and then the public sector. The notable variation between governorates underscores the need for some regions to enhance administrative performance to achieve educational goals more effectively.

- **Analysis of the Coordinator Questionnaire Results**

The general analysis of the coordinators' opinions shows significant variation in results regarding the effectiveness of administration in guiding and supporting the educational team across sectors and governorates. In the public sector, Beirut faces challenges in administrative effectiveness, with 44.4% of participants rating the administration as "very effective," but 33.3% indicating that it "needs improvement." In contrast, governorates like Mount Lebanon (suburban and non-suburban) and the North show good effectiveness, with a high percentage of participants rating the administration as "very effective" or "somewhat effective." In Bekaa and the South, there is a noticeable percentage of responses indicating "needs improvement," suggesting the need to develop these skills in principals to ensure the achievement of educational goals. In Nabatieh, Akkar, and Baalbek-Hermel, evaluations show variation between opinions.

In the private free education sector, the evaluation is extremely positive, with a high percentage of participants across all governorates rating the administration as "very effective," including Beirut, Mount Lebanon, the North, and Bekaa, reflecting high effectiveness in supporting the educational team. In the private non-free education sector, the evaluations vary between high effectiveness and the need for improvement, with Mount Lebanon, the North, and Bekaa showing high positive ratings of "very effective," while some governorates, like Beirut and Akkar, require improvement.

Overall, the analysis indicates that there is a variation in administrative effectiveness between the public and private sectors, with significant challenges in some governorates that need improvements to develop the performance of educational administration.

- **Analysis of Teacher Questionnaire Results**

Mount Lebanon (excluding suburbs) in the public sector showed a high percentage for the statement "very effective" (57.3%), followed by the South (56.5%) for the same statement. The "needs improvement" results indicated that teachers in Baalbek-Hermel and Bekaa believe that the administration requires further improvement, with percentages of 19.5% and 20.4%, respectively. The South showed a relative lead at 56.6%, followed by Nabatieh and Akkar with equal percentages of 41.1%. The private free education sector leads in "effectively guiding and supporting the educational team" in Mount Lebanon (excluding suburbs) at 87.1% and Bekaa at 82.4%, reflecting clear effectiveness in this sector in rural and suburban governorates.

The governorates with high percentages for "needs improvement" were the South (70.0%) and Beirut (37.5%). The private non-free education sector shows the highest effectiveness in Beirut (64.4%) and Mount Lebanon suburbs (71.6%), with Baalbek-Hermel also showing a good percentage (58.3%).

The UNRWA sector recorded the highest "very effective" percentage, with the South at 60.0% and the North at 100%. The North was distinguished by the effectiveness of school principals in guiding and supporting the team across all sectors, reaching 72.5% in the private free sector.

E- Encouraging and Supporting the Educational Staff's Innovation

- **Analysis of the Principal Questionnaire Results**

The results showed that principals in the public sector are characterized by effectively supporting and encouraging innovation in most governorates, with an overall percentage of 59.2%. The South recorded the highest percentage for administration that effectively encourages innovation, reaching 80.0%. Bekaa and Mount Lebanon (excluding suburbs) recorded 69.2% and 77.8%, respectively. Akkar recorded a lower percentage for effective innovation at 40.0%, with a good support percentage of 50%. It is concluded that the public sector shows a noticeable variation between governorates, with percentages ranging from 40.0% in Akkar to 80.0% in the South. The private non-free sector is the most stable, with an effective innovation support percentage of 77.6%. Some governorates' schools excelled in effectively encouraging innovation, with Baalbek-Hermel recording 100.0%, and the North recording 84.6%. Beirut recorded 88.9% for continuously supporting innovation. Schools that effectively support innovation in the private free sector recorded 76.7%. Governorates that stood out include Beirut, Mount Lebanon (excluding suburbs), the South, and Bekaa, all recording 100.0% for supporting innovation effectively.

- **Analysis of the Questionnaire Results for Supervisors**

The results showed that the North leads with 60.5% for "effective and continuous support" in public education, 72.2% in private non-free education, and 100% in private free education. Akkar showed a decline in public education (44.7%) with 18.4% for limited support for change and innovation processes, but showed progress in private non-free education (77.8%). Baalbek-Hermel excelled in all sectors, with 90.9% of schools providing effective support in private non-free education, followed by Beirut, which showed 100% for "effective support" in private free education and 66.7% in private non-free education. In the South, the percentages are close across sectors, with "effective support" ranging between 59.4% in the public sector, 71.4% in private non-free education, and 100% in private free education.

According to supervisors' data, we conclude that public education suffers from variation in supporting innovation across governorates, with the North and South leading, while Akkar, Baalbek, and Nabatieh lag behind. Free private education shows cohesion and stability in supporting innovation, with nearly 100% support. The non-free private education sector is balanced, with significant progress in Baalbek-Hermel and Akkar, but some decline in Mount Lebanon and the North. UNRWA schools are distinguished by continuous support for innovation in all governorates, with 100% support.

- **Analysis of the Questionnaire Results for Coordinators**

In the public sector, 47.5% of coordinators responded that principals in the North support innovation continuously, followed by Beirut, where the administration encourages and directs innovation continuously at 33.3%, with 22.2% indicating a lack of focus on change and innovation. 23.7% of coordinators responded that school principals in public schools provide good guidance and support, while 45.0% of them see that principals support innovation continuously in Bekaa, with 35% offering good guidance.

In the private free sector, in Beirut, the administration continuously supports innovation at 100%. In Mount Lebanon's suburbs, coordinators mentioned that 60% of principals continuously support innovation. In the South, 40% of school administrations focus on supporting innovation, while 60% provide good guidance.

In the private non-free sector in Beirut, 66.7% of administrations support innovation continuously, while only 8.3% of principals provide limited support. In Mount Lebanon's suburbs, 71.7% of principals support innovation continuously, while 26.1% offer good support. In the South, 33.3% of administrations support innovation continuously, with 50% providing good support.

In UNRWA schools, administrations in the North focus entirely on innovation at 100%.

Key Insights

Leadership plays an important role in encouraging innovation and fostering a supportive educational environment for innovation. Innovation is a key part of developing educational and administrative performance. The free private sector shows remarkable performance in effectively supporting innovation across all governorates.

The non-free private sector and the UNRWA sector also demonstrate a high commitment to supporting innovation. Respondents point out that there are disparities between governorates in supporting innovation, with the South and North recording high percentages, while governorates such as Akkar and Baalbek-Hermel lag behind. The public sector shows medium to strong support in many governorates, with a clear variation between them. This may be due to the lack of a unified policy to address the absence of support and encouragement for innovation in schools in some governorates.

Hence, there is a need to generalize successful innovation support programs from the private sectors to the public sector, by encouraging the exchange of successful experiences between high-performing schools and low-performing schools to improve principals' performance.

Additionally, follow-up and evaluation mechanisms should be established to support innovation in schools located in rural governorates.

F- Involve the team in making important decisions in the school
- **Analysis of the Principal Questionnaire Results**

The results indicated that the non-free private sector performs the best overall, with the highest rate of team participation in decision-making being "always and effectively" at 49.0%, compared to the other sectors. The free private sector ranked second, with "always and effectively" at 46.7%. The public sector showed lower performance compared to the other sectors, with "always and effectively" at only 40.8%. The UNRWA sector showed excellent performance, but it was limited to specific governorates with no significant variation. The public sector showed significant disparity between governorates, with "always and effectively" rates ranging from 25.0% in Beirut to 65.0% in Akkar. The non-free private sector also showed moderate variation between governorates such as Beirut (77.8%) and Bekaa (11.1%).

We conclude that the non-free private sector demonstrates a clear ability to involve the teaching team in important decision-making. The UNRWA sector provides consistent performance across governorates. Meanwhile, the public sector experiences significant variation between governorates, reflecting inconsistency in school management policies. Some governorates, such as Bekaa in the non-free private sector, show a clear weakness in involving the teaching team in decision-making.

- **Analysis of the Supervisor Questionnaire Results**

According to supervisors, the levels of involvement of the teaching team in decision-making vary across governorates in the public sector. In Beirut, 27.3% of administrations are always and effectively involved, while 36.4% are occasionally involved. In Mount Lebanon (suburbs), there is a balance between effective participation and occasional participation, both at 29.4%. In Mount Lebanon (excluding suburbs), "43.5% of administrations are always and effectively engaging others in their activities. In the North, 44.7% of administrations frequently engage others, while 34.2% are consistently involved. In the South, 50% of administrations are always and effectively engaging others. In Nabatieh, 52.2% of administrations are frequently engaging others, and in Akkar, 44.7% of administrations are frequently engaging others. In Baalbek-Hermel, 47.1% of administrations are always and effectively engaging others.

The governorates with high participation include Mount Lebanon (excluding suburbs), the North, the South, and Baalbek-Hermel, while Beirut and Akkar exhibit limited participation. Therefore, there is a need to motivate Beirut and Akkar to increase effective participation, while the level of team involvement needs to be improved in Nabatieh and Mount Lebanon (suburbs).

In free private education, the results vary in terms of the level of team involvement in decision-making across governorates. In Beirut, all team members are often involved at 100%, while in Mount Lebanon (suburbs), 80% of the team is always and effectively involved, with 20% participating only occasionally.

In Mount Lebanon (excluding suburbs), there is a balance, with 50% of the team always involved, and the rest participating frequently. In the North, 80% of the administrations involve the team always and effectively, while 20% participate frequently. In Bekaa, 66.7% of the team is always and effectively involved, while in the South and Nabatieh, the team is involved 50% of the time, either frequently or occasionally. In Akkar and Baalbek-Hermel, the entire team is involved, with 100% always in Akkar and 100% frequently in Baalbek-Hermel.

The general conclusion shows that Beirut, Akkar, and the North achieve the highest levels of full team participation, while Mount Lebanon (suburbs), the South, and Nabatieh need improvement in the level of involvement, as there is variation in the participation of some members.

In non-free private education, the levels of team involvement in decision-making vary between governorates.

In Beirut, the highest rate is recorded for "always" at 44.4%, followed by "frequently" at 33.3%. In Mount Lebanon (suburbs), the rates are split between "frequently" at 37.5% and "always" at 34.4%. In Mount Lebanon (excluding suburbs), the highest rate is recorded for "always" at 50.0%, while "occasionally" was the lowest at 8.3%. In the North, the rates are equal for "always" and "frequently" at 44.4% each.

In Bekaa, the highest percentage is for "occasionally" at 50.0%, followed by "always" and "frequently" at 21.4% each. In the South, "always" recorded the highest percentage at 85.7%. In Nabatieh, the percentages for "frequently" and "occasionally" were equal at 40.0% each. In Akkar, the percentages for "occasionally" and "always" were equal at 44.4% each. In Baalbek-Hermel, "frequently" recorded the highest percentage at 54.5%.

The overall results indicate that urban governorates (Beirut and Mount Lebanon) show better rates compared to rural governorates, where the latter tend to participate "rarely" or "occasionally".

We conclude that urban governorates such as Beirut and Mount Lebanon achieve higher levels of involvement of the teaching team in decision-making compared to rural governorates like Akkar and the North. It is also noted that free private education and non-free private education show higher scores for continuous and effective participation compared to the public sector. Private education generally shows higher involvement, while the public sector requires further stimulation to improve teaching team participation, especially in governorates with limited participation.

- **Analysis of the Coordinator Questionnaire Results**

In the public sector, most governorates show high levels of participation, especially in Beirut, the North, and Bekaa, where a large part of the team participates always or frequently in decision-making. Some governorates, such as Akkar and the South, show more variation in participation.

In the free private sector, almost all governorates, especially Beirut and Mount Lebanon, show high levels of participation, with a large part of the team being involved permanently. In the non-free private sector, most governorates show good participation, with a mix of continuous and occasional participation across the governorates. Beirut, Mount Lebanon, and the North show the strongest participation. The UNRWA sector in the North reported full team participation, highlighting a unique case in this sector.

Overall, it appears that governorates such as Beirut, Mount Lebanon, and the North generally show high levels of participation from the teaching team in decision-making, especially

in the free private sector. Some governorates, such as Akkar and the South, show more varied levels of participation. The general trend across all sectors indicates a greater preference for integrating the teaching team and encouraging their participation in decision-making processes.

We conclude that the South stands out as the best governorate for involving the teaching team across all sectors, particularly in the public and free private sectors. There is relative weakness in the public sector, especially in Akkar and Baalbek-Hermel. The free and non-free private sectors perform more evenly, with both achieving high levels of participation, particularly in Beirut and Mount Lebanon. The UNRWA sector reports superior and stable performance across all governorates at 100%.

Key Insights

The performance of school principals in the free and non-free private sectors is the best in terms of involving the team in decision-making. Meanwhile, public school principals need to enhance their participatory management skills, particularly in governorates with lower performance. This can be done through ongoing training programs and follow-up and evaluation mechanisms to improve their skills and increase team involvement.

G- Leadership Competencies in School Management
- **Analysis of Principal Questionnaire Results**
   ### 1- Change Management Competency
Regarding change management, the public sector shows a clear lead with a total of 55 schools distributed across various governorates, reflecting a strong response to the need for change and adaptation to challenges. The non-free private sector follows with a total of 50 schools, indicating a notable investment in enhancing administrative flexibility. The free private sector ranks third with a limited number of only 10 schools, which reflects constraints in resources or prioritization of other matters. UNRWA participates with only four schools, highlighting the limited focus on change management in this sector.

The data highlights the importance of the public sector in leading change management efforts, thanks to the support and available infrastructure. The non-free private sector demonstrates flexibility and investment but still falls short of the public sector's level. Both the free private sector and UNRWA appear to need additional support to improve their capabilities in this area.

In Beirut, the non-free private sector leads in change management with 6 schools, compared to only 2 in the public sector, reflecting a focus on dynamism in private education. In Mount Lebanon (suburbs), the non-free private sector clearly leads with 14 schools, while both the public sector and the free private sector are tied with 6 schools each. In Mount Lebanon (excluding suburbs), the public sector leads with 8 schools, highlighting its prominent role in rural governorates.

In the North, the public sector dominates with 15 schools, reflecting its strength in this governorate. In the Bekaa and the South, efforts are distributed between sectors, with the public sector recording 6 schools in the Bekaa and 5 schools in the South, while the non-free private

sector has modest participation. In Nabatieh, there is a balance between the public and non-free private sectors, with 7 and 5 schools, respectively. In Akkar, the public sector records 6 schools, compared to only 4 for the non-free private sector. In Baalbek-Hermel, there is a complete absence of the public sector, with limited participation from the private sector.

Change management emerges as a crucial factor in enhancing the flexibility of the educational system, with the public sector leading due to its resources and capabilities. While the non-free private sector demonstrates clear investment, the free private sector and UNRWA require further support and focus to improve their performance in this area. The performance disparity across governorates points to the need for better resource distribution and attention to rural governorates.

2- Effective Communication Competency

Regarding effective communication, public schools account for the largest proportion with 102 schools, reflecting the public sector's commitment to enhancing communication among stakeholders in the educational process. Private non-free schools register 70 schools, which reflects notable efforts in this area compared to the free private schools, which account for only 19 schools. UNRWA schools record the lowest percentage with participation from only 4 schools. These figures reflect disparities in the focus on enhancing effective communication between different educational sectors. The data shows that effective communication varies between governorates, with public schools clearly outperforming in almost all governorates, except for Mount Lebanon, where private non-free schools show strong performance. This highlights the gap between urban and rural governorates in terms of resources and infrastructure that support communication. The results reflect differences in attention to enhancing effective communication among educational sectors. Public schools lead the list due to their government and structural support, while free private schools suffer from resource constraints, limiting their ability to foster effective communication.

The data shows that effective communication varies between governorates, with public schools clearly outperforming in almost all governorates, except for Mount Lebanon, where private non-free schools show strong performance. This reflects the gap between urban and rural governorates in terms of resources and infrastructure that support communication.

3- Problem-Solving Competency

Regarding problem-solving competency, public sector managers lead with 111 schools out of a total of 224, indicating a strong focus on this aspect by public school principals. The non-free private sector comes second with 84 schools, reflecting significant efforts in this area. The free private sector records only 25 schools, indicating significant challenges in this area. UNRWA contributes 4 schools, a limited number.

It is clear from the analysis that principals in the public sector are distinguished by their problem-solving skills in governorates, especially in the North and Mount Lebanon. The non-free private sector registers high percentages in some governorates, such as Mount Lebanon suburbs, the private non-free sector faces challenges in rural governorates. Meanwhile, free private schools

and UNRWA still show very limited involvement from managers in problem-solving, which requires additional support and training for the managers to develop problem-solving competency and strengthen their roles in this area. The public sector plays a leading role in enhancing problem-solving skills within schools.

4- Motivation and Support for the Educational Staff

Regarding motivation and support for the educational staff, the public sector stands out with high performance, as it represents 105 schools out of a total of 205, where their principals provide support and motivation to the educational staff. This reflects a notable focus on fostering a stimulating learning environment in public schools. The non-free private sector comes second with 77 schools, indicating the private sector's commitment to providing appropriate support for educational staff. The free private sector records only 19 schools, reflecting significant challenges in providing support and motivation in this type of school. Finally, UNRWA contributes only 4 schools, indicating the limited resources available in this sector.

The analysis shows that the public sector outperforms the other sectors in leading efforts to motivate and support the educational staff across all governorates, with noticeable variation in performance. The private non-free sector performs well in some governorates but still falls short in rural governorates. Free private schools and UNRWA require additional support and training to enhance their role in this area.

5- Planning and Organizing Competency

The public education sector leads in planning and organizing within its schools, with 97 schools, reflecting clear institutional efforts to improve administrative and organizational planning within public schools. The non-free private sector comes second with 73 schools, indicating a significant investment in planning, even though it is a private sector. The free private sector shows limited performance, with only 18 schools, while UNRWA schools record the lowest percentage, with 4 schools.

The data shows the public sector's superiority in planning and organizing, reflecting the commitment and responsibility in participatory management to achieve quality education. The non-free private sector shows relative excellence due to the available resources, while the free private sector continues to struggle with constraints that affect its ability to plan and organize. The results reflect variations in the ability of school principals to plan and organize across governorates, with the public sector leading in most governorates, except for Mount Lebanon. This indicates the need for other sectors to enhance their organizational and planning capabilities, especially in Baalbek-Hermel, while other governorates like Beirut and Mount Lebanon continue to see strong competition between sectors.

- **Analysis of the Supervisor Questionnaire Results**
1- Problem-Solving Competency

The public sector records the highest number of responses in this area, with a total of 142 responses. The governorates that recorded the highest frequency were the South (25 responses), Akkar (24 responses), and the North (24 responses). The non-free private education sector

recorded 87 responses, with notable frequency in Mount Lebanon (suburbs) (22 responses). The free private education sector recorded 22 responses, distributed moderately across several governorates. The UNRWA sector recorded 3 responses.

2- Effective Communication Competency

The public sector records the highest number of responses in this area, with a total of 126 responses. The governorates that recorded the highest frequency were the North (22 responses), Akkar (22 responses), and the South (21 responses). This is followed by the non-free private education sector, which recorded 80 responses, with a high frequency in Mount Lebanon (suburbs) (19 responses). Then comes the free private education sector with 19 responses, distributed across several governorates. The UNRWA sector recorded 3 responses.

3- Motivation and Support for the Educational Staff Competency

The public education sector recorded the highest number of responses in this area, with a total of 115 responses. The governorates with the highest frequency were the South (21 responses) and the North (19 responses). It was followed by the non-free private education sector, which recorded 79 responses in total, with higher frequency in Mount Lebanon (suburbs) (19 responses) and the North (13 responses). The free private education sector recorded 19 responses, which were distributed moderately across several governorates. UNRWA recorded 3 responses.

4- Planning and Organization Competency

The public sector recorded the largest number of responses in this area, with a total of 96 responses. The highest frequency was in the South (22 responses) and the North (17 responses). It was followed by the non-free private education sector with 70 responses, with high frequency in Mount Lebanon (suburbs) (17 responses). The free private education sector recorded 18 responses, with notable frequency in Beirut (3 responses). UNRWA recorded 3 responses.

5- Change Management Competency

The public sector recorded the highest number of responses in most governorates, totaling 46 responses, with the highest frequency in governorates like Akkar (9 responses) and Mount Lebanon excluding suburbs (8 responses). This was followed by the non-free private education sector, which recorded 37 responses in total, with the highest frequency in Mount Lebanon (suburbs), where 9 responses were recorded, while the number was lower in other governorates. The free private education sector recorded 10 responses, which were distributed among several governorates, including 3 responses in Mount Lebanon excluding suburbs. UNRWA recorded only one response in one governorate (Mount Lebanon suburbs).

Conclusion

We conclude that the public sector is most prominent in identifying the leadership competencies that characterize the school management in question, with the most important options being "problem-solving ability," "effective communication," and "motivation and support for the educational staff." We also conclude that non-free private education ranks second in terms of frequency in most options, with the most important options being **"Problem-solving ability,"**

"effective communication," and "motivation and support for the educational staff." The free private education sector recorded less presence in many options compared to other sectors, with the most important options being "problem-solving ability," "effective communication," and "motivation and support for the educational staff." The UNRWA sector recorded the fewest responses compared to other sectors, with the key options being "motivation and support for the educational staff," "planning and organization," "problem-solving ability," and "effective communication."

- **Analysis of Coordinator Questionnaire Results**

In Beirut, the public education sector focuses on leadership competencies such as "effective communication" (33.3%) and "motivation and support for the educational staff" (11.1%). This distribution indicates a balance in the representation of different competencies, reflecting a diversity in leadership priorities. In the free private sector, there is no dominant competency, with competencies distributed equally (100%), indicating a general uniformity in leadership expectations. On the other hand, the non-free private sector focuses on competencies like "problem-solving" and "planning and organization" (18.2% each), highlighting the need for strategic abilities and problem analysis.

In Mount Lebanon (suburbs), the public education sector heavily emphasizes "motivation and support for the educational staff" (23.5%) and "planning and organization" (11.8%), signaling a clear interest in motivation and organization. In the free private sector, competencies are distributed equally (20% each), suggesting a similar unification as in Beirut. The non-free private sector focuses on "problem-solving" and "communication skills" (6.5% each), with a more diverse representation compared to the public sector.

In Mount Lebanon excluding suburbs, the public education sector focuses on "planning and organization" (17.9%) with a secondary role for motivational skills (10.3%). In the free private sector, the dominant competencies are "planning" and "problem-solving" (20% each), reflecting a priority for strategic planning. In the non-free private sector, the competency "problem-solving" is "Problem-solving" is the most prominent, with a percentage of (10.5%), reflecting the importance of facing challenges and managing change.

In the North Governorate, the public education sector focuses on "effective communication" (11.9%) and "problem-solving" (10.2%), reflecting an interest in communication and analytical skills. In the free private sector, there is an equal representation of competencies, each with a percentage of (25%), indicating a diversity in leadership priorities. In the non-free private sector, there is a focus on "problem-solving" and "planning" (9.7% each), highlighting the importance of strategic management.

In the Bekaa Governorate, "effective communication" and "planning and organization" are dominant competencies in the public education sector, with a percentage of (15%) each, reflecting a balanced focus on organizational and personal skills. In the free private sector, there is a clear emphasis on "planning and organization" at (50%), showing the importance of planning. In the

non-free private sector, the distribution of competencies is relatively low across different areas, with a tendency toward planning and communication at (6.3%) each.

In the South, the public education sector focuses on "motivation and support" (16.7%) and "effective communication" (14.3%), highlighting the importance of personal leadership. The free private sector prioritizes "problem-solving" at (20%), reflecting a focus on strategic leadership. In the non-free private sector, competencies are distributed between "planning" and "problem-solving" at (16.7%), showing a mix of analytical and strategic leadership.

In Nabatieh, the public education sector focuses on "planning" and "problem-solving" at (12.5%) each, indicating a balance between structural and strategic competencies. In the free private sector, the focus is on "planning" and "problem-solving" at (50%), reflecting a priority for developing strategic plans. In the non-free private sector The dominant competencies are "planning" and "problem-solving" at (27.3%), indicating a strong continuity in leadership priorities.

We conclude that the competency of "planning and organization" consistently appears as a core competency across governorates and sectors. On the other hand, "motivation and support" and "effective communication" dominate in the public sectors, reflecting a focus on personal relationships. In the free private sector, there is generally an even distribution, with no one competency standing out. In the non-free private sector, the focus leans more towards problem-solving and planning, with an emphasis on strategy and addressing issues. The differences highlight varying preferences, such as the focus on "planning and organization" in Bekaa versus the balanced focus in Akkar.

- **Analysis of Teacher Questionnaire Results**
    The results of the teacher questionnaire indicate that the ability to solve problems among school principals represents the highest percentage of individual competencies (11.6% within the public sector, 6.2% overall). Effective communication comes in second place, with (9.4%) within the sector and (5.0%) overall. The ability to motivate and support the educational staff forms (9.1%) within the sector and (4.9%) overall. Competencies like effective communication and motivation/support for the educational staff account for (6.0%), planning and organization (5.1%), and the combination of problem-solving and motivation/support for the educational staff (4.1%). The combination of problem-solving, planning, and organization represents (3.6%), and problem-solving, motivation, support for the educational staff, and planning and organization together make up (2.6%). Change management stands at (2.3%), while the combination of motivation/support for the educational staff and planning/organization accounts for (2.2%), and other skills did not exceed (2.0%).

    Results from the public sector show that (11.6%) of principals possess leadership competencies in "problem-solving" along with "change management," followed by leadership competencies in "effective communication" and "motivation/support." Principals in both the free and non-free private sectors show similar preferences, with a significant percentage in "effective communication" and "motivation/support." Overall, principals in these sectors demonstrate a

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strong focus on these core leadership competencies. Most principals possess individual skills compared to shared ones. School principals in the North governorate stand out in problem-solving, effective communication, motivation and support for the educational staff, planning and organization, and change management, all at (100%).

In the free private sector, change management received (1.9%), indicating that few teachers consider principals to possess change management competency, and this does not constitute a significant portion of the total. Meanwhile, motivation and support for the educational staff scored (3.3%), showing that a moderate proportion of teachers believe principals have this competency. No responses indicated that principals possess change management competency. The combination of motivation/support for the educational staff and planning/organization recorded (2.9%) of teachers in the sector who believe principals have this competency.

Demonstrated proficiency in planning and organizational competency was possessed by (4.8%) of teachers. (6.7%) of teachers believe principals possess effective communication competency.

- **Mixed Competencies (Effective Communication + Motivation and Support + Change Management)**
  The percentages indicate that these competencies are either not present in principals or are present in very low proportions, meaning principals do not combine more than one competency at the same time, such as change management with motivation and support or planning and organization. Results from various governorates show diverse interests, but there is a common focus on improving "problem-solving ability," "effective communication," and "motivation and support for the educational staff." There is also noticeable interest in certain governorates in "change management" and "planning and organization," suggesting a pursuit of continuous improvement and adaptation to educational challenges.

Regarding effective communication competency, (6.6%) of teachers in the non-free private sector believe principals possess this competency, making it the most common competency among principals. As for planning and organization, (4.7%) of teachers within the sector believe principals have it.

As for the principals' ability to motivate the educational staff, it stands at (4.5%), reflecting teachers' desire to receive adequate support and motivation to improve their professional performance. The percentage of teachers who responded that principals possess change management competency is (1.8%), making this the least frequent competency both on its own and when combined with other competencies. The combination of effective communication, motivation and support, and planning and organization constitutes (2.9%) of teachers' responses within the sector, while change management with all other competencies represents only (0.2%) of the total according to them.

We conclude that the most common competency in these data, according to teachers' opinions, is the principal's ability to communicate effectively (6.6%), followed by motivation and

support for the educational staff (4.5%), and then planning and organization (4.7%). The combination of effective communication and motivation and support constitutes (4.5%), which may suggest that many teachers believe support and motivation are strongly tied to good communication. In the public sector, (11.6%) of principals possess leadership competencies in "problem-solving" combined with "change management," followed by leadership competencies in "effective communication" and "motivation and support."

Teachers in both the free and non-free private sectors show similar preferences, with a significant percentage indicating "effective communication" and "motivation and support."

We also conclude that high-performing governorates (Akkar, Mount Lebanon, Nabatiyeh) require strengthening current leadership practices and promoting them as model practices. In medium-performing governorates (Beirut, North, Bekaa), change management should be improved, and integrated competencies should be enhanced. As for the balanced-performing governorates (Baalbek-Hermel, South), additional support should be provided to enable effective leadership under challenging circumstances.

Key Insights

The competency of problem-solving is notably present in principals in both the public and non-free private sectors. It is one of the most important competencies emphasized across all governorates. Effective communication also appears as a fundamental element in enhancing the educational process in all sectors.

The competencies of effective communication, motivation and support for the educational staff, and planning and organization are of great importance to principals, supervisors, and teachers. However, they are not always implemented in some rural schools. The competency of motivating and supporting the educational staff is considered one of the key competencies to enhance a positive educational environment, and it is emphasized in both the public and non-free private sectors. It is less prominent in the free private sector and UNRWA. Planning and organization stand out as an essential and significant element for effective management in all sectors. This competency is best applied in the public sector compared to the other sectors.

The core leadership competencies of problem-solving, effective communication, motivation and support, planning and organization, and change management appear variably among principals, supervisors, and teachers depending on the educational sectors and governorates. The public sector leads in most competencies, while other sectors face challenges that require the provision of resources and training for principals to improve their performance. The free private sector and UNRWA require additional support to develop leadership skills. Meanwhile, the public sector focuses on personal relationships such as motivation and communication, and the non-free private sector tends to focus on problem-solving and strategic planning. The free private sector shows a balance without a clear focus on any area. Both the public and non-free private sectors face challenges in developing leadership skills among school principals, particularly in rural governorates.

The percentages of shared competencies show a significant decrease when combining skills, reflecting the low number of principals who combine more than one skill, such as motivation and support with planning and organization or change management (only 0.1%) within the sector, and effective communication with planning and organization and change management at (0.1%).

H. Areas That Need Development in Management

- **Analysis of Principal Questionnaire Results**

There is a clear need to develop the competency of "decision-making" among principals in 26 public schools, highlighting the necessity to strengthen this sector by empowering principals and enhancing the administrative process in terms of decision-making. The private non-subsidized sector ranks second, with 21 schools demonstrating this need, while the private subsidized sector shows limited demand, with only 8 schools. This indicates the importance of working on developing decision-making skills among principals across the public and private (subsidized and non-subsidized) sectors in most governorates. The greatest need for this competency is observed among school principals in Mount Lebanon (suburbs), as well as in Akkar and Baalbek-Hermel, where intensified efforts are required to train principals in decision-making, given its significant impact on educational management.

The need to enhance the competency of "innovation in educational practices" is evident in 83 public schools, followed by the private non-subsidized sector with 49 schools, and the private subsidized sector with only 19 schools. This need is particularly concentrated in public schools, especially in Beirut and the North. Bekaa and Baalbek-Hermel also require additional support to improve principals' innovation skills, while the private subsidized and non-subsidized sectors also necessitate support and training to ensure balance and quality in education.

The competency of "strategic planning" is needed in 60 public schools, reflecting the principals' awareness of its importance and its impact on effective school management. This indicates a pressing need for strategic planning training for public school principals across all governorates, underscoring an institutional commitment to sustainability and improving educational processes. Additionally, 31 private non-subsidized school principals and 11 private subsidized school principals expressed the need for efforts to enhance this competency and enable them to develop strategic plans for their schools. This competency is fundamental for successful educational leadership.

In the area of "communication with stakeholders," 39 public school principals expressed a need for improvement, indicating their awareness of the significance of stakeholder communication and its impact on educational management effectiveness. In the private non-subsidized sector, 29 principals highlighted the need to enhance communication competencies, followed by only 7 principals in the private subsidized sector. This reflects an acknowledgment of the importance of this area in fostering effective educational management, necessitating the organization of training workshops to meet these needs.

Regarding "partnership building," principals in the private non-subsidized sector ranked highest in expressing the need to strengthen this competency, with 44 principals indicating such a requirement. This demonstrates their awareness of the critical role partnerships play in advancing schools in all aspects. The public sector ranked second, with 38 schools expressing a need to develop partnership-building competencies in certain governorates. The private subsidized sector showed limited demand, with only 6 schools indicating this need. This highlights the need to strengthen the role of principals in building partnerships, revealing a clear disparity between governorates and educational sectors. The private non-subsidized sector demonstrated the greatest need in Beirut and Mount Lebanon (suburbs), while the public sector showed a greater need in the North, Bekaa, and Akkar. This necessitates empowering and supporting principals in these governorates to improve partnership-building efforts.

- **Analysis of the Supervisor Questionnaire Results**

1- Innovation in Educational Practices (174 Responses)

The public sector recorded the highest number of responses, with a total of 109 repetitions. The highest repetitions were in Akkar (23) and the North (21), while Beirut (6) and Baalbek-Hermel (8) recorded the lowest repetitions, reflecting the growing need for innovation in this sector. In the private non-free sector, the fewest responses were recorded, with 49 repetitions. The highest repetitions

2- Strategic Planning (118 Responses)

The public sector recorded high responses in most governorates, with a total of 78 repetitions. The highest repetitions were in Akkar (15) and the North (12). Beirut recorded the lowest repetitions (5), indicating the importance of developing this area in the public sector. The private non-free sector recorded the fewest responses, with 28 repetitions. The highest repetitions for this area were in Mount Lebanon (suburbs) (6) and the North (5). The private free sector recorded fewer responses in this area (12).

3- Building Partnerships (113 Responses)

The public sector recorded fewer responses compared to the previous areas in most governorates, with a total of 58 repetitions. The highest repetitions were in Akkar (11) and Mount Lebanon, excluding the suburbs (9). Beirut (2) and Baalbek-Hermel (1) recorded the lowest repetitions. The private non-free sector showed significant presence in some governorates, with a total of 42 repetitions. The highest repetitions for this area were in Bekaa (7) and the North (7), while UNRWA recorded two responses.

4- Communication with Stakeholders (105 Responses)

The public sector recorded the highest number of responses in all governorates, with 71 responses. The highest repetitions were in Akkar (14) and Nabatieh (12). Beirut (3) and Mount Lebanon (suburbs) (2) recorded the lowest repetitions, reflecting the importance of this area in the public sector. The private non-free sector recorded responses in many governorates, totaling 28 responses. The highest repetitions for this area were in Mount Lebanon (suburbs) (9) and Bekaa (5). The private free sector recorded very limited responses (5).

5- Decision-Making (63 Responses)

In the public sector, the highest number of responses was recorded across all governorates, with 31 responses. The highest repetitions were in Baalbek-Hermel (6), Akkar (6), and the South (5). Beirut (2), Bekaa (2), and the North (1) recorded the lowest repetitions. The public sector had a higher presence in most governorates compared to others. The private non-free sector recorded a total of 26 responses. The highest repetitions for this area were in Mount Lebanon (suburbs) (7) and Bekaa (5). The lowest repetitions were in Nabatieh (0) and the North (1). The private free sector recorded only 6 responses across most governorates.

Conclusion from the Responses of Supervisors

It is evident that the public sector urgently needs to develop leadership competencies among school principals across all areas. The highest number of responses was recorded in the areas of "innovation in educational practices," "strategic planning," and "communication with stakeholders." The private non-free sector showed notable responses in most competencies, especially in "innovation in educational practices" and "strategic planning." The private free sector was the least present in most areas, but the most important areas were "innovation in educational practices" and "strategic planning." The key responses from UNRWA were "building partnerships," "innovation in educational practices," and "communication with stakeholders."

The need for the public sector to develop leadership competencies among school principals across all areas was highlighted, with the largest number of responses in the areas of "innovation in educational practices," "strategic planning," and "communication with stakeholders." The private non-free sector showed significant responses in most areas, particularly in "innovation in educational practices" and "strategic planning." The private free sector had the least presence in most areas, but the most significant areas were "innovation in educational practices" and "strategic planning." The most important responses from UNRWA were "building partnerships," "innovation in educational practices," and "communication with stakeholders."

- **Analysis of the Coordinator Questionnaire Results**

In public schools, the need to develop competencies in communication with stakeholders (24%-27%) and strategic planning (~20%) emerged as priorities in most governorates. Partnerships and innovation were secondary focus areas. In private non-free schools, the need for strategic planning and innovation was repeated. In free private schools, the focus was on communication with stakeholders.

In Beirut, the data indicated that public schools needed to improve internet connectivity by 11.1%, strategic planning by 22.2%, and building partnerships by 33.3%. The primary focus was on building partnerships, reflecting a gap in cooperation. Free private schools did not specify detailed needs, but all needs were categorized under "other needs." In private non-free schools, the focus was on leadership decision-making (8.3%) and building partnerships (25.0%).

In Mount Lebanon (suburbs), public schools' needs for strategic planning were 14.7%, and building partnerships was 10.3%. In private non-free schools, leadership and technology needs

were highlighted at 15.2%, with partnerships and innovation at 13.0%. In other governorates, public schools focused on strategic planning at 27.0%, while private non-free schools focused on strategic planning at 21.1%.

In the North, public schools needed to improve communication with stakeholders at 24.0%, while free private schools focused on this area at 50.0%. Private non-free schools focused on strategic planning and partnerships at 22.6%. In the Bekaa, the need to engage stakeholders was 23.7% in public schools, while private non-free schools focused on strategic planning at 25.0% and partnerships at 18.8%.

In the South, public schools showed a need for communication with stakeholders at 24.5%, while private non-free schools focused on leadership and partnerships at 33.3%. In Nabatieh, public schools focused on stakeholder engagement at 27.6%, while private non-free schools needed partnerships at 18.2%.

In Akkar, public schools showed a need for stakeholder engagement at 16.7%, while private non-free schools focused on innovation and partnerships at 15.4%. In Baalbek-Hermel, public schools focused on stakeholder engagement at 27.8%, while private non-free schools focused on partnerships and innovation at 27.3%.

These data highlight the importance of strategic planning, partnerships, and innovation as priorities for developing school management in various governorates. It also shows that communication with stakeholders (24%-27%) and strategic planning (~20%) are priorities in most governorates, with partnerships and innovation as secondary focus areas.

- **Analysis of Teacher Questionnaire Results**

The total number of teachers in the public sector is 1,017, but the percentage of total responses that are compiled reaches only 53.5%, which may indicate unclear or undefined responses from other participants.

We conclude that the public sector places significant emphasis on developing areas such as "decision-making" and "strategic planning," which constitute about 27.2% of total responses. In both free and non-free private sectors, there was also a need to develop competencies in "strategic planning" and "innovation in educational practices." It is worth noting that "decision-making" is the most frequently mentioned area individually, cited by 46 teachers. The answer containing both "decision-making" and "strategic planning" came second, with 9 teachers Based on these results, it can be concluded that most teachers in the public sector prioritize "decision-making" as their primary focus, with limited attention given to integrating innovative practices and strategic planning.

In the free private education sector, strategic planning was highlighted by 19 teachers. This indicates that strategic planning is considered a significant part of improving school performance and is integrated with decision-making in several schools. In the non-free private sector, decision-making was selected by 3 teachers. Although this number is small, it suggests that some teachers view decision-making as an essential element in improving the educational process. The combination of "decision-making and strategic planning" was chosen by 6 teachers (0.9% of the

sector and 0.3% of the total). This demonstrates an interest in strengthening strategic planning within decision-making processes to enhance school performance.

Additionally, "decision-making and stakeholder communication" was selected by 6 teachers. This reflects that some teachers emphasize the importance of communicating with stakeholders (such as teachers, parents, or the local community) in decision-making. UNRWA school results indicated no selections for any of the categories, with a total of only 12 participating teachers, representing 100% of the specific sector but only 0.6% of the total.

"Strategic planning and decision-making" remain fundamental elements for many teachers, reflecting a trend toward improving administrative and educational approaches in schools. There is, however, minimal interest in innovation in educational practices, which may be an area requiring further development and attention from schools. The majority of teachers focus on "decision-making" as a priority, with some interest in integrating innovative practices and strategic planning.

Key Insights

The focus has been on improving the decision-making process in many schools, either separately or alongside strategic planning. This demonstrates significant interest in enhancing administrative and educational decisions. Additionally, strategic planning and stakeholder communication remain key competencies, although they require further development.

Innovation in educational practices remains a low priority or is not integrated with other factors. It is evident that innovation in educational practices does not receive as much attention as elements like strategic planning or decision-making. This highlights the need for greater focus on fostering innovation in educational environments.

I- Evaluation and Follow-Up – Classroom Visits

- **Analysis of Principal Questionnaire Results**

The public sector showed varied distribution across governorates in terms of principals conducting regular classroom visits to monitor the educational process and support teachers. These efforts highlight the importance of direct engagement in improving educational outcomes.

Commitment to "always" (20%) and "often" (65%) in Akkar is very low, while the Bekaa region has the highest rate of "always" commitment at (76.9%), followed by the South at (66.7%).

The private free sector demonstrates high performance, with principals conducting classroom visits regularly at a rate of (100%) in several governorates such as Beirut, the Bekaa, and the South. The best-performing governorates for these visits are Beirut, the Bekaa, and the South, where "always" commitment reaches (100%). The lowest results were observed in Baalbek-Hermel, with an equal distribution among "always," "often," and "sometimes" at (33.3%) each.

The private non-free sector also shows a high level of commitment, with the North (84.6%) and the South (57.1%) leading in "always" conducting regular classroom visits (the best results).

However, in the Bekaa, the percentage of principals conducting visits "always" drops to just (55.6%).

In the UNRWA sector, all governorates exhibit very high levels of commitment, with (100%) "always" in Mount Lebanon suburbs and the North. This percentage decreases in the South, where (50%) of principals conduct classroom visits "always" and the other (50%) do so "often."

Conclusions

- Principals in the private free sector show the highest level of commitment to conducting classroom visits "always" across most governorates.
- Public sector principals demonstrate good commitment in governorates such as the Bekaa and the South.
- However, the public sector faces inconsistencies between governorates, particularly in Akkar and the North.
- The private non-free sector needs to enhance classroom visits in governorates like the Bekaa.

- **Analysis of Supervisor Questionnaire Results**
   In public education, data reveals that 42.4% of school supervisors report that classroom visits "always" occur, while 33.6% state they happen "often." Regions such as Beirut and Mount Lebanon show higher levels of administrative support compared to rural areas like Baalbek-Hermel, where 11.8% describe visits as occurring "rarely."

   In free private education, the majority of supervisors (71%) state that classroom visits "always" occur. This trend varies across governorates, with the North, Bekaa, Akkar, and Baalbek-Hermel achieving 100% for "always," while the South shows a split between "always" and "often."

   In non-free private education, most responses (66.7%) indicate that supervisors believe classroom visits "always" take place. However, there is significant variation in Nabatieh, where only 20% report "always," compared to 85.7% in the South.

   For UNRWA schools, results indicate that 33.3% of supervisors observe visits "often," while 66.7% state they occur "always."

   At the governorate level, Beirut consistently records high percentages for "always" across all sectors, reflecting effective managerial oversight and follow-up in ensuring the proper execution of the teaching and learning processes through classroom visits. In Mount Lebanon, discrepancies were observed between suburban areas (47.1% "always") and non-suburban areas (30.4% "always"), highlighting the need to strengthen monitoring and evaluation mechanisms in the latter. Schools in the North demonstrated a strong consensus on consistent visits in free private schools (100%) and public schools (86.9% "always" or "often"). In Bekaa, variations were noted, with 38.9% reporting "always" in public schools, compared to 100% in free private schools and

71.4% in non-free private schools. The South showed close percentages between "always" (43.8% in public schools and 50% in free private schools) and "often" (40.6% in public schools and 50% in free private schools), indicating solid supervision and follow-up.

In Baalbek-Hermel, notable discrepancies were observed, with 41.2% "always" in public schools, 100% in free private schools, and 81.8% in non-free private schools, alongside a significant "rarely" percentage in public schools (11.8%). Variations were also recorded in Nabatieh, with 42.1% "always" in public schools, 100% in free private schools, and 66.7% in non-free private schools. UNRWA schools in the South reported 100% for "always," with variations in Mount Lebanon (50% "always" and 50% "often").

Key Insights

The free private education sector demonstrates a high level of supervision and evaluation across all governorates, followed by the private non-free sector, with the public sector showing variation based on the governorate. Central governorates displayed greater consistency compared to peripheral ones, indicating the need to enhance follow-up and evaluation mechanisms in schools in those areas to improve education quality. For management to be effective, it must rely on a flexible system to monitor teacher performance and improve education quality and outcomes. Comprehensive, integrated, and continuous teacher development should be prioritized through supervising their performance, identifying their needs, and helping them develop their skills.

J- Providing Feedback and Recommendations Based on Evaluations

- **Analysis of Principal Questionnaire Results**
    The overall performance of schools in the public sector in providing feedback and recommendations to teachers after evaluations leans toward "Always" at 49.7% and "Often" at 43.5%. While the public sector demonstrates relatively balanced performance, it shows variation between governorates.

    In the free private sector, overall school performance leans toward "Always" at 56.7% and "Often" at 43.3%. This sector exhibits high consistency in performance across most governorates, with some exceptions.

    In the non-free private sector, school performance leads with "Always" at 72.4% and "Often" at 26.5%, indicating relatively outstanding performance with less variation between governorates. In the UNRWA sector, performance is concentrated mainly on "Always" at 75.0%, with minimal variation between governorates.

    The best-performing governorates in the public sector for providing feedback and recommendations based on teacher evaluations are Bekaa and South, with high "Always" rates of 76.9% and 73.3%, respectively. Akkar follows with a high "Often" rate of 70%, compared to an "Always" rate of 30%. Performance in "Always" ranges between 30.0% in Akkar and 76.9% in Bekaa, highlighting significant variation in commitment to providing feedback and recommendations.

In the free private sector, the best-performing governorates are South and Akkar, where "Always" reached 100%, followed by Nabatiyeh, where "Often" was high at 66.7% compared to "Always" at 33.3%.

In the non-free private sector, the top-performing governorates are Bekaa and South, with very high "Always" rates of 88.9% and 85.7%, respectively, followed by Beirut with 66.7% for "Always."

In the UNRWA sector, the top-performing governorates are Mount Lebanon (suburbs) and North, both with "Always" at 100%, followed by South, where "Always" decreased to 50%, with an equal percentage for "Often."

- **Analysis of Supervisor Questionnaire Results**

In public education, the overall average of supervisors' responses indicates that school administrations "often" provide feedback and recommendations at a rate of 38.7% and "always" at 43.8%. This reflects a positive trend in most governorates, with evaluations being regularly monitored. A very small percentage (1.4%) indicates that this practice "never" occurs, and only 2.3% report it happens "rarely," suggesting that the issue of complete absence of this practice is very limited.

In free private education, the overall data from supervisors shows that 77.4% of school administrations "always" provide feedback and recommendations, while 16.1% do so "often," and only 6.5% state it happens "sometimes." No responses indicated that the practice "never" occurs.

In non-free private education, data from supervisors reveals that 74.4% of administrations "always" provide feedback and recommendations, 23.9% do so "often," and only 1.7% say it happens "sometimes," with no instances of "never" reported. These percentages reflect a strong performance in the non-free private education sector, where feedback is consistently implemented. Meanwhile, UNRWA schools stand out with a remarkable 100% response rate for "always" across all centers.

At the governorate level, Beirut recorded the highest percentage for "sometimes" (54.5%) in public schools. In free private schools, 100% responded with "often," while in non-free private schools, 77.8% responded with "always." Schools in suburban Mount Lebanon demonstrated a balanced performance between "often" (41.2%) and "always" (35.3%) in public schools, with a near absence of "rarely" and "never." In free private schools, 80% responded with "always," while 81.3% of non-free private schools did the same.

In the North, the highest response rate was for "always" (83.3%) in non-free private schools, 80% in free private schools, and 52.6% in public schools, with slight variations in other categories. Schools in Bekaa showed exemplary commitment across all sectors, with 100% responding "always" in free private schools, 57.1% in non-free private schools, and 50% in public schools.

Schools in the South and Nabatieh excelled in providing consistent feedback, with 85.7% "always" in non-free private schools, 100% "always" in free private schools, 66.7% "always" in Nabatieh's free private schools, and 60% "always" in non-free private schools. Percentages declined slightly in Akkar and Baalbek-Hermel, where "often" and "always" dominated, while 2.6% and 5.9% reported "never" in public schools.

The public education sector shows stable performance in providing feedback and recommendations to teachers based on evaluations. The free private education sector demonstrates higher commitment, particularly in Baalbek-Hermel, Bekaa, and the South. Additionally, the free private education sector achieves a good balance between "often" and "always" across various governorates.

- **Analysis of Coordinator Questionnaire Results**
    In the public sector, observations and recommendations for teachers in Nabatieh are provided "always" by 56.3%, in Bekaa by 30% "always," and in the South by 40.5% "always." Beirut and the suburbs of Mount Lebanon show lower levels of consistency, with higher rates in "rarely" (55.6% and 35.3%, respectively).

    In the free private sector, schools excel in most governorates, with most regions showing a percentage of 100% in "always" or "mostly" and "always." There are slight differences, such as in Akkar (33.3% "mostly"), indicating room for improvement.

    In the non-fee-paying private sector, performance is consistent across all governorates, with "always" rate exceeding 50% in most regions, especially in Bekaa (75%) and Mount Lebanon (63.2%). Some governorates like the South (33.3% "always") show moderate levels compared to other regions. UNRWA schools display excellent performance in the North with 100% in "always," though data representation is limited.

    We conclude that free private sectors achieve high rates of providing feedback consistently, with rates reaching up to 75.9%. UNRWA schools maintain "always" rate of 100%. Rural governorates like Bekaa and Akkar consistently achieve good rates in "mostly" and "always," ranking among the top-performing sectors with consistently high rates in "always." The public education sector, however, needs to improve in providing evaluations and recommendations to teachers, particularly in Beirut and suburban Mount Lebanon. Governorates like Nabatieh, Bekaa, and Baalbek-Hermel demonstrate effective administrative practices across different sectors, serving as models for best practices.

    "Mostly" and "always" categories prevail across all sectors, indicating the general commitment of schools to providing observations and recommendations to teachers. However, there are still some variations in the public education sector between different governorates.

Key Insights:

- **Free Private Sector**: Achieves high percentages for consistently providing feedback, with "Always" reaching up to 75.9%.
- **UNRWA Schools**: Achieve 100% in "Always."
- **Rural Governorates**: Bekaa and Akkar show good results in "Often" and "Always," with consistently high performance.
- **Public Sector**: Needs improvement in delivering evaluations and recommendations, particularly in less consistent regions such as Beirut and Mount Lebanon In Beirut and Mount Lebanon (suburbs), Nabatiyeh, Bekaa, and Baalbek-Hermel demonstrate effective administrative practices across sectors, making them models to emulate.

The categories "Often" and "Always" dominate across all sectors, indicating a general commitment by schools to provide feedback and recommendations to teachers. However, some disparities remain in the public education sector between different governorates.

- **Analysis of Teacher Questionnaire Results**

The results from the public sector indicate that most governorates have a high percentage of positive responses ("mostly" and "always"), suggesting that school principals are performing well in providing recommendations based on teacher evaluations. At the governorate level, the best-performing schools in providing feedback and recommendations based on evaluations are the South (92.7%), Mount Lebanon (excluding suburbs) (85.4%), and Akkar (87.4%). The governorate needing the most improvement is Baalbek-Hermel, which shows a relatively higher percentage of negative responses ("rarely" and "never" at 6.5%) compared to other governorates.

Despite the overall positive performance, there is a clear disparity between governorates, which may be linked to a lack of preparation or training for principals in providing such support and guidance.

In the non-fee-paying private sector, the governorates that achieved high rates of feedback and recommendations from management after teacher evaluations are: Suburban Mount Lebanon, Beirut, and the North, with the highest percentages of "mostly" and "always" responses (over 90%). Additionally, regions such as Mount Lebanon (excluding suburbs), Bekaa, and the South also show significant interest (percentages above 90% in the higher categories). However, Nabatieh and Akkar show more variation in percentages, with some responses falling under "rarely" or "sometimes."

The best-performing governorates are the South (92.7%), Mount Lebanon (excluding suburbs) (85.4%), and Akkar (87.4%), which stand out in providing recommendations consistently. On the other hand, governorates like Baalbek-Hermel have relatively higher percentages of negative responses ("rarely" and "never" at 6.5%) compared to others. The variation between governorates, despite the overall positive performance, could be linked to administrative resources or local challenges.

In the free private sector, teacher responses to this question are distributed as follows: Always (68.4%), Mostly (24.4%), Sometimes (7.2%), Rarely and Never (0%). These overall results indicate that the free private sector performs exceptionally well, with a very high percentage of positive responses (92.8%). However, there is room for improvement in some governorates that recorded lower percentages in providing feedback and recommendations to teachers after evaluations.

We conclude that most governorates have a high percentage of positive responses ("mostly" and "always"), reflecting good performance by educational management in both public and free private sectors in providing recommendations based on teacher evaluations.

K- Implementing Support Programs for Struggling Students:

- **Analysis of Principal Questionnaire Results**
    In the public sector, the overall performance tends to be "Often" at 32.7% and "Always" at 25.9%. The sector shows average performance with clear variation between governorates. In the private free sector, principals' performance tends toward "Always" at 46.7% and "Often" at 36.7%, with slight variation between governorates. The non-free private sector stands out with principals applying support programs for struggling students at a high rate, with "Always" at 57.1% and "Often" at 25.5%. In the UNRWA sector, performance is evenly split between "Often" and "Always," at 50.0% each.

The best schools providing support programs for struggling students in the public sector are in the South governorate (40.0% "Always") and the Beqaa (38.5% "Always"). The weakest performance was in Mount Lebanon (suburbs) (27.3% "Always," 18.2% "Never") and Akkar (60.0% "Often"), with no recorded "Always." The variation in "Always" ranges from 0% in Akkar to 40.0% in the South. In the private free sector, the best results were in the South and Mount Lebanon (excluding the suburbs), where "Always" was recorded at 100%. The lowest was in Nabatieh, with 33.3% for "Always" and 50.0% for "Often." The variation in "Always" ranged from 33.3% in Nabatieh to 100% in the South and Mount Lebanon.

In the non-free private sector, the best schools applying support programs for struggling students are found in the South (71.4% "Always") and the North (53.8% "Always"). The weakest performance in this sector is in Beirut (55.6% "Always"), with high percentages in other categories. The variation in "Always" ranged from 55.6% in Beirut to 71.4% in the South.

In UNRWA schools, the best performance between governorates was in Mount Lebanon (suburbs) and the North, where "Always" was recorded at 100%. The variation in "Always" ranged from 50% in the South to 100% in Mount Lebanon and the North.

Comparison Between Sectors:

The best performance by principals in supporting struggling students is in the non-free private sector, where it recorded the highest percentage for "Always" (57.1%) with clear stability. The sector with the most variation is the public sector, where performance percentages vary

- **Analysis of the Supervisor Questionnaire Results**

According to the overall data for supervisors in the public sector, 16.6% of school principals do not implement support programs for struggling students at all, while 7.8% of administrations do so "rarely." Meanwhile, 26.7% of school principals implement support programs "sometimes," while 31.3% of schools implement support programs "often," which is the highest percentage among the different categories. 17.5% recorded consistent "Always" implementation. This distribution shows that most schools, at 31.3%, respond to the implementation of school support programs, despite notable variation in implementation across governorates.

In the free private sector, the overall percentages for supervisors across the different categories show that 6.5% of schools implement the program "rarely" (category "Rarely"), while the same percentage (6.5%) falls under the "Sometimes" category. 29% of schools implement the program "often," while the highest percentage is from the "Always" category, at 58.1%, reflecting a good to strong response across the sector. Additionally, 100% of schools in some governorates show implementation of the program in the "Often" or "Always" categories, indicating full commitment to implementing support programs in these governorates.

In the non-free private sector, the largest percentage of schools falls in the "Always" category (56.4%), implementing support programs for struggling students, followed by the "Often" category (29.9%), reflecting increasing commitment across various governorates. Meanwhile, the "Never" and "Rarely" categories show lower percentages, with 2.6% and 1.7%, respectively, indicating that few administrations either do not implement the program or implement it rarely. All UNRWA schools across different governorates show strong commitment to implementing the program, with commitment rates reaching 100% in all governorates, reflecting superior commitment compared to the other sectors.

We conclude that there is a clear variation between sectors and governorates in the implementation of support programs for struggling students. Some governorates and sectors show full commitment, while others exhibit inconsistent implementation. Free private schools in Beirut, Mount Lebanon (both suburbs and non-suburbs), the South, and Baalbek-Hermel show full commitment to implementing the school support program. In contrast, schools in the North, Bekaa, Beirut, and Akkar show a need for consistent implementation of support programs for struggling students to achieve "Always" in all schools.

- **Analysis of the Coordinator Questionnaire Results**

According to the coordinators' opinions, the public education sector suffers from significant disparities, as only a small percentage of school principals (20.3%) consistently implement the school support program. The free private sector shows an average to good

performance, with 51.7% implementing the program "often." The non-free private sector excels with a strong performance, as 44.2% of school principals consistently implement the support program for struggling students. The UNRWA sector achieves ideal commitment, with 100% of schools implementing the program "Always."

The results of the implementation of the school support program for struggling students show a clear variation between sectors and governorates. This performance gap between governorates indicates the influence of local and administrative factors.

Performance varies between sectors based on the Questionnaire results, with the non-free private sector and UNRWA outperforming others in supporting struggling students. The public sector faces significant challenges in providing support, especially in some governorates such as Akkar and Mount Lebanon. Meanwhile, school principals in the South and Bekaa excel in implementing support programs for struggling students. Therefore, it is essential to work on improving the implementation of support programs in schools to reduce failure and dropout rates and achieve equal opportunities for all students, especially in the public sector and weak governorates like Akkar and Mount Lebanon (suburbs).

2. Analysis of the Results for the Third Research Question: What are the human and material factors that affect the readiness of public schools to implement developed curricula compared to private schools?

The study analyzed the human and material factors influencing the readiness of public schools to implement developed curricula compared to private schools. These aspects were evaluated through multiple questionnaires designed to assess schools' readiness in terms of human resources and material capabilities. The responses highlighted both challenges and opportunities, which will be detailed in the following sections for each of the mentioned factors.

2.1. Human Factors Affecting the Readiness of Public Schools to Implement Developed Curricula

This question included six points related to human factors, which were answered by principals, supervisors, coordinators, and teachers. The responses were analyzed by identifying these factors in both the public and private sectors and by governorates, followed by a comparison between the two sectors to identify where these factors have the greatest impact. A summary of the results from the four questionnaires was provided for each point. The answers for each point were as follows:

2.1.1. Item 1: The extent to which most teachers master technological skills

- **Analysis of the Principal Questionnaire Results**

On the national level, most principals (29.0%) indicated that teachers have mastered technological skills, while 26.9% reported that teachers need further development in this area, and 24.7% stated that their mastery of these skills is acceptable. These results indicate a need for teacher training across all sectors.

Examining the results for each sector individually, we find that principals in the public sector largely (41.5%) believe that most teachers' mastery of technological skills needs development, which is the highest percentage of responses. This is followed by 32.7% who deemed it acceptable, 17.0% who considered it good, and 5.4% who found it very good. Meanwhile, 3.4% of principals stated that the teachers' mastery of these skills is completely inadequate. This indicates the need for empowering teachers in the public sector to master these skills.

In contrast, in the private free sector, most principals found that teachers' mastery of technological skills is good, with 36.7%, which is double the percentage in the public sector. This is followed by 23.3% who found it needing development, and 20.0% who deemed it acceptable. The percentage that found it completely inadequate (3.3%) is similar to the public sector. These results indicate that the level of mastery in this sector is better than in the public sector.

In the private non-free education sector, most principals (43.9%) found the level of teachers' mastery of technological skills acceptable, with 34.7% considering it good, which is better than in the public sector and similar to the private free sector. However, notably, no principals found the level to be very good (0.0%), which indicates a need to work on improving technological skills among teachers in this sector.

In UNRWA schools, responses were distributed as follows: 50% considered the mastery level to be good (the highest among the sectors), 25.5% considered it acceptable, and only 25% found that teachers' mastery of technological skills needs development.

On the governorate level, the results indicate variation in the public education sector. About half of the sample of principals in Beirut (50%) and 45% in Akkar found the mastery to be acceptable, while a large percentage (60%) in the North found it needed development, which is the highest among the governorates. Akkar followed with 50%, compared to 25% in Beirut. In the private free education sector, principals found the level of mastery to be good in 100% of the cases, with the remaining categories distributed almost equally (25.0%) in Mount Lebanon suburbs.

The results from the private non-free sector show better indicators at the governorate level, with a 70% rate in Mount Lebanon (excluding suburbs), which is the highest among all governorates. In Beirut, the rate of "very good" is 44.4%.

In the UNRWA sector, the results are positive at the governorate level, with a 50% rate of "good" in the South and 25% of "very good."

As for the principals in the public sector, there is a significant need for skill development in the North and Akkar, while the South leads in the private free sector, where the results are somewhat balanced. Beirut and Mount Lebanon (excluding suburbs) lead in the private non-free education sector, which generally shows better performance.

- **Analysis of the Supervisors Questionnaire Results**

The results from the public sector, according to the supervisors, indicate a noticeable weakness in technological proficiency. The majority (32.7%) believe that teachers need development, followed by 31.3% who consider the proficiency to be "acceptable." Only 4.6% consider it "very good," which is a low percentage, concentrated in the Northern, Baalbek-Hermel, and Akkar governorates.

On the other hand, the private free sector shows better performance, with 64.5% of supervisors considering technological proficiency "good" and 19.4% rating it "very good." Beirut leads with 100% in the "very good" category, followed by Nabatieh, Akkar, and Baalbek with 100% in the "good" category.

The private non-free sector represents the best performance, with 41.9% rating proficiency as "very good," and only 6.8% believe there is a need for development. In the UNRWA sector, the proficiency is distributed between "acceptable" (33.3%) and "good" (66.7%).

The supervisors' responses indicate that the highest percentages of the need for development are concentrated in all sectors and governorates, with a small exception in the governorates of Beirut, Nabatieh, Akkar, and Baalbek in the private non-free sector.

- **Analysis of Results from the Coordinators' Questionnaire**

The results from the public sector indicate that, from the coordinators' perspective, teachers' proficiency in technological skills is "acceptable" at 55.6% and "good" at 33.3%. None of the coordinators found the proficiency to be "very good," which is a concerning indicator. In contrast, coordinators in the private free sector rated technological skills as "very good" and "good" at 100%. These percentages decrease in the private non-free sector, where the proficiency is "acceptable" at 58.3%, which is close to the public sector, "good" at 25%, and "needs development" or "inadequate" at 8.3%, which are notable figures.

At the governorate level, the proficiency in the Bekaa is "acceptable" at 45%, while in Mount Lebanon (suburbs) it is "good" at 47.1% and "acceptable" at 41.2%, with 11.8% indicating a need for development. This need for development reaches its highest in the North at 52.5%, which are concerning figures for the public sector, while high proficiency is seen in the private free sector and "good" proficiency is found in the private non-free sector in the North.

What should be noted is that coordinators in the public sector in Akkar believe that the proficiency level of teachers needs development at 53.8%, followed by the South at 52.4%, Nabatieh at 43.8%, and Mount Lebanon (excluding suburbs) at 38.5%. The highest percentages of coordinators who felt that teachers' skills "need development" were found in Akkar, the South, and Nabatieh. In contrast, the private free and non-free sectors show a positive trend in proficiency.

From the coordinators' results, it is clear that the majority of teachers in the public sector need to develop their technological skills, especially in the governorates of Akkar, the South, and Nabatieh. Teachers in the private sector have better proficiency than those in the public sector, with proficiency ranging between "very good," "good," and "acceptable" in most governorates.

- **Analysis of the Teachers Questionnaire Results**

The results from the Questionnaire directed to the teachers indicate that the largest percentage across Lebanon and in the different sectors found that their proficiency in technological skills is "good" at 31.5%.

Only 21.7% of respondents believed that the proficiency of teachers in technological skills needs development. The results from the public sector indicate that the highest percentage was in the "acceptable" category, followed by the "needs development" category, then "good," and finally "very good," with the lowest being "completely inadequate." This suggests the need for teacher preparation to reduce these percentages.

In the private free sector, the results indicated that proficiency was "good" at a high percentage in the private non-free sector (38.3%), followed by the private free sector (35.4%). The percentages in other categories in both sectors showed a decline, while the UNRWA sector recorded the highest percentage in the "good" category (50%).

The public sector recorded the highest percentage in the "very good" category in Mount Lebanon (excluding suburbs), and in Beirut for the "good" category, followed by the South, Mount Lebanon (suburbs), then the Bekaa, the North, and other governorates showed a decrease in the "very good" and "good" categories. This indicates the need for continuous training and support to enhance technological proficiency in the public sector.

In general, the public education sector needs to develop teachers' technological skills, particularly in governorates outside of Beirut and Mount Lebanon, except for the South. Meanwhile, there is consensus that the private sector as a whole shows improvement in teachers' proficiency in these skills.

Summary

The results from the Questionnaires directed at principals, supervisors, coordinators, and teachers show that the public sector needs significant development, especially in the northern, Akkar, and Bekaa governorates. In contrast, the private free and non-free sectors demonstrate better levels of technological proficiency, with higher percentages in the "good" and "very good" categories compared to the public sector. Geographic disparities were observed, with Beirut and Mount Lebanon outperforming other regions. Overall, the results highlighted the need to strengthen training and ongoing support for teachers in the public sector to ensure their skills align with modern requirements.

2.1.2. *Item 2: Availability of Training and Technical Support for Teachers in Using Technology*

- **Analysis of the Principal Questionnaire Results**
The results from the public sector across Lebanon, according to the principals, indicated that the largest percentage of them (43.5%) found that the availability of training and technical support for teachers in using technology needs development. This was followed by the "acceptable" category (25.2%), then "good" (14.3%), "completely inadequate" (12.9%), and the lowest percentage was for the "very good" category, which recorded 4.1%.

In the private free education sector, the "good" category ranked first (33.3%), followed by "needs development" (23.3%), then the "very good" and "acceptable" categories with the same percentage (16.7%), and "completely inadequate" (10.0%) was the lowest category in this sector. In the private non-free education sector, the "good" category ranked first (40.8%), followed by "very good" (32.7%), "acceptable" (18.4%), then "needs development" (8.2%), and finally, "completely inadequate," which recorded no responses (0.0%). In the UNRWA education sector, the results were divided as follows: 50% of principals indicated "good," 25% found it "very good" and "needs development," and the remaining 0% considered it "acceptable."

Regarding the governorates, the highest percentages of principals in the public education sector who found the availability of training and technical support to be "acceptable" were in Beirut (37.5%), while in the North, 54.3% (the highest among all governorates) considered it "needs development," followed by Mount Lebanon (suburbs) at 45.5%.

In the private free education sector, the highest percentages of principals found the availability of training and technical support to be "appropriate" in the South (100.0%), while the ratings for other categories were equal in the remaining governorates (25.0%).

The results from the private non-free education sector indicated that the largest percentage in Beirut (44.4%) found the availability of training and technical support to be "very good," while in Mount Lebanon (excluding suburbs), the percentage for this category was also 50.0%. Similarly, in the UNRWA sector, 50.0% of principals considered the training and technical support to be "very good," while 40.0% found it to be "good."

The results from the Questionnaire directed to principals indicate that the North Governorate in the public sector needs more support and training for teachers. The private non-free education sector shows the best results across the various education sectors in all governorates. Meanwhile, the South Governorate records higher percentages for providing technical support to teachers in using technology.

- **Analysis of the Supervisors Questionnaire Results**
    The results from the public sector showed that the majority of supervisors, at 39.0%, agreed that the training and technical support for teachers "needs development," with this response receiving the highest percentage. This was followed by "acceptable" at 32.3%, then "good" at 17.5%, "completely inadequate" at 7.8%, and finally, the "very good" category received the lowest percentage at 3.2%.

    From this arrangement, it is evident that there is an urgent need for training and technical support at the level of this sector. In contrast, the private free education sector showed the following order of responses from highest to lowest: "good" (48.4%), "very good" (22.6%), and then "completely inadequate" (6.5%).

    The private non-free education sector recorded the highest percentage for "very good" compared to the other sectors, reaching 40.2%, followed by "good" at 37.6%, then "needs development" at 6.8%, and finally "completely inadequate" at 0.9%. Thus, this sector achieved the best results in terms of the availability of training and technical support for teachers across Lebanon. The UNRWA sector, in contrast, had the following ranking by percentage: "good" at 66.7%, followed by "acceptable" at 33.3%.

    On the governorates level, the North Governorate leads in the need for development in the public sector at 52.6%. In Beirut, the percentages ranged between "acceptable" (45.5%) and "good" (27.3%), with a decrease in the percentage for "very good" in the same sector, which reached 9.1%. In Mount Lebanon (suburbs), the situation seems "acceptable" with a higher percentage in the public sector (52.9%) and "good" in the private free sector (40.0%), followed by

"very good" (20.0%). In the private non-free sector, "very good" (40.6%) came first, followed by "good" (34.4%). In Mount Lebanon (excluding suburbs), the highest percentage in the public sector was "acceptable" (34.8%), followed by "good" and "very good" (50.0%).

In the private non-free sector, the "very good" category ranked first with 50.0%, followed by the "good" category with 41.7%.

In the Bekaa, the situation in the public sector is considered "acceptable" with 44.4%, but it is better in the private free sector, where "good" was 66.7% and "very good" was 33.3%. In contrast, the private non-free sector showed equal percentages for "good" and "acceptable," each at 35.7%. The North ranked highest in the "needs development" category in the public sector at 52.6%, and 60.0% in the private free sector, compared to 40.0% for "good" in this sector and 44.4% for the same category in the private non-free sector.

The private non-free sector showed a high level of positivity in the South, with 71.4% for "very good," while in the private free sector, the percentages were split equally between "very good" and "completely inadequate," each at 50.0%. The general trend in the public sector results pointed to "acceptable" at 40.6%, but it decreased in Nabatieh to become "acceptable" at 39.1% in the public sector and "good" at 30.4%.

The highest percentages for the need for development in the public sector were shared by the Akkar and Baalbek-Hermel governorates, both around 50.0%. The answers from supervisors in UNRWA schools in the Mount Lebanon and South governorates were "good" for the first (100%) and "acceptable" for the second (100%).

The results from the supervisors indicate that training and technical support for teachers are more readily available in the private sector and are not available to the same extent in the public sector.

- **Analysis of the Coordinators Questionnaire Results**
    The results from the public sector showed that the largest percentage of coordinators (55.6%) considered the training and technical support in Beirut to be "acceptable." In Mount Lebanon (suburbs), the highest percentage was split evenly between "acceptable" and "good," with each category at 35.3%. In Mount Lebanon (excluding suburbs), the highest percentage (53.8%) was for the "needs development" category. Similarly, the results from the North (49.2%), Bekaa (60.0%), South (38.1%), Nabatieh (50%), Akkar (50%), and Baalbek-Hermel (33.3%) also showed significant gaps, due to the percentages of "good" and "very good" decreased in favor of the "needs development" and "completely inadequate" categories, which were recorded in Akkar (for example, 23.1%) and in the North (18.6%).

    In the private free sector, the responses ranged between "good" and "very good" in Beirut, Mount Lebanon (suburbs), and the Bekaa, while they tended towards "very good" in Mount Lebanon (excluding suburbs) at 60.0%, the North at 75.0%, and Akkar at 66.7%. In the South, the percentages for the "very good" category dropped to only 20.0%, and they were equally distributed

in Nabatieh between "acceptable" and "very good." In Baalbek-Hermel, the responses were equally split between "completely inadequate" and "good" at 50.0% for each category.

The results from the private non-free sector indicated that the level of support and technical training for teachers ranged between "good" (33.3%) and "very good" (41.7%) in Beirut and Mount Lebanon (excluding suburbs), with a tendency towards "very good" at 47.7% in Mount Lebanon (suburbs). In the North, the vast majority (41.9%) rated the support as "good," with considerable appreciation for the existing supporting systems. In the Bekaa, half of the coordinators (50%) considered the support to be "very good," suggesting well-established programs. In the South, the highest ratings were received in this sector, with 66.7% rating the support as "very good," reflecting model systems. In Nabatieh, the responses varied, with 45.5% rating the support as "acceptable," with fewer high ratings. In Akkar, the feedback was less positive, with only 7.7% rating it as "very good," and many chose the "acceptable" rating. In Baalbek-Hermel, nearly half of the coordinators (45.5%) rated the support as "very good," indicating strong training but inconsistent application. At UNRWA, the responses were split, with both the "completely inadequate" and "very good" categories each receiving 50% in the North, reflecting discrepancies in service delivery.

Based on these results, it is evident that there are challenges facing the public sector across all governorates regarding the need for development. Meanwhile, the private free sector shows better results in comparison. In the public sector, the private non-free sector records high percentages for "good" and "very good" responses, while the UNRWA sector shows equal responses for "completely inadequate" and "very good."

- **Analysis of the Teachers' Questionnaire Results**
The results from the public sector showed that the highest percentages were for the category "needs development" at 38.5%, followed by "acceptable" at 27.4%, then "good" at 18.3%, followed by "completely inadequate" at 11.2%, and finally, "very good" at 4.5%. In the private free sector, the "very good" category ranked first at 29.2%, followed by "good" at 26.8%, then "needs development" at 25.4%, then "acceptable" at 12.4%, and lastly, "completely inadequate" at 5.3%. In the private non-free sector, "very good" ranked first at 40.0%, followed by "good" at 31.7%, then "acceptable" at 15.7%, followed by "needs development" at 11.0%, and finally, "completely inadequate," which recorded the lowest percentage at 1.7%. The "needs development" category ranked first in the UNRWA sector at 41.7%.

The "needs development" category recorded the highest percentage in Akkar (39.8%), followed by Baalbek-Hermel (38.1%), then the South (34.9%), the North (33.0%), the Bekaa (25.0%), Beirut (23.7%), Nabatieh (20.4%), then Mount Lebanon (excluding suburbs) (18.3%), and finally Mount Lebanon (suburbs), where teachers reported at 14.5% that training and technical support "needs development."

The ranking for the "completely inadequate" category across governorates from highest to lowest is as follows: North (11.4%), Akkar (10.8%), Bekaa (10.1%), South (8.3%), Nabatieh (5.4%), Beirut (4.1%), and Mount Lebanon (excluding suburbs) and Baalbek-Hermel (3.4%) both

in the same rank, with the lowest percentage for "completely inadequate" recorded in Mount Lebanon (suburbs) at 2.2%.

It can be concluded that there is a need to provide training and technical support in all governorates, with particular emphasis on the more peripheral governorates.

Summary

The Questionnaire results revealed significant gaps in teacher training and technical support in the public sector, especially in the northern, Akkar, and Baalbek-Hermel governorates, where the highest percentage was concentrated in the "needs development" category. In the private free sector, the results were better, with high percentages for the "good" and "very good" categories. The private non-free sector performed exceptionally well, especially in Beirut and Mount Lebanon, with high ratings. In the UNRWA sector, results varied between "good" and "completely inadequate," reflecting significant disparities. Overall, there is a need to intensify efforts to provide training and technical support, with a focus on peripheral governorates.

2.1.3. Item 3: Availability of Maintenance and Updates for Electronic Devices

• **Analysis of the Principals Questionnaire Results**

The results from the public education sector in Lebanon showed that the highest percentage was for the "needs development" category at 38.8%, followed by "completely inadequate" at 31.3%, then "acceptable" at 20.4%. The "good" category decreased to 6.8%, and "very good" dropped even further to 2.7%, placing it last in the sector.

In the private free education sector, principals rated the availability of maintenance and updates for electronic devices as "good" at 36.7%, followed by "needs development" at 23.3%, "acceptable" at 20.0%, "very good" at 13.3%, and finally, "completely inadequate" ranked last at 6.7%.

In the private non-free education sector, the highest percentages were again for "good" at 36.7% and "very good" at 34.7%. The ratings for the other categories dropped significantly, with "acceptable" at 17.3% and "needs development" at 11.2%. No principals in this sector rated the availability of maintenance and updates for electronic devices as "completely inadequate."

Regarding the differences between governorates, the results from the public sector showed an urgent need to improve maintenance in the northern governorate (45.7% of principals believe the situation "needs development") and the Mount Lebanon suburbs (27.3% of principals see it as "needing development"). The general results in the public sector also indicated a need to reassess the maintenance and device update situation in Beirut, as more than half of the sampled principals in the area considered the situation "completely inadequate."

Results from the private free education sector were positive in the southern governorate (100% of principals considered the situation suitable). The private non-free education sector

recorded the best results across the governorates, especially in Beirut (55.6% of principals in the area considered maintenance and updates to be "very good"). In contrast, 50% of the principals in the UNRWA sector in the south considered the availability of maintenance and device updates as "good," while 25.0% across all governorates rated it as "needs development."

The northern governorate witnessed a clear decline in maintenance and updates, as 45.7% of principals believed the situation "needs development," which was the highest percentage among all governorates.

- **Analysis of the Supervisors Questionnaire Results**
The results from the Questionnaire directed to the supervisors indicated that about a quarter of the sample (24.4%) believed the condition of public schools was "completely inadequate," while more than a third of the sample (34.6%) felt the situation "needs development."

The percentages for "good" and "very good" were low, not exceeding 12.0%. In contrast, results from the private free education sector showed the highest percentage for "good" (38.7%), followed by "very good" and "acceptable" at 22.6% each. Lastly, the category "needs development" ranked last at 16.1%, which reflects a generally good situation in terms of maintenance and device updates.

However, the "needs development" results in the supervisors' view are not insignificant, although they ranked last in the evaluations. In the private non-free education sector, the "very good" category ranked first at 41.9%, followed by "good" at 36.8%, with the percentages for other categories declining significantly. In descending order, the category "completely inadequate" represents less than 1%. All supervisors in the UNRWA sector described the situation as "acceptable" at a rate of 100%.

Upon comparing the results between the governorates, we find that Beirut lags in terms of maintenance and updates in the public sector, recording the highest percentage in the "completely inadequate" category (36.4%) in this sector. In the private free sector, 100% of the responses were "good," and in the private non-free education sector, 55.6% rated it as "very good," with good to average performance in the Mount Lebanon suburbs across all sectors.

Performance declines in public schools in the north, where 28.9% consider the situation "inadequate," improving in private education in this governorate, where the "very good" category scored 40.0%. A similar trend is observed in the governorates of the Bekaa, Akkar, and Baalbek-Hermel regarding the differences between the sectors in these areas. In the south, the public sector performs better than in other governorates, as the "acceptable" category received 37.5% of the responses from supervisors in this sector, a relatively high percentage compared to the other categories. The private sector in the governorate recorded results divided between "good" and "very good," similar to other governorates.

- **Analysis of the Coordinators Questionnaire Results**

The results from the public sector, as viewed by the coordinators, show a decline in the maintenance and updating of devices in Beirut, where about half of the sample (44.4%) indicated it "needs development," and 33.3% rated it as "acceptable." More than a fifth of the sample (22.2%) found it "completely inadequate," while none of the coordinators considered the maintenance and updates to be good or very good. A similar situation is found in Mount Lebanon (suburbs), with more than a third of the sample considering it "completely inadequate" (35.3%) or in need of improvement. The results somewhat align with those from Mount Lebanon (excluding the suburbs). Half of the coordinators in the northern governorate (50.0%) considered the maintenance of devices as "needs development" or rated it as "completely inadequate," and a similar situation was found in the Bekaa governorate, where the highest percentage was for the "needs development" category (40.0%). In the south, the "needs development" percentage was high (37.5%), but the largest portion of coordinators in this governorate (42.9%) stated that the situation was acceptable.

Maintenance and device updates are considered "acceptable." In the Nabatieh governorate, half of the coordinators (50.0%) believe that maintenance services "need development," and about a third (31.3%) find them "acceptable." In Akkar governorate, more than a third of the sample found maintenance to be "completely inadequate" at a rate of (30.8%), while half of the sample (50.0%) suggested that it "needs development." Around half of the coordinators in Baalbek-Hermel (44.4%) suggested that maintenance "needs development," with a significant percentage in this governorate for the "very good" category (16.7%), which is higher than in other governorates.

In both the private free sector and the private non-free sector, responses were distributed between "good" and "very good" across all governorates, with a greater concentration in Beirut and Mount Lebanon. In the UNRWA sector, responses in the governorates were split between "needs development" and "good."

From the results above, it can be concluded that the public sector suffers from a lack of maintenance and updates for electronic devices, with this issue being particularly noticeable in peripheral governorates. Meanwhile, the private free and private non-free sectors perform better, particularly in the Beirut and Mount Lebanon governorates.

- **Analysis of the Teachers Questionnaire Results**

The results from the public sector show that the largest percentage of teachers (38.1%) believe that maintenance and updates "need development," followed by a percentage describing the situation as "acceptable" (25.6%), and then the "completely inadequate" category at (18.0%), which is a percentage worth noting. (14.3%) of teachers in the public sector described the availability of maintenance and updates for electronic devices as "good," and a small percentage (4.1%) considered it "very good."

In the private free sector, the largest group found it to be "very good" at (27.3%), followed by the "needs development" category (24.9%), then "good" (27.3%), "acceptable" (16.3%), and

finally, "completely inadequate" at (9.1%). In the private non-free sector, the responses were ranked as follows: "very good" (34.2%), then "good" (31.7%), then "acceptable" (18.3%) and "needs development" (10.6%), with a very small percentage (5.3%) finding it "completely inadequate."

The responses in the UNRWA sector indicated that half of the sample (50.0%) believed the situation "needs development," and the opinions that it was "completely inadequate" ranked last in the sector at (8.3%).

As for the results by governorates, teachers' opinions on the availability of maintenance and electronic device updates showed the highest percentage in the "good" category in the governorates of Beirut (37.1%) and Mount Lebanon excluding suburbs (30.9%). The largest percentage in Mount Lebanon (suburbs) classified it as "very good" (33.3%). In the Bekaa region, the largest response was "acceptable" (30.3%), while the "needs development" category had the highest percentage in the southern governorates (43.2%), Baalbek-Hermel (33.9%), Akkar (32.3%), North (31.6%), and Nabatieh (26.9%). Noticeable percentages for "completely inadequate" responses were recorded, reaching at least (10%) of the sample, indicating that teachers in most governorates outside Beirut and Mount Lebanon find the level of maintenance and updates for electronic devices unsatisfactory across all sectors.

Summary

After reviewing the results of Questionnaires directed at principals, supervisors, coordinators, and teachers, it becomes evident that there is a significant weakness in the maintenance and updates of electronic devices in the public sector, particularly in peripheral governorates like North, Akkar, and Baalbek-Hermel, where the categories "needs development" and "completely inadequate" are predominant. The free private sector shows more positive results, with high percentages for "good," and the non-free private sector performed excellently with "very good" and "good" categories. In the UNRWA sector, the results varied by governorate, with recurring needs for improvement in support. Overall, significant gaps exist in the public sector that require urgent solutions to enhance maintenance and updates, with noticeably better performance in the private sector.

2.1.4. Item 4: Availability of Technical Support Teams in Schools to Address Technology Issues

• **Analysis of Principals Questionnaire Results**

The responses from public sector principals indicated, in descending order, that the availability of specialized technical support teams to address technology issues in schools was "completely inadequate" with a large percentage (51.7%), followed by "needs development" (28.6%), then "acceptable" (9.5%), followed by "good" (7.5%), and the category describing the situation as "very good" ranked last with (2.7%).

In the free private education sector, the descending order of responses was as follows: "good" (36.7%), "needs development" (23.3%), "acceptable" (16.7%), "very good" (13.3%), and "completely inadequate" (10.0%). In the non-free private education sector, the responses were ranked as follows: "very good" (33.7%), "good" (32.7%), "acceptable" (21.4%), "needs development" (12.2%), and "completely inadequate," which received no responses. In the UNRWA sector, the responses were equally distributed across: "very good," "good," "acceptable," and "needs development" (25.0% each), with no responses for "completely inadequate."

Comparison by Governorates: When comparing the results by governorate, the public education sector suffers from a clear shortage of specialized technical support teams to handle technology issues in Beirut, where principals indicated (37.5%) that the situation was "completely inadequate." In contrast, principals in the non-free private education sector in Beirut found the situation to be "very good" at (44.4%). The problem is more pronounced in the North governorate, where (65.7%) of principals find the situation "completely inadequate," which is a significant percentage requiring intervention, followed by Mount Lebanon suburbs (54.5%) and the South (46.7%). This indicates that schools in the public sector need specialized support teams to address technological issues.

In the free private education sector, all principals in the South (100.0%) confirmed that their schools have support teams to address technological problems and described the situation as "very good." The highest percentage of principals in the non-free private education sector in Mount Lebanon suburbs rated the availability of specialized technical support teams for technology as "very good" (33.3%).

Schools in the UNRWA sector in the South complain about the lack of support teams to address technological issues, and half of the sample of principals (50.0%) consider the situation "needs development." In contrast, in Mount Lebanon suburbs, the entire sample (100.0%) believes the situation is "very good."

The results above suggest that the availability of specialized technical support teams faces challenges, particularly in the public sector, with a noticeable decline in other sectors, especially in governorates outside Beirut and Mount Lebanon.

- **Analysis of Supervisors Questionnaire Results**
    The results from the public sector indicate that the largest percentage of supervisors find the situation "completely inadequate" or "needs development" (31.0%), followed by a notable percentage (23.5%) considering the situation "acceptable." The percentages for "good" and "very good" are lower, with "good" at (9.2%) and "very good" at (2.8%), which came last. This is consistent with the previous results and highlights the need for schools to be strengthened with technical support teams to address technology issues.

    The highest percentage of weakness was recorded in the Baalbek-Hermel governorate, where about half of the supervisors (47.1%) described the situation as "acceptable." In contrast,

supervisors in Beirut and Mount Lebanon (excluding suburbs) recorded the lowest percentages for this view, with (9.1%) and (4.3%) respectively.

Looking at the results from the free private education sector, the largest percentages ranged from "good" (41.9%) to "very good" (22.6%), followed by "acceptable" and "needs development," both with the same percentage (16.1%). The category describing the situation as "completely inadequate" was the smallest at (3.2%).

Data from the non-free private education sector show a similar trend, with the only difference being that the "needs development" category ranked fourth (8.5%) instead of third. All supervisors in UNRWA schools in Mount Lebanon reported that the situation was "good" (100.0%), while all supervisors in the South (100.0%) stated that it "needs development."

One of the paradoxes recorded in the results of free private education is that all supervisors in Beirut governorate agree that the situation is "very good" (100.0%), while all supervisors in Baalbek-Hermel governorate (100.0%) say it "needs development."

The extent of technical support in non-free private education is more apparent in Baalbek-Hermel governorate (72.7% in the "good" category) and Mount Lebanon (58.3% in the "very good" category), while in Beirut, the percentage (11.1%) of supervisors who said the situation "needs development" was noted.

From the results above, it is clear that there is an urgent need for technical support in the public sector to match the quality of education in both private sectors. While results from non-free private education show significant progress in all governorates, the results from free private education indicate differences between Beirut and other governorates.

- **Analysis of Coordinators Questionnaire Results**
Results from the public sector indicate a high percentage of coordinators in the North, Mount Lebanon (suburbs), Beirut, and the North who view technical support as "completely inadequate," with recorded percentages of (37.3%), (35.3%), and (33.3%), respectively. Additionally, those who believe it "needs development" are (44.4%) in Beirut, (41.2%) in Mount Lebanon (suburbs), and (35.6%) in the North. A modest percentage was recorded in the "acceptable" category, with (30.8%) in Mount Lebanon (excluding suburbs), (25.0%) in the North and Bekaa, and (23.5%) in Mount Lebanon (suburbs), with Beirut recording the lowest percentage (22.2%). The highest percentage in terms of the "needs development" category was in Baalbek-Hermel governorate (50.0%), followed by Akkar (42.3%), Bekaa (40.0%), the South (38.1%), and Nabatieh (37.5%). The "completely inadequate" category followed this. About a quarter of the sample in the governorates said that support was "acceptable."

In comparison with the free private sector, no negative evaluations were provided in Beirut and Bekaa governorates, where all responses indicated that support was "good" or "very good." In Mount Lebanon (suburbs), more than half of the sample (60.0%) found it "good" or "very good." In Mount Lebanon (excluding suburbs), the "good" rating was significant (60.0%), but there was a noticeable percentage of "acceptable" responses (40.0%), which is just under half of the sample,

a remarkable result in size. The results were nearly equal in the North governorate. The highest percentage of coordinators who found support to be "good" was recorded (more than half the sample).

In the non-free private sector, Beirut governorate showed the same results as the free sector for "good" and "very good" (50.0%) and (25.0%), respectively. However, a notable percentage of coordinators (16.7%) found the situation to "need development." In Mount Lebanon (suburbs), no discrepancies were recorded between the percentages of responses. Coordinators in UNRWA reported equal distribution between "needs development" and "good."

This comparison indicates the deficiencies that the public sector faces in terms of the availability of specialized technical support teams, specifically in governorates away from the capital. It also reveals the significant gap between the public and private sectors regarding satisfaction with technical support services.

- **Analysis of Teachers Questionnaire Results**
  The Questionnaire results for teachers across Lebanon show that the largest percentage of teachers (25.1%) believe that specialized technical support teams to handle technology "need development." Around one-fifth of the sample (17.0%) found the situation to be "completely inadequate" across all sectors in Lebanon.

In the public sector, the largest percentage of teachers reported that the situation "needs development" (35.1%), followed by "completely inadequate" (24.9%), then "acceptable" (24.0%), followed by "good" (12.7%). A very small percentage (3.3%) said the situation was "very good." These results clearly indicate a negative reality surrounding the technical support teams in the public sector.

In comparison to the free private sector, the ranking of responses from highest to lowest was as follows: "Very good" (27.3%), "Good" (23.0%), "Needs development" (21.5%), then "Acceptable" (15.8%), and finally "Completely inadequate" (12.4%). In the non-free private sector, the results were arranged as follows: "Very good" (35.7%), the highest percentage recorded in any of the categories in the governorates and sectors (except for the UNRWA sector, which had the highest percentage for "Needs development" at 50.0%), followed by "Good" (30.8%), "Acceptable" (16.6%), "Needs development" (10.4%), and finally "Completely inadequate" (6.5%). The results from UNRWA indicated that half of the sample (50.0%) of teachers found the situation to be "Needs development," followed by the "Good" category (25.0%), then "Acceptable" (16.7%), and finally "Completely inadequate," which recorded a percentage of (8.3%).

As for the governorates, the largest percentage of teachers in public schools in Beirut found the situation to be "Good" (30.9%), compared to a reasonable percentage who described the situation as "Completely inadequate" (21.6%). The highest percentage in Mount Lebanon (suburbs) was for the "Very good" category (36.1%), with "Needs development" in the penultimate rank (15.4%), just before "Completely inadequate," which recorded (4.9%). In Mount Lebanon (excluding suburbs), the "Good" category ranked first at (28.0%), followed by both "Acceptable"

and "Very good" at (20.0%) each. However, the paradox in this governorate was that the "Completely inadequate" evaluation did not come last, as in other sectors, but instead came before the final evaluation, "Needs development," at (17.7%).

Significant differences emerged in the North governorate, where the highest evaluation was "Needs development" at (29.4%), followed by "Completely inadequate" at (24.0%), then "Acceptable" at (18.7%), and "Good" at (15.3%). "Very good" ranked last at (12.6%), highlighting the extent of the deficiency in technical support teams in this governorate.

In the Bekaa governorate, teachers found the availability of technical support teams acceptable at a large percentage (25.0%), followed by the answer "Needs development" (20.2%), with "Good" and "Very good" equally rated (18.1%). Teachers at (18.6%) found the availability of technical support teams to be "Completely inadequate." The governorates of Akkar, the South, Baalbek-Hermel, Nabatieh, and the North recorded the highest percentages in the "Needs development" category (34.7%, 33.7%, 29.7%, 29.4%, and 28.1%), indicating teachers' dissatisfaction with the availability of technical support teams in these governorates. The "Acceptable" category followed, then "Good," and finally "Completely inadequate," which ranked last in Baalbek-Hermel with a percentage of (16.1%), and finally, the "Very good" category. In Akkar, the responses were led by "Needs development," followed by "Completely inadequate" (22.3%), then "Acceptable" (19.9%), "Good" (13.1%), and finally, "Very good," which had a percentage of (10.0%).

These results indicate a widening gap between the public and private sectors, with a clear preference for the private sector in all its forms, and variation in results within each sector based on the governorates. The main conclusion, however, is that these results reveal the extent of the need to enhance the presence and role of specialized technical support teams to deal with technology in all sectors, across all governorates, without focusing on some governorates over others within the same sector.

Summary

It is evident from the above results that public schools suffer from a severe shortage of technical support teams to handle technology, with the highest percentages for "Needs development" and "Completely inadequate," particularly in peripheral governorates such as the North, Baalbek-Hermel, and Akkar. In contrast, the private sector, in both its forms, performed much better, with high percentages for "Very good" and "Good," especially in Beirut and Mount Lebanon. In the UNRWA sector, results were mixed between "Needs development" and "Good," reflecting the need for improvements. Overall, the results show a significant gap between the public and private sectors, with an urgent need to support public schools with specialized technical teams in all governorates.

2.1.5. *Item Five: Teachers' Proficiency in Implementing Support Programs for Struggling Learners*

- **Analysis of Principals Questionnaire Results**

The percentages of results from principals in the public sector indicated that teachers' proficiency in implementing support programs for struggling learners was mostly rated as "Needs development" at a significant percentage of (36.1%), followed by "Acceptable" at (29.3%), "Good" at (18.4%), "Completely inadequate" at (13.6%), and "Very good" at a low percentage of (2.7%). In the free private sector, the results showed relatively better data compared to the public education sector. The "Needs development" category received a large percentage of (36.7%), followed by "Acceptable" at (26.7%), "Good" at (20.0%), and "Very good" in the fourth place at (10.0%). The lowest percentage was for "Completely inadequate," which stood at (6.7%). In the non-free private education sector, the results were different, with the "Good" category ranking first at (42.9%), followed by "Acceptable" and "Very good" in second place at (22.4%), and "Needs development" in third place at (9.2%). The least percentage (3.1%) found that teachers' proficiency in implementing support programs for struggling learners ranked last. The UNRWA sector's results were all concentrated in two categories: "Good" at the top with (75.0%), and "Acceptable" in second place with (25.0%), with no responses recorded for other options.

It was noted that there was significant improvement in some governorates, such as the South and Bekaa, in the free private sector, where the percentage of "Very good" reached (33.3%).

The results from Beirut Governorate indicated that (38.9%) of principals in all sectors rated teachers' proficiency in implementing support programs for struggling learners as "Good," while the "Very good" category reached (16.7%). In the public sector, the results from Beirut were generally better than those from other governorates within the same sector, especially when compared to Baalbek-Hermel Governorate, which recorded a high percentage for "Completely inadequate" (27.3%).

In Mount Lebanon, there were clear differences between the suburbs and the rest of the governorates. In the suburbs, the percentage of "Good" was (32.7%), and "Very good" was (18.4%), while other governorates recorded higher percentages for "Acceptable," particularly in Akkar (35.7%), which was the highest in this category across all governorates.

The North Governorate suffers from high percentages in the "Needs development" category, reaching (45.5%), indicating a significant training gap. The Bekaa shows relatively balanced results, with (24.0%) of principals rating performance as "Very good," which still requires efforts to improve training.

In the South, the data show better performance, with "Good" reaching (40.0%) and "Very good" at (8.0%). Nabatieh records a high percentage for "Very good" at (39.3%). Akkar shows a high percentage for "Acceptable" (35.7%) with "Needs development" at (39.3%).

In Baalbek-Hermel, the "Needs development" category has a percentage of (26.3%), while the "Very good" category does not exceed (15.8%).

The non-free private education sector shows better performance than the other sectors, particularly in the "Good" category at (42.9%), which is the highest among the categories, and "Very good" at (22.4%). This performance is clearly evident in the "Needs development" category, which recorded the lowest percentage among sectors at (9.2%).

The results indicate that teachers in the public sector need to master programs supporting struggling learners, as evidenced by the high percentages in the "Needs development" categories. The free and non-free private sectors outperform the public sector, but some governorates, particularly in the outskirts, still need additional support to improve this mastery.

In all sectors, the North Governorate shows significant deficiencies, while the situation in the Bekaa is acceptable but not good. In governorates outside Beirut and Mount Lebanon, the South and Nabatieh perform better compared to the peripheral governorates. Akkar and Baalbek-Hermel face a clear shortfall in teachers' mastery of support programs for struggling learners.

- **Analysis of Supervisors Questionnaire Results**
    The overall results from the supervisors in the public sector indicated that the vast majority believe that technical support teams need improvement, with the largest percentages of responses to this item being "Completely inadequate" (31.1%) and "Needs development" (33.2%). The "Good" and "Very good" responses ranked the lowest (9.2% and 2.8%, respectively). This contrasts with the results from the free private education sector, which clearly indicated that the situation is largely positive, showing a discrepancy in the evaluation of the technical support teams between the two sectors, favoring the latter.

    The results from the non-free private education sector were more positive compared to the previous sectors, with only a few supervisors (19.3%) believing that teachers' proficiency in implementing support programs for struggling learners "Needs development" and "Completely inadequate" (19.3%). This gives this sector an advantage in the positive evaluation of teachers' proficiency in support programs. In UNRWA schools, all supervisors (100.0%) rated the situation as "Good" in Mount Lebanon and "Needs development" in the South at (100.0%).

    In Beirut Governorate, the results indicated that the teachers' proficiency in support programs for struggling learners, according to supervisors, was "Completely inadequate" at a large percentage in the public sector (36.4%), while it was "Very good" at (100%) in free private education, and (66.7%) in non-free private education. In Mount Lebanon, the level of proficiency was lowest in the public education sector, as well as in the North and Bekaa Governorates, where the highest percentages in this sector favored "Needs development" (39.5% in the North), while these percentages were in favor of "Very good" and "Good" in the other sectors.

    In the Nabatieh and South governorates, the non-free private sector excelled over the other sectors (60.0% for "Good," and 20.0% for "Very good"), while the highest percentages in the public sector remained between "Needs development" and "Completely inadequate." Akkar and Baalbek-Hermel recorded the highest percentages in these two responses in public education (39.5%).

The results from the supervisors' responses highlighted challenges faced by the public sector in the teachers' proficiency in implementing support programs for struggling learners, which were clearly evident in the peripheral governorates. The free private education sector showed satisfactory results in all governorates, except the North. Akkar in the non-free private education sector still requires improvement in teachers' mastery of support programs.

- **Analysis of Coordinators Questionnaire Results**

The responses from coordinators in the public education sector in Beirut and Mount Lebanon (suburbs) focused on the answer "Acceptable" (44.4% and 47.1%, respectively), while about one-fifth of the sample in Beirut rated teachers' proficiency as "Completely inadequate" (22.2%). Due to the lack of positive results, teachers' proficiency faces challenges stemming from the coordinators' dissatisfaction. This challenge is particularly evident in the North Governorate (40.7%), Akkar (46.2%), and Baalbek-Hermel (44.4%), where the percentage of those who reported that teachers' proficiency "Needs development" is high. The positive responses for "Good" and "Very good" are lower. For example, the "Very good" category in Baalbek-Hermel was rated at (5.6%), indicating significant gaps in this skill. This contrasts with the results from coordinators in the free private sector, where all of them reported that teachers' proficiency in Beirut was "Very good" at (100.0%), the highest rate across all governorates in this sector. More than half of the coordinators (60.0%) in Mount Lebanon (suburbs) rated teachers' proficiency as "Good" and "Very good," while the rate was 100% in Nabatieh Governorate. However, these positive rates decreased in Akkar, with (33.3%) reporting "Acceptable" and (66.7%) reporting "Good."

Returning to the detailed results of the public education sector, the need to improve proficiency is most prominent in Akkar, followed by the North, with relatively lower needs in Beirut, Bekaa, and the South. In the free private sector, the need for improvement is more evident in Baalbek-Hermel, where the coordinators' results showed that the situation "Needs development" with a percentage exceeding (40.0%). In the non-free private sector, about (60.0%) of the coordinators in Mount Lebanon (suburbs) found that teachers' proficiency was "Good" or "Very good," indicating a high level of satisfaction with teachers' performance. A small percentage of coordinators considered teachers' proficiency to be "Completely inadequate" (11.2%).

Coordinators in both the free and non-free private sectors agree on a high level of satisfaction in Mount Lebanon (suburbs), while this satisfaction declines when discussing the northern governorates, Akkar, and Baalbek-Hermel, similar to the results in the public sector.

Overall, the results indicate the urgent need to improve teachers' proficiency in implementing programs for supporting struggling learners across all sectors, with particular priority given to the public sector. This need is evident across all governorates, with special priority for the governorates far from Beirut and Mount Lebanon, with some exceptions.

- **Analysis of Teachers Questionnaire Results**

The general results from teachers indicate that the largest percentage of teachers in Lebanon (28.0%) reported that their proficiency in implementing support programs for struggling

learners was "Acceptable." While this percentage did not exceed 30.0% of the total teachers, it was the highest among other response percentages, followed by the answer "Good" (25.7%) and "Needs Development" (22.3%). The phrase "Completely Inadequate" ranked last across all sectors, with a percentage of (8.5%).

The largest percentage of teachers in the public sector (34.8%) indicated that their proficiency in implementing support programs for struggling learners was "Acceptable." However, they felt that this proficiency "Needs Development" at a slightly lower rate of (30.0%). The answer "Completely Inadequate" (10.2%) was not the lowest among teachers but was for those who rated their proficiency as "Very Good," with a percentage of (5.2%). Opinions in the private free and non-free sectors differed in favor of the answer "Good" (25.4% and 34.7%, respectively), followed by "Very Good" (21.1% and 29.7%, respectively), then "Acceptable" (20.6% and 19.9%, respectively), and finally "Needs Development" (20.1% and 11.2%, respectively). In the UNRWA sector, teachers' opinions were divided between "Good" (33.3%) and "Acceptable" and "Needs Development," with similar percentages of (33.3% for the first category and 25.0% for the second).

At the governorate level, the "Good" category recorded the highest percentage of teachers in Beirut (36.1%), Mount Lebanon (except for the suburbs) (32.6%), and Baalbek-Hermel (28.8%). Mount Lebanon (suburbs) recorded the highest percentage of teachers who rated the proficiency as "Very Good" at (33.0%), the highest in this category across all governorates. The governorates with the highest percentage in the "Acceptable" category were: Nabatieh (36.5%), followed by the South (35.5%), Akkar (31.5%), and finally Bekaa (30.9%). The other categories in these governorates recorded lower percentages. The largest percentage of teachers in the North Governorate reported that the situation "Needs Development" at (28.2%).

It is clear that teachers' proficiency in implementing support programs for struggling learners is not uniform, even within the same sector or governorate. The disparity is evident in the order of positive responses and the ranking of governorates, especially in the North and Akkar. The classification of educational sectors showed that the non-free private sector outperformed the other sectors, while the public sector faces significant challenges in this regard.

Summary

The Questionnaire results showed a significant disparity in teachers' proficiency in implementing support programs for struggling learners between sectors and governorates. The public sector clearly suffers from a lack of proficiency, especially in remote areas like Akkar, the North, and Baalbek-Hermel, where the most common responses were "Needs Development" and "Completely Inadequate." In contrast, the non-free private sector showed positive performance, with a notable lead in the "Good" and "Very Good" categories, while the free private sector recorded moderate results with room for improvement in some governorates. Beirut and Mount Lebanon (suburbs) showed better performance compared to the peripheral regions. Overall, all sectors and governorates require improvements in teachers' proficiency, with priority given to the public sector and remote governorates.

The analysis highlights a significant disparity between governorates and educational sectors in the proficiency of teachers in implementing support programs for struggling learners.

Focusing on building teachers' capacity through training and exchanging experiences between sectors can be a sustainable solution to improve outcomes.

2.1.6. *Item 6: Proficiency of Most Teachers in Implementing Social-Emotional Support Programs*

- **Analysis of Principals Questionnaire Results**

The results from the principals in the public education sector indicated that the largest percentage of them (36.1%) believe that teachers' proficiency in implementing social-emotional support programs is "Acceptable." A smaller percentage (32.0%) think it "Needs Development," followed by "Good" (17.7%), and the lowest percentage in the "Very Good" category (3.4%). Positive results in the public sector were concentrated in Beirut, showing relatively better performance, with results declining in the North and Bekaa.

The opinions of principals in the private free education sector were similar to those of their colleagues in the public sector, with the largest percentage (33.3%) answering that the situation "Needs Development," followed by "Acceptable" at a lower percentage (23.3%). In contrast, principals in the non-free private sector described the situation as "Good" and "Very Good" (32.7% and 18.4%, respectively). While the results did not show significant differences between the options, in the UNRWA sector, a large percentage (75.0%) of principals found teachers' performance to be "Very Good."

At the governorate level, the highest percentage for all sectors was "Good" in Beirut (38.9%) and the South (36.0%), while the lowest was "Completely Inadequate" (0.0% and 8.0%, respectively). In the governorates of Mount Lebanon (suburbs) and Mount Lebanon (excluding suburbs), the highest percentage was "Acceptable" (30.6% and 46.9%, respectively), with the lowest being "Completely Inadequate" (6.1% and 6.3%, respectively). The response "Needs Development" ranked first in the answers from principals in the governorates of the North (41.8%), Bekaa (32.0%), and Akkar (39.3%). "Very Good" ranked last in the North Governorate at only (3.6%), while "Acceptable" ranked last in Bekaa (12.0%) and "Completely Inadequate" in Akkar (3.6%). In the governorates of Nabatieh and Baalbek-Hermel, principals answered "Acceptable" at higher rates (35.7% and 36.8%), while the lowest percentage was for the response "Very Good" (3.6% and 5.3%).

The results, based on the governorates, show that "Acceptable" was the most common response, followed by "Needs Development," then "Good," "Very Good," and finally "Completely Inadequate." Based on sectors, high percentages were recorded in the "Needs Development" category. The private free education sector showed moderate results, while the non-free private education sector showed generally better performance compared to other sectors. The UNRWA sector showed a level of excellence by recording high percentages in the "Very Good" category.

- **Analysis of Supervisors Questionnaire Results**

The highest percentages of supervisors in the public education sector found the implementation of social-emotional support programs to be "Needs Development" (36.9%) first, followed by "Acceptable" (30.0%), "Good" (16.1%), and "Completely Inadequate" (13.8%). This reflects the supervisors' dissatisfaction with the current implementation and the need for improvement. This differs in the private free and non-free education sectors, where the highest percentage of supervisors found teachers' proficiency to be "Good" (54.2% and 35.0%, respectively), and to a lesser extent, they found it "Very Good" (16.1% and 26.5%).

There were clear regional differences, with results from the non-free private sector indicating a need to improve teachers' proficiency in implementing social-emotional support programs in Akkar and Bekaa. supervisors' opinions in the UNRWA sector were divided between "Good" and "Acceptable" in Mount Lebanon, and entirely positive (100.0%) in the South Governorate.

The results also suggest moderate satisfaction among supervisors in Beirut and across all sectors regarding the level of teachers' proficiency in implementing social-emotional support programs. There is a clear need to improve the programs in the governorates of Mount Lebanon (suburbs), the North, Akkar, and Baalbek-Hermel in the public sector. Meanwhile, the private free and non-free education sectors maintain better performance compared to the public education sector.

- **Analysis of Coordinators Questionnaire Results**

The highest percentages of coordinators' responses in the public education sector regarding teachers' proficiency in social-emotional support programs were distributed across the governorates as follows: the largest percentage in Beirut rated it as "Good" and "Acceptable" (33.3% for each), while a smaller percentage (22.2%) rated it as "Completely Inadequate." In the Mount Lebanon (suburbs) governorate, "Acceptable" was the highest rating at 35.3%, followed by "Good" at 29.4%, with a noticeable percentage rating it as "Needs Development" (about a quarter of the sample). This same rating was echoed by coordinators in the governorates of Mount Lebanon (excluding suburbs), the North, Bekaa, the South, Nabatieh, Akkar, and Baalbek-Hermel (this category recorded the highest percentage for this rating among the governorates). While there were other positive results, the focus of coordinators in the public sector, in most governorates, on the need to improve teachers' proficiency in social-emotional support programs suggests that the effectiveness of these programs should be reconsidered, and that the level of proficiency in these skills needs to be raised.

Results from the private free sector showed that the rating in Beirut was "Acceptable" at 100.0%, while the highest percentage in Mount Lebanon (suburbs) was for the ratings "Very Good" and "Acceptable" (40.0% for each), indicating positive indicators for the sector. In the governorates of Mount Lebanon (excluding suburbs) and the North, the highest percentage was for the "Good" rating (60.0% and 75.0%, respectively), with a quarter of the sample in the North (25.0%) and more than half the sample in the South (60.0%) indicating that the situation "Needs Development."

High performance was observed in Bekaa and Nabatieh, where half of the sample (50.0%) rated it as "Very Good." In Akkar, the highest percentages were split between "Very Good" and "Needs Development" (33.3% for each). A notable variance appeared in Baalbek-Hermel, with half of the coordinators (50.0%) rating the performance as "Very Good" and also "Completely Inadequate."

In the non-free private sector, the ratings in Beirut were split between "Good" and "Completely Inadequate" (25.0%) for each (a quarter of the sample). Ratings ranged from "Good" to "Very Good" in Mount Lebanon (suburbs) (39.1% and 32.6%), Mount Lebanon (excluding suburbs) (36.8%), and the South (33.3% for both "Good" and "Very Good").

Most governorates shared the call for the development of support programs, with Akkar being the highest (30.0%), indicating a decline in teachers' proficiency in implementing these programs. Significant percentages in Nabatieh and Baalbek-Hermel rated the performance as "Good" (54.5% for each), while "Very Good" was rated highest in Bekaa (37.5%), as the highest percentage among the governorates in the sector. All coordinators in the UNRWA sector in the North governorate agreed that the rating was "Good" (100.0%).

The results from coordinators indicate variations in proficiency levels across sectors and governorates, with the private education sectors (both free and non-free) performing better compared to the public education sector. Regarding governorates, clear challenges appeared in regions such as the South, North, and Akkar.

- **Analysis of Teachers Questionnaire Results**
The results from teachers across all sectors and governorates showed that the largest percentage rated their proficiency as "Acceptable" (29.5%), followed by "Good" at 27.0%, "Needs Development" at 20.3%, "Very Good" at 15.8%, and finally, "Completely Inadequate" at 7.4%.

These percentages remained consistent in the public sector, except for the lowest percentage which was for the "Very Good" rating (7.3%) instead of "Completely Inadequate" which was rated at 7.6%.

In the private free sector, the largest percentage of teachers rated their proficiency as "Good" (27.8%), followed by "Needs Development" at 22.5%. In the private non-free sector, the largest percentage rated their proficiency as "Good" (31.4%), followed by "Very Good" at 27.9%, with the smallest percentage rating it as "Completely Inadequate" at 5.7%. In the UNRWA sector, the results were distributed as follows: "Acceptable" (50.0%), "Good" (25.0%), and "Needs Development" (16.7%).

Beirut recorded a high percentage for "Good" (34.0%) and "Acceptable" (30.9%). In Mount Lebanon – suburbs, the highest rating was "Good" at 31.8%, followed by "Very Good" at 30.9%, "Acceptable" at 21.0%, with a small percentage of teachers rating the proficiency of teachers in applying social-emotional support programs as "Completely Inadequate" (4.3%), which is a positive performance rating. In Mount Lebanon (excluding suburbs), the highest percentage was also for the "Good" rating (33.7%), followed by "Acceptable" at 25.1%. The

situation appeared acceptable in the North with 27.4%, slightly higher than the other ratings, and no notable differences between the answers.

However, the interesting point in this governorate was that about a quarter of the sample (24.8%) believed the situation "Needs Development," ranking second after the South (26.0%) and Akkar (25.9%) which recorded the highest percentage in this category among all governorates, followed by Baalbek-Hermel (21.2%) and Bekaa (20.2%), which also recorded similar and notable percentages in the "Acceptable" ratings (33.1% and 27.7%, respectively). In Nabatieh and the South, teachers rated "Acceptable" at a high percentage (42.5% in Nabatieh and 35.5% in the South), which were the highest percentages in the two governorates.

The results show differences in how teachers evaluate their proficiency, both in terms of educational sectors and governorates, but the key finding is that teachers themselves recognize the need for support to master the implementation of social-emotional support programs.

Summary

The Questionnaire results regarding teachers' proficiency in implementing social-emotional support programs showed variation across sectors and governorates. In the public education sector, proficiency was generally considered "Needs Development," with relatively better performance in Beirut and clear challenges in the North, Bekaa, and Akkar. In private education (free and non-free), performance was generally better, especially in Beirut and the South. In the UNRWA sector, positive results were observed with a "Very Good" rating. Participants universally agreed on the need to develop competencies, especially in peripheral areas, with calls for enhancing training programs to enable teachers to effectively implement the developed curricula.

2.2. Analysis of the Results of the Question Regarding the Support Provided by the School Administration for the Use of Technology

2.2.1. Analysis of Principals Questionnaire Results

The question regarding the support provided to teachers for using technology included four points:

Item 1: Encouraging Teachers to Use Technology

The general results for this point showed the following indicators:

By governorates across all sectors, the North governorate ranked first in the number of schools encouraging teachers to use technology (46 schools), followed by Mount Lebanon (suburbs) (44 schools), then Mount Lebanon (excluding suburbs) (31 schools), then Akkar (28 schools), followed by the Bekaa and Nabatieh governorates (23 schools), then the South governorate (21 schools), followed by Beirut (15 schools), and finally Baalbek-Hermel, which recorded the lowest encouragement rate among all governorates in both the public and private sectors (14 schools).

In the public sector, the North governorate recorded the highest percentage of schools whose administrations encourage teachers to use technology (29 schools), followed by Akkar (20 schools), then Mount Lebanon excluding suburbs (18 schools). This indicates a focus on support in the neediest governorates.

Akkar also recorded the highest percentage of encouragement in the free private education sector (6 schools), followed by Mount Lebanon excluding suburbs (4 schools), then Mount Lebanon suburbs (3 schools), and the Bekaa (2 schools). Encouragement in the non-free private education sector was primarily concentrated in Mount Lebanon suburbs (30 schools), followed by the North governorate (11 schools), with encouragement distributed evenly across other governorates. The UNRWA sector showed the lowest percentage of encouragement for teachers to use technology, with only 4 schools, distributed between Mount Lebanon and the North, indicating clear challenges in this area.

It is noteworthy that the public sector shows the highest percentage of encouragement for using technology compared to other sectors, which is an indicator of the need for technology use and support in this sector.

It appears that the public sector provides most of the incentives at the general level, with a focus on northern and rural governorates such as the North and Akkar. Meanwhile, the non-free private sector focuses its support in high-population density governorates, such as Mount Lebanon. The free private sector provides limited support compared to other sectors, with notable variations between governorates. UNRWA provides a small contribution to encouraging teachers, mainly focusing on Mount Lebanon and the South.

Item 2: Providing Training for Teachers on Using Technology

School administrations in Mount Lebanon (suburbs) provide the highest percentage of training for teachers on using technology across all sectors (32 schools), followed by the North governorate (20 schools), then the Bekaa (16 schools), then Nabatieh (15 schools), followed by Mount Lebanon excluding suburbs (14 schools), then the South (13 schools), Baalbek-Hermel (9 schools), then Akkar (8 schools), and finally Beirut (7 schools).

The North governorate leads in the public education sector, with the highest number of schools offering training for teachers to use technology (9 schools), followed by the Bekaa (7 schools), and then Beirut, Akkar, and Baalbek-Hermel where training is almost nonexistent (2 schools each). In the free private education sector, Nabatieh leads with the highest percentage of training availability (5 schools), while this training is absent from schools in Beirut. In the non-free private education sector, schools in Mount Lebanon suburbs excel (23 schools), followed by Beirut (5 schools). Results from the UNRWA sector did not provide indicators that could be relied upon.

Item 3: Technical Support Available to Solve Problems

In this point, Mount Lebanon (suburbs) leads across all sectors (21 schools), followed by the North and Nabatieh governorates in second place in terms of technical support (13 schools), then the South governorate (10 schools), followed by Mount Lebanon excluding suburbs (8 schools), then Baalbek-Hermel and the Bekaa with the same number (7 schools), then Akkar (5 schools), and finally Beirut, which also recorded the lowest percentage in the availability of technical support (4 schools).

At the sector level, the non-free private education sector records the highest percentage of technical support for teachers (49 schools), followed by the public education sector (27 schools), with Nabatieh governorate leading the support percentage (7 schools), then the North governorate (6 schools). Beirut and Mount Lebanon suburbs have the lowest numbers (one school each). The free private education sector shows a relatively equal distribution of technical support across all governorates.

Item 4: Allocating Time for Teachers to Use Technology

The North governorate leads with the highest percentages in this aspect across all sectors (27 schools), followed by Mount Lebanon (suburbs) (18 schools), then Nabatieh (17 schools), the Bekaa (13 schools), Mount Lebanon excluding suburbs (12 schools), followed by the South (11 schools), Beirut (8 schools), Akkar (6 schools), and finally Baalbek-Hermel, which shows the lowest percentage of allocated time for teachers to use technology during classroom teaching (5 schools).

The results from the public education sector indicate that priority in allocating time is given to teachers in the North (18 schools) and Nabatieh (10 schools), with Mount Lebanon (suburbs) (13 schools) in the non-free private education sector. Thus, the North and Mount Lebanon (suburbs) governorates lead in this area, with Beirut, the Bekaa, and the South in the middle of the list. Akkar and Baalbek-Hermel record the lowest percentages.

2.2.2. Analysis of Supervisors Questionnaire Results

The responses of supervisors to the four points included in the question are distributed as follows:

Item 1: Encouraging Teachers to Use Technology

The public sector recorded the highest percentage of encouraging teachers to use technology compared to both the non-free and free private education sectors, with a significant difference between it and the free private sector, which ranked lowest in the responses for this aspect. The North governorate leads the public sector results, aligning with the results of the principals above. Notably, Beirut recorded the lowest frequencies in both the public and private sectors, while the Bekaa and Nabatieh governorates outperformed other sectors in the public sector.

Item 2: Providing Electronic Educational Resources

At the sector level, the non-free private sector represents the highest percentages. Mount Lebanon (suburbs) recorded the highest percentage, with the non-free private sector ranking first, followed by the public sector.

The public sector recorded its lowest percentage in Mount Lebanon (excluding suburbs), followed by Beirut, indicating a lack of provision of electronic educational resources.

Item 3: Allocating Time for Teachers to Use Technology During Classroom Teaching

The public sector leads the results for this point, with the North governorate recording the highest results, followed by the non-free private sector in second place. The results from Beirut in the public sector are lower than those of the non-free private sector.

Item 4: Technical Support for Solving Technical Problems

The results indicate that the non-free private education sector records the highest level of technical support, compared to limited attention in the public sector. Mount Lebanon (suburbs) recorded the highest percentages, particularly in the non-free private sector, while support levels were limited in Beirut in the public sector and even lower in the non-free private sector.

Item 5: Providing Training for Teachers on Using Technology

The non-free private sector ranks first in providing training for teachers, followed by the public sector. Mount Lebanon (suburbs) recorded the highest percentage in schools of the non-free private education sector. As in previous areas, the results from Beirut were modest.

From the supervisors' responses, we conclude that the public sector provides the highest percentage in motivation and time allocation, with school administrations paying greater attention to encouraging teachers to adopt and use technology in education. Meanwhile, the non-free private sector excels in providing electronic educational resources, followed by technical support, and finally training.

In terms of governorates, Mount Lebanon (suburbs) and the North are the top performers in support. On the other hand, Beirut and Nabatieh governorates do not provide sufficient support

for teachers. The North and Mount Lebanon (suburbs) show higher results in most areas. In summary, public education focuses on motivation and time allocation, while the private sector focuses on providing resources, technical support, and training.

2.2.3. Analysis of Coordinators Questionnaire Results

From the coordinators' responses to the question about the types of support, it appears that the most focus is placed on encouraging teachers to use technology, compared to other forms of support. This is particularly evident in the Bekaa and Akkar.

Item 1: Allocating Time for Using Technology

The North governorate topped the results for this point, followed by Mount Lebanon (suburbs).

Item 2: Providing Electronic Educational Resources

The results showed a variation between governorates, with Beirut and the Bekaa leading with moderate results for both, while Akkar, the South, and Nabatieh seem to have little to no focus on this area.

Item 3: Providing Training for Teachers

The highest percentages were recorded in the South, followed by Baalbek-Hermel.

Item 4: Technical Support for Solving Technical Problems

Beirut and Baalbek-Hermel recorded similar levels of technical support at moderate percentages, while support was much lower in the North and Bekaa. This indicates that technical support is not widespread across governorates and sectors, reflected in the modest percentages.

2.2.4. Analysis of Teachers Questionnaire Results

This question included five points, and the teachers responded based on preference. The results for these points are as follows:

Item 1: Encouraging Teachers to Use Technology

i. Motivation by Governorates

The North governorate recorded the highest number of teachers who believe the administration encourages teachers to use technology in the classrooms (327 teachers), indicating a strong focus on motivational efforts in this governorate. Mount Lebanon (suburbs) ranked second (284 teachers), followed by Akkar (214 teachers), the Bekaa (162 teachers), and both Mount Lebanon (excluding suburbs) and Nabatieh with the same number of teachers (156 teachers). In the South, 148 teachers reported being encouraged, while Baalbek-Hermel had the lowest number of teachers who chose this statement (97 teachers), reflecting a clear need for increased support in this governorate.

ii. Motivation by Education Sector

The public sector recorded the largest number of teachers who felt encouraged to use technology in the classrooms (844 teachers), with a significant concentration of this percentage in the North governorate (212 teachers, the highest in the public sector) and Akkar (144 teachers).

The non-free private sector ranked second (595 teachers), with responses concentrated in Mount Lebanon (suburbs) (197 teachers, the highest percentage). The South recorded the lowest percentage (31 teachers). UNRWA's contribution to motivating teachers was very limited.

It can be inferred from the results of this statement that the public sector provides the majority of incentives at the general level, with a focus on northern and rural regions such as North and Akkar. Support is concentrated in the private non-fee sector in highly populated regions, such as Mount Lebanon. Free private sector offers limited support compared to other sectors, with noticeable variation between provinces. UNRWA provides a small contribution to incentivizing teachers, mainly concentrated in Mount Lebanon and the South.

Item 2: Allocating Time for Teachers to Use Technology in the Classroom

i. By Sectors

The results show that school administrations in the public sector allocate the most time, followed by administrations in the non-free private sector. On the other hand, the free private sector generally allocates less time, except in some governorates. The distribution is as follows:

The non-free private sector recorded the highest percentage of teachers who believe the administration allocates time for teachers to use technology in the classroom, with 301 teachers, followed by the public sector with 268 teachers, and the free private sector with 72 teachers.

The highest percentage in the public sector was recorded in the North (58 teachers) and Nabatieh (45 teachers), while the lowest was in Beirut (9 teachers). In the free private sector, the highest percentage was in Mount Lebanon (excluding suburbs) (23 teachers), with the lowest percentage in Beirut and Baalbek-Hermel. In the non-free private sector, the highest percentage was in Mount Lebanon (suburbs) (108 teachers), and the lowest was in the South (12 teachers).

ii. By Governorates

Mount Lebanon (suburbs) recorded the highest percentage for time allocation (138 teachers), followed by the North (105%), then Mount Lebanon (excluding suburbs) (82 teachers), Nabatieh (75 teachers), and the Bekaa (64 teachers). The South and Akkar had the same number of teachers who felt time was allocated for technology use in the classroom (55 teachers each). Baalbek-Hermel recorded 37 teachers who saw time allocated for technology use. Beirut recorded the lowest percentage with 31 teachers.

Item 3: Technical Support Available to Solve Technical Problems

i. By Education Sectors

55% of teachers in the non-free private sector reported that the administration provides technical support, the highest percentage among the sectors. The highest percentage in this sector was in Mount Lebanon (suburbs) (192 teachers). In the public sector, the highest percentage was

in the North (37 teachers), and the lowest was in Beirut (7 teachers). In the free private sector, the highest percentage was in Mount Lebanon (suburbs) (15 teachers), and UNRWA showed very weak support.

It can be concluded that Mount Lebanon (suburbs) and the North receive the highest levels of technical support, indicating a concentration of resources in these governorates. Beirut, the South, and Baalbek-Hermel show the lowest allocation of technical support, especially in the public sector. The results indicate a discrepancy between sectors, with the non-free private sector providing the largest contribution in technical support, while UNRWA and the free private sector need to strengthen their support.

ii. By Governorates

Teachers in Mount Lebanon (suburbs) and the North report the highest levels of technical support (131 teachers, or 25.1%, and 93 teachers, respectively). These are followed by Mount Lebanon (excluding suburbs) (62 teachers), the Bekaa (57 teachers), and Nabatieh (47 teachers). Meanwhile, Beirut (32 teachers, or 6.1% of the total) and the South (30 teachers) show very little technical support, with Baalbek-Hermel having the lowest percentage among the governorates (26 teachers).

Item 4: Providing Training for Teachers on Using Technology

i. By Education Sectors

School administrations in the non-free private sector provide the highest percentage of training for teachers (439 teachers, or 54.1%, the highest percentage), especially in Mount Lebanon (suburbs). The non-free private sector recorded the highest percentage of training for teachers (151 teachers), followed by the public sector (266 teachers, or 32.8% of the total). The highest contribution in the public sector was recorded in the North (60 teachers), while the lowest percentage was in Beirut (5 teachers). In the free private sector, the total percentage was 12.7%, or 103 teachers. The highest percentage in this sector was in Mount Lebanon (suburbs) (19 teachers), while the lowest contributions were in Beirut and Baalbek-Hermel (1 teacher each). UNRWA provides very limited training.

ii. By Governorates

Mount Lebanon (suburbs) recorded the highest training rates (189 teachers, or 23.3%, the highest percentage), while Baalbek-Hermel had the lowest percentage of teachers (52 teachers) who felt the administration did not provide adequate training on using technology. Beirut recorded the lowest levels of training (53 teachers, or 6.5% of the total). The North ranked second in terms of providing teachers with training on using technology (133 teachers), followed by Mount Lebanon (excluding suburbs) (83 teachers), Nabatieh (82 teachers), Akkar (80 teachers), the Bekaa (79 teachers), and the South (60 teachers).

Item 5: Providing Electronic Educational Resources

i. By Governorates

Mount Lebanon (suburbs) dominates the distribution of electronic educational resources (110 teachers, or 21.7%, the highest percentage), followed by the North (103 teachers). The Bekaa

and Mount Lebanon (excluding suburbs) are tied with 58 teachers each, followed by Nabatieh (55 teachers), Akkar (31 teachers), Baalbek-Hermel (30 teachers), and Beirut recorded the lowest levels (29 teachers, or 5.7%).

ii.   By Education Sectors

The non-free private sector provides the largest percentage of resources (46%, the highest percentage), with a clear focus on Mount Lebanon (suburbs) (84 teachers). Only 7 teachers in both the South and Akkar felt the administration provided electronic educational resources. In the public sector, 44.4% of teachers (225 teachers) believe the administration provides electronic educational resources. The highest percentage in the public sector was recorded in the North (58 teachers), and the lowest was in Beirut (8 teachers). In the free private sector, the total number was 47 teachers (9.3%), with Mount Lebanon (excluding suburbs) having the highest percentage of teachers who believe the administration provides these resources. The lowest contributions were recorded in Beirut and Akkar (1 teacher in each). UNRWA provides very limited resources.

The responses from teachers indicate that Mount Lebanon (suburbs) and the North have the highest percentage of educational resources, reflecting a concentration of efforts in these two governorates. Beirut, the South, Akkar, and Hermel recorded the lowest levels of resource provision, especially in the public and free private sectors. There is also a significant disparity between sectors, with the non-free private sector providing the largest share of support in all areas, while UNRWA needs to enhance its role in providing technical support, training, and resources.

There is a marked variation in the distribution of support between governorates and sectors, with some enjoying more support in terms of training and technologies compared to others, which suggests the need for more equitable allocation of resources.

Among the options for the support provided by school administrations to teachers, the statement "Encouraging teachers to use technology" was the most common form of support across all governorates and sectors. Public schools focus more on encouragement and allocating time for technology use in classrooms, but they suffer from a lack of resources or training compared to private schools.

The highest percentage of support was recorded in Akkar, in the public sector, with 56.6%.

Private non-free schools rely more on technology compared to public schools and provide broader support in terms of training, electronic resources, and technical support.

Summary

The results of the Questionnaires directed at principals, supervisors, coordinators, and teachers regarding the support provided for using technology show significant variation between governorates and educational sectors in Lebanon. In the area of "Encouraging teachers," the public sector leads with high encouragement, especially in the governorates of the North, Akkar, and Mount Lebanon (suburbs), while Beirut and Baalbek-Hermel show low rates. In "Providing Training," Mount Lebanon (suburbs) ranks first, followed by the North and the Bekaa, with notable

weakness in Beirut. "Technical Support" is more prominent in the non-free private sector, especially in Mount Lebanon (suburbs), while the public sector shows weakness in most governorates. Finally, "Allocating Time for Teachers" is a priority in the public sector in the North and Nabatieh, with a clear decline in Beirut and Baalbek-Hermel.

2.3.   Results of the Open- ended Question: What are the training needs related to technology that you consider essential for developing your skills as a teacher?

Teachers were asked an open-ended question regarding their training needs related to technology. After extracting the responses, most of which were similar and repetitive, the answers were categorized into broad themes, each covering specific sub-needs. These categories included: infrastructure and devices, technical skills, professional training and development, administrative support, and integrating technology into education.

Teachers requested training on the technological devices used in the teaching process, training on applications, development of digital content, and training on modern technologies such as artificial intelligence applications and data analysis. They also asked for technical support and infrastructure, as well as continuous training through regular courses and workshops.

It was found that there is a major need for training on using technology and electronic devices in education in the governorates of the North, Akkar, Baalbek-Hermel, and Nabatieh, with a lower degree of need in the governorates of Beirut, Mount Lebanon (suburbs and non-suburbs), the South, and the Bekaa in ascending order. The need for training on artificial intelligence applications was common among all teachers in all governorates, with a particular focus in Beirut and Mount Lebanon (non-suburbs). Almost all teachers in all sectors and governorates expressed a need for continuous training. The need for providing devices, internet access, and infrastructure was most prominent in Akkar, followed by Baalbek-Hermel, the South, the North, Nabatieh, the Bekaa, Beirut, and lastly, the governorates of Mount Lebanon, which appeared to have fewer major issues in providing devices, internet, and infrastructure. Teachers in all sectors and governorates require technical support, with additional emphasis on the peripheral governorates.

The needs mentioned above are essential for teachers' work to the extent that they cannot effectively teach without acquiring the technological skills that enable them to do so. Since technology has been widely integrated into the educational process in recent years, teachers should have been trained in its use, especially considering that they taught remotely during the COVID-19 pandemic. If they faced difficulties at that time due to schools' lack of preparedness to meet the minimum requirements, it is expected that efforts have been made to address this deficiency in order to later focus on advancing technology topics, such as training on artificial intelligence applications and improving infrastructure.

The developed curricula rely heavily on the use of technology, dedicating significant space to it. While interviews with students, educational officials, and curriculum developers focused on digital content and integrating technology into education, it is assumed that these efforts should

have been preceded by basic steps: preparing teachers technologically and meeting their essential technological needs so that they can progress to the subsequent stages.

2.4. Results of the Open -ended Question addressed to School Supervisors: What are the training needs related to technology that you consider essential for developing your skills?

An open question was posed to school supervisors regarding their training needs related to technology. After collecting responses, the answers were classified into categories that covered homogeneous types of needs. These categories were centered around major themes. Notably, some of the supervisors' answers combined training needs with the availability of technological devices, so responses that did not pertain to the needs were excluded. The following conclusions were drawn:

There is an urgent need for supervisors to attend courses in information technology and computer programs (the most frequently mentioned in the responses). Additionally, there is a need for training in educational technology (e-learning platforms and interactive boards), as well as specialized courses in using technology for administration and communication, including organizing activities, class schedules, and communicating with parents. There is also a demand for specialized technical support to ensure the effectiveness of training, as well as a need for ongoing training to keep up with technological developments. Training in artificial intelligence and advanced technologies, including sophisticated software tools to better support education and training, is also necessary. Furthermore, supervisors expressed a need for training in remote education (training in remote learning tools), as well as specialized courses in teaching soft technological skills (managing communication and using digital tools). Additional needs include training in printing and software, specialized courses in using educational technology and interacting with digital media, and lastly, supervisors indicated a need for training that has both administrative and technical aspects.

It seems that supervisors' emphasis on the necessity of these courses indicates that they are not proficient in the skills provided by such courses. This creates the impression that supervisors in both the public and private sectors lack professional preparation and are not adept at dealing with modern methods and technological tools. This places their role in the school outside the knowledge-based and contemporary framework required by the developed curricula, which also demands a certain level of professional and technological preparedness for other school staff members.

2.5. Summary: Answer to Research Question 3 (Human Factors Affecting School Readiness)

Examining the perspectives of principals, supervisors, coordinators, and teachers on the influence of human factors on school readiness for implementing the developed curricula revealed

notable differences in how these factors affect the readiness of public schools compared to private schools. The data showed a lack of training and technical support for teachers in the public sector, particularly in peripheral governorates such as the North, Akkar, and Baalbek-Hermel, where the most common responses identifying training and technical support as "in need of development" and "completely inadequate" were reported. In contrast, the private sector (both free and non-free) showed much better performance, with higher percentages of "good" and "very good" ratings, especially in the governorates of Beirut and Mount Lebanon (both regions). Additionally, the public sector faces challenges with teachers' proficiency in applying remedial support programs and emotional social support, while the private sector, particularly the non-free sector, performs positively in terms of proficiency.

From a material perspective, the results indicate that public schools face significant challenges related to the maintenance and updating of electronic devices. The categories "in need of development" and "completely inadequate" were the most common, with the private sector showing clear superiority in this area, particularly in Beirut and Mount Lebanon. Furthermore, the public sector suffers from a shortage of technical support teams dedicated to dealing with technology, which exacerbates the gap between the public and private sectors. This calls for urgent solutions in the public sector, including enhancing training, providing technical support teams, and updating infrastructure to achieve readiness for implementing the developed curricula.

The results scientifically indicate that the human factors' readiness is weak in the public sector and requires serious interventions to enhance capabilities, while the private sector is closer to readiness, though not fully complete.

To cross-check the results of the Questionnaires on Research Question 3 regarding the impact of human factors on school readiness to implement the developed curricula, two open questions were posed to teachers and supervisors about the training needs related to technology that they consider essential for developing their skills. The findings showed that the human factors affecting the readiness of public schools to implement the developed curricula are primarily linked to the ability of teachers and supervisors to handle technology and meet the required training needs.

The responses revealed that teachers in the public sector suffer from a significant lack of technological skills, with an urgent need for training on the use of educational devices, applications, digital content development, and modern technologies like artificial intelligence and data analysis. It was evident that peripheral governorates, such as Akkar, the North, and Baalbek-Hermel, suffer more from a lack of training and technical support compared to other governorates.

As for the supervisors, their need for courses in information technology, using e-learning platforms, and administrative technology (such as managing activities and class schedules) emerged. They also requested specialized courses in artificial intelligence and remote learning tools, reflecting a general weakness in professional and technical preparation.

The results of the open questions indicated that the training needs are not supplementary but essential for enabling school staff to keep up with the requirements of the developed curricula,

which heavily rely on technology. The lack of providing these trainings weakens the ability of public schools to implement these curricula compared to the private sector, which enjoys higher readiness.

2.6. Material Factors Affecting Public Schools' Readiness to Implement the Developed Curricula

The second part of the third research question included several points related to material factors such as the availability of interactive whiteboards, projectors, computers, as well as facilities like laboratories, libraries, and playgrounds. Additionally, the availability of facilities and services for learners with special needs was also addressed. The questions were answered by principals, supervisors, coordinators, and teachers. The responses were presented by identifying these factors in both the public and private sectors, according to the governorates, followed by a comparison between the sectors to identify the areas of impact for these factors and a summary of the results from the four Questionnaires for each item in the question. The answers for each item were as follows:

Answering the Question: The Availability Technological Tools in Classrooms

2.6.1. Item 1: Availability of Projectors (LCD) in Each Educational Cycle

● **In the Kindergarten Stage**

The data showed clear variations in the availability of LCD projectors between different sectors (public, private free, private non-free, and UNRWA schools), reflecting varying challenges depending on the sector and governorate.

In the public sector, principals reported a clear shortage in Beirut, where 50% of classrooms lack devices, with significant variations in other governorates. Mount Lebanon (suburbs) recorded the highest shortage percentage at 54.5% for devices "not available (on demand)", while Baalbek-Hermel showed the best percentage at 36.4% for devices "fully available." Coordinators emphasized continued challenges, particularly in Bekaa and Baalbek-Hermel, where shortages were evident. Teachers reported that the full supply rate was 34% in Beirut, with noticeable shortages in the North and South.

In the private free sector, the data shows high supply rates, with Beirut at 100% availability, and a notable advantage in the South. Principals and supervisors confirmed the availability of adequate equipment in most schools, while teachers reported moderate availability in the North and South.

In the private non-free sector, performance was better than the public sector, with supply rates reaching 80% in Mount Lebanon (excluding suburbs) and 42.9% in the South. Supervisors and coordinators confirmed relatively high supply rates, with Beirut and Mount Lebanon outperforming other governorates.

In UNRWA schools, the North faced a severe shortage, with 100% of devices "not available," while the South showed a slight improvement with 50% of devices "available in most classrooms." Teachers and coordinators explained that UNRWA schools face significant challenges, making them the least equipped among the sectors.

Overall, the private sector, both free and non-free, had better availability of equipment compared to the public sector. However, UNRWA schools still face a significant shortage, negatively affecting the educational process in most governorates.

- **In the First Cycle of Basic Education**

Principals in the public sector reported complete availability of devices at 46.9%, with a total lack in 16.3% of schools. Supervisors confirmed full availability at 37.3%, while 15.2% of schools rely on alternative solutions. Coordinators reported a 33.9% full availability rate, with some schools depending on partial availability at 27.1%. Teachers reported a full availability rate of 43.2%, with a shortage in 12% of classrooms.

In the private free sector, principals reported complete availability of devices at 26.7%, while supervisors noted 29%. Coordinators showed significant variations, with availability rates ranging between 33.3% and 52.4% across governorates. Teachers stated the full availability rate at 30.6%.

In the private non-free sector, principals reported complete availability of devices at 32.7%. Supervisors confirmed a higher rate of 37.6%, while coordinators mentioned some governorates reaching 60%. Teachers noted a full availability rate of 35.4%.

In UNRWA Schools, the principals reported that 50% of the schools provide devices completely, with variations between governorates. Supervisors indicated a severe shortage, as 66.7% of the schools lack devices, while coordinators and teachers confirmed clear disparities depending on the location.

Regarding the governorates, principals stated that Beirut recorded a complete availability rate of 27.8%, while Mount Lebanon (excluding suburbs) outperformed with 59.4%. In the North, the availability rate was 38.2%, while Bekaa showed better performance at 48%. In the South and Nabatieh, the rates were 36% and 32.1%, respectively, with Akkar recording the lowest at 28.6%, and Baalbek-Hermel at 57.9%.

Supervisors confirmed that the free private sector in Beirut had full availability (100%), while Mount Lebanon suburbs faced a significant shortage at 29.4%. The North recorded 47.4%, and Bekaa, the South, and Nabatieh showed medium availability, with major challenges in Akkar and Baalbek-Hermel.

The coordinators' results indicated that Beirut recorded a full availability rate of 33.3% in public schools, while Mount Lebanon suburbs reached 41.2%. The North suffered from a low rate of 33.9%, while Bekaa showed significant improvement at 60%. The South recorded 52.4%, with significant challenges in Akkar and Baalbek-Hermel.

Teachers reported that full availability in Beirut was 30%, with better performance in the non-free private sector. In Mount Lebanon suburbs, the availability rate reached 58.3%, while in the North, it was 43.7%. Bekaa recorded 52%, and the South 51.6%, while Nabatieh recorded 33.9%. Akkar and Baalbek-Hermel continued to face a significant shortage, with the lowest equipment availability rates among the governorates.

● **In the Second Cycle of Basic Education**

In the public sector, the availability of LCD projectors varied significantly between governorates according to the principals, supervisors, coordinators, and teachers. The principals indicated that Beirut had a good availability rate of 50%, while Mount Lebanon suburbs faced significant challenges at 36.4%. Bekaa stood out with the best availability at 76.9%, followed by Baalbek-Hermel at 63.6%, while the North recorded 45.7%. Supervisors confirmed similar results, with Nabatieh at 56.5% and Bekaa at 50%, while Baalbek-Hermel suffered a sharp decline at 17.6%.

In the free private sector, principals reported that Beirut achieved full availability (100%), while Baalbek-Hermel suffered a complete lack of devices. Supervisors indicated a high availability rate in Mount Lebanon suburbs at 75%, while the sector overall faced a severe shortage in classroom equipment. In the non-free private sector, principals and supervisors agreed on Mount Lebanon's excellence, with principals reporting a good rate, while supervisors recorded 83.3%. Akkar stood out with 0% according to supervisors.

The coordinators' opinions reflected a similar disparity, with Beirut recording 33.3% in the public sector, while Mount Lebanon and Bekaa showed good availability rates of 41.2% and 60%, respectively. The free private sector showed good availability in Mount Lebanon, while the non-free private sector showed encouraging availability in the North and Mount Lebanon.

Teachers clarified that Beirut recorded 33.3% in the public sector, while the free private sector recorded 50%. Mount Lebanon suburbs recorded 58.3% of fully equipped classrooms in the public sector, while the non-free private sector recorded 41.9%. Bekaa showed good performance at 53.1%, while the South recorded 54.9% of fully available classrooms in the public sector.

Overall, the public sector faces significant disparities between governorates in terms of projector availability, while the free private sector shows a general lack, and the non-free private sector stands out as the best equipped, particularly in Mount Lebanon.

Regarding the governorates, the public sector results indicated notable variations in projector availability, according to principals, supervisors, coordinators, and teachers. Principals confirmed that Beirut recorded a good availability rate of 50%, while Mount Lebanon suburbs had a very low rate of 27.3%. Bekaa topped the rankings with high availability rates at 76.9%, followed by Baalbek-Hermel at 63.6%. In the free private sector, principals noted that Beirut achieved full availability (100%).

For the supervisors, Nabatieh stood out as the best governorate in the public sector with an availability rate of 56.5%, while Baalbek-Hermel recorded a very low rate of 17.6%. In the free

private sector, Mount Lebanon suburbs excelled with a rate of 75%. In the non-free private sector, Mount Lebanon (excluding suburbs) demonstrated impressive performance with a rate of 83.3%.

Coordinators' opinions confirmed a similar disparity in the public sector, where Beirut recorded 33.3% of fully equipped classrooms, while Mount Lebanon reached 41.2%. Bekaa maintained its excellent performance with 60%. In the free private sector, Mount Lebanon led with an availability rate of 80%. The non-free private sector showed good performance in the North, with governorates there recording good availability rates.

From the teachers' perspective, the public sector in Beirut recorded an availability of 33.3%, while in Mount Lebanon (suburbs), the rate increased to 58.3%. Bekaa showed a good level of availability at 53.1%. Overall, there are significant variations in projector availability between governorates and sectors, with the free private and public sectors showing better performance compared to the public sector in some governorates.

- **In the Third Cycle of Basic Education**
Regarding supervisors, the data showed that the public sector achieved relatively good availability rates in some governorates, such as Nabatieh, which recorded the highest availability rate of devices at 60.9%. In the free private sector, Beirut and Baalbek-Hermel faced severe shortages of devices. In the non-free private sector, Mount Lebanon (excluding suburbs) performed best, with equipment availability at 80%. UNRWA schools faced severe shortages of devices, with absence rates reaching 66.7% in many classrooms.

For the coordinators, the data pointed to clear challenges in some governorates. In the public sector, Beirut and Mount Lebanon suburbs showed low availability rates, while the South and Bekaa performed better comparatively. The non-free private sector recorded the best availability rates, with 83.3% of classrooms in Mount Lebanon (excluding suburbs) fully equipped. In UNRWA schools, the situation was worse, with significant disparities between governorates and almost complete absence of devices in most classrooms.

For teachers, in the public sector, governorates such as Mount Lebanon (suburbs) and Nabatieh showed relatively good equipment availability rates, ranging from 43.7% to 61.7%. In the free private sector, Beirut and Baalbek-Hermel faced complete device shortages, while governorates such as the South recorded better availability rates. In the non-free private sector, teacher equipment rates were high in Mount Lebanon (excluding suburbs), with 83.3%. UNRWA schools continued to record the lowest results, with almost complete absence of devices in most classrooms.

- **In the Secondary Stage**
In the public sector, Beirut recorded an availability of devices at 50% of fully equipped classrooms, representing a moderate rate compared to other governorates. Mount Lebanon (suburbs) faced significant challenges, with classrooms unavailable (under request) at 36.4%. In the North, the rate of unavailable classrooms reached 22.9%, indicating clear equipment shortages. On the other hand, Bekaa was the most distinguished, recording 61.5% of fully equipped classrooms, showing significant investment in technological infrastructure there. On the supervisory level, the availability rate of LCD projectors was approximately 50%, indicating

moderate support for their role in educational supervision. For coordinators, the rate was lower at 35%, reflecting challenges in providing tools supporting coordination. Teachers recorded the lowest rate at 20%, indicating a significant lack of technological tools to support improving education quality.

In the free private sector, data showed significant variations between governorates. In Beirut, all classrooms were fully unavailable at 100%, indicating a complete lack in this area. Mount Lebanon (suburbs) recorded relatively better results, with classrooms fully available at 50%. In the North, the situation was more deteriorated, with a rate of unavailability at 83.3%. On the other hand, Bekaa and the South showed more balanced rates. For supervisors, the availability rate in this sector was approximately 60%, a better level than in the public sector, indicating a greater focus on supporting supervision. For coordinators, the rate was 45%, reflecting a moderate level of technological support. Teachers recorded 30%, a relative improvement compared to the public sector but still far from the desired level.

In the non-free private sector, the best performance was recorded across all sectors. In Mount Lebanon (excluding suburbs), 80% of classrooms were fully equipped, indicating significant technological investments. Beirut and the North showed a balanced distribution between partial and full availability, while the South recorded a lower full availability rate of 14.3%. On the supervisory level, the availability rate was 80%, reflecting strong support for their role. For coordinators, the rate was 70%, indicating good availability to support coordination. Teachers recorded 60%, demonstrating this sector's superiority in providing technological support.

In UNRWA schools, challenges were extremely clear, showing severe shortages of projector devices. In Mount Lebanon suburbs, all classrooms were partially equipped at 100%. In the North, a complete lack of devices was apparent at 100%.

In the South, the situation was more balanced, with 50% of classrooms partially equipped and 50% unavailable. For supervisors, the availability rate of devices was only 25%, reflecting a severe shortage of resources allocated to this role. For coordinators, the availability rate was even lower at 20%, indicating significant challenges in supporting the coordination process. Teachers recorded the lowest rate at 10%, demonstrating a severe lack of technological tools needed to support education.

Regarding the governorates, clear disparities in availability rates were observed. In Beirut, the availability of LCD projectors for supervisors was 70%, while coordinators had 60% and teachers 50%. In Mount Lebanon, the data showed that supervisors reported an availability rate of 65%, coordinators 55%, and teachers 40%. In the North, the rates were lower, with 50% for supervisors, 40% for coordinators, and only 30% for teachers. In Bekaa, the availability rates were lower, with supervisors at 45%, coordinators at 35%, and teachers at 25%. In the South, the situation was relatively better, with availability rates of 60% for supervisors, 50% for coordinators, and 40% for teachers. In Nabatieh, the rates were 55% for supervisors, 45% for coordinators, and 35% for teachers, reflecting the urgent need to improve technological support across various governorates and job levels.

General Conclusions on LCD Projector Availability

In the kindergarten stage, the results indicate a significant disparity in the availability of LCD projectors across sectors and governorates. Public schools and UNRWA schools suffer from major shortages compared to non-free private schools, creating gaps in the quality of education between urban and rural governorates. Rural governorates like Akkar and Baalbek-Hermel face significant challenges, while Beirut and Mount Lebanon enjoy better availability rates, deepening the educational gap.

In the first cycle of primary education, the data show that the public sector suffers from low preparation rates at 46.9%, while the non-free private sector recorded better preparation rates, reaching 60%. Rural governorates such as Akkar and Baalbek-Hermel recorded the lowest preparation rates, while Bekaa showed relatively good performance. UNRWA schools face severe shortages, with 66.7% of their schools lacking devices entirely, significantly impacting the quality of education for refugee children.

In the second cycle of primary education, the analysis reveals a clear disparity in projector availability between sectors. The public sector shows improvements in some governorates such as Nabatieh and Bekaa, while governorates like Baalbek-Hermel and Mount Lebanon suburbs suffer from significant shortages. The free private sector shows varied performance, with better availability in Mount Lebanon and the suburbs of Beirut, but notable shortages in governorates like Baalbek-Hermel. UNRWA schools continue to face severe shortages of devices, requiring an improvement in the distribution of educational resources.

In the third cycle of primary education, it is clear that Mount Lebanon (excluding suburbs) achieves the best preparation rates, while Beirut and Baalbek-Hermel face severe shortages. The non-free private sector stands out as the best equipped compared to the public and free sectors, with governorates like Mount Lebanon showing excellent performance. Meanwhile, UNRWA schools continue to face significant challenges, reflecting a lack of the necessary infrastructure to improve education quality.

In the secondary stage, there is an improvement in some governorates like the South, Bekaa, and Mount Lebanon, while other governorates such as Beirut, Akkar, and the North suffer from major shortages. The non-free private sector continues to provide the best preparation rates, with notable superiority in Mount Lebanon. However, UNRWA schools remain in a poor state due to severe resource shortages, requiring ongoing efforts to improve educational conditions and ensure equal opportunities for all students across governorates.

2.6.2. *Item 2: Availability of Interactive Boards (Active Board)*

● **In the Kindergarten Stage**

In the public sector, the Questionnaire results from school principals revealed that many schools suffer from significant shortages in the availability of interactive boards, with their complete absence in some governorates such as Beirut, where the rate of complete absence reached 79.7%, and Mount Lebanon at 65.8%. In other governorates like the South (52.3%) and Bekaa

(60.4%), interactive boards are only partially available. In free private schools, Beirut and the South suffered most from the lack of interactive boards, with Beirut recording a shortage rate of 85.2% and the South 72.1%. However, some improvement was observed in governorates like Mount Lebanon, which recorded a shortage rate of 68.7%. The principal also mentioned that the non-free private sector showed a more balanced distribution of interactive boards, but it still suffers from notable shortages in some governorates, where the shortage rates ranged between 33% and 44.5%.

For supervisors, the collected results showed that the public sector faces significant shortages in interactive boards, with about 79.7% of schools lacking boards. The need to intensify efforts to provide this technology in the future is urgent. It also shows that both free and non-free private education suffer from significant shortages in interactive boards, with the percentages ranging from 65.8% to 77.4% of schools lacking these devices.

Regarding coordinators, the results indicate a significant disparity in the availability of interactive boards across governorates. In Beirut, the public sector suffers from a severe shortage, with 53.3% of classrooms lacking interactive boards, while the situation was relatively better in governorates like Mount Lebanon (48.9%) and some governorates in Bekaa (45.2%). In free private education, Beirut recorded a shortage of 85.2% and the South 72.1%, while some improvements were observed in Mount Lebanon, where interactive boards were partially available in 68.7% of schools.

For teachers, the results showed that about 41.8% of classrooms in the public sector were not equipped with interactive boards. In free private education, the percentage rose to 44.5%, while in the non-free private sector, it was slightly lower at 33%. This shortage reflects the significant challenges faced by the education sector in providing these devices in schools across most governorates, especially in Beirut, which recorded the highest shortage rates.

When comparing these results by governorates, in Beirut, principals reported a severe shortage of interactive boards, stating that 79.7% of schools lacked these devices. Supervisors also mentioned that availability in Beirut was very low, with many schools completely lacking interactive boards. Coordinators noted that 79.7% of schools in the public sector and 85.2% in the free private sector in Beirut were facing a major shortage of interactive boards, while teachers added that Beirut is among the most affected governorates, with 79.7% of classrooms lacking interactive boards.

In Mount Lebanon suburbs, principals indicated that the governorate suffered from a 65.8% shortage in the availability of interactive boards. Supervisors stated that there was a significant shortage in Mount Lebanon suburbs. The results from coordinators revealed disparities in the distribution of interactive boards in Mount Lebanon suburbs, with partial availability in some areas. Teachers confirmed that Mount Lebanon suburbs also faced a significant shortage, with a 65.8% lack of interactive boards.

In the North, principals reported that schools in the governorate suffer from a significant shortage of 72.5% in interactive boards. Supervisors confirmed the substantial shortage in the availability of interactive boards in the governorate, while coordinators noted that the North

recorded partial shortages in interactive boards in some schools. Teachers showed that the North suffers from a severe shortage of 72.5% in the availability of interactive boards.

In Bekaa, principals mentioned that the region achieved a relatively better availability of interactive boards, with 45.2% of principals reporting partial availability. Supervisors indicated that Bekaa had a relatively good availability compared to other governorates. Coordinators highlighted that Bekaa showed a better distribution of interactive boards at 45.2%. Teachers also confirmed, with 45.2%, that Bekaa was one of the governorates that showed notable improvements in the availability of interactive boards.

In the South, principals pointed out that the governorate suffers from a shortage of 52.3% in the availability of interactive boards. Supervisors confirmed that the South recorded a severe shortage of 72.1% in the availability of interactive boards. Coordinators also confirmed that the South faces partial shortages in the availability of interactive boards, with a rate of 72.1%. Teachers pointed out that the South recorded a relative improvement, with a shortage rate of 52.3%.

In UNRWA schools, principals reported a total lack of interactive boards in most governorates, with complete absence in kindergarten classes. Supervisors added that UNRWA schools lack interactive boards, with significant shortages in many governorates. Coordinators noted that UNRWA schools face major challenges in the availability of interactive boards, with severe shortages in some governorates. Teachers indicated a complete absence of interactive boards in most UNRWA schools, with partial availability in a few limited governorates.

From this comparison, it is clear that Beirut, Mount Lebanon suburbs, and the North are among the governorates most affected by the shortage of interactive boards, while Bekaa and the South show relative improvements.

- **In the First Cycle of Basic Education**

In the public sector, principals reported that 44.9% of schools lack interactive boards, and 43.5% are on-demand, meaning that 88.4% of schools are either not equipped or need to be equipped. Supervisors confirmed that 39.6% of schools lack interactive boards, 35.9% are on-demand, and only 5.1% are fully equipped in most classrooms. Coordinators indicated that 25-40% of schools lack equipment, while 45-55% offer partial services, and 15-20% offer full services. Teachers pointed out that 40.6% of classrooms lack interactive boards, with variations between governorates.

In the free private sector, principals reported that 43.3% of schools lack interactive boards, with improvements in some governorates like Baalbek-Hermel, where 33.3% are fully equipped. Supervisors confirmed that 54.8% of schools do not have interactive boards, 19.4% are on-demand, and only 6.5% are fully equipped. Coordinators clarified that 70-90% of schools suffer from shortages, especially in Beirut, which recorded a 100% shortage. Teachers' results showed that 46.9% of classrooms lack interactive boards, with very low equipment rates.

In the non-free private sector, principals reported that 44.9% of schools lack interactive boards, with better performance in Beirut and Mount Lebanon, where the equipment rate reaches 22%. Supervisors indicated that 35.9% of schools lack interactive boards, 29.9% are on-demand,

and 14.5% are fully equipped. Coordinators reported that 25-33% of schools suffer from shortages, with 60% providing partial services. Teachers clarified that 35% of classrooms lack interactive boards, with higher equipment rates compared to the public and free private sectors.

In UNRWA schools, principals reported that 25% of schools are equipped in most classrooms, while supervisors confirmed that 100% of schools lack interactive boards. Coordinators and teachers did not provide detailed information about UNRWA.

Comparing across governorates

Beirut showed a significant shortage, with principals stating that 50% of schools lack interactive boards, and 37.5% are on-demand. In Mount Lebanon suburbs, principals reported that 27.3% of schools lack interactive boards. Bekaa, the South, and Nabatieh suffered from varying shortage rates, with partial availability in some governorates. Akkar recorded high shortage rates, with 55% on-demand. Baalbek-Hermel was the least equipped, with principals reporting that 63.6% of schools lack interactive boards.

- **In the Second Cycle of Basic Education**

The results, by sector, indicate that in the public sector, principals reported that 40.1% of schools lack interactive boards, and 35.9% are not available but are on demand, meaning that 76% of schools suffer from a shortage of this technology. Supervisors confirmed that 40.1% of schools lack interactive boards, and 35.9% are on demand, with only 5.5% having interactive boards in all classrooms. Coordinators reported that the unavailability rates range between 32.3% and 40%, with partial availability of up to 60% in some governorates, and noted significant variation in the distribution of boards among classrooms. Teachers reported that 39.2% of classrooms lack interactive boards, with significant variation between governorates, with some governorates having unavailability rates of up to 50%.

In the free private sector, principals stated that 54.8% of schools lack interactive boards, with 19.4% on demand, meaning that 74.2% of schools lack this technology. Supervisors reported that 54.8% of schools lack interactive boards, and 19.4% are on demand, with only 6.5% having interactive boards in all classrooms. Coordinators mentioned that the unavailability rate in this sector reaches 100% in some governorates, such as Beirut, with partial availability in other governorates ranging from 25% to 50%. Teachers pointed out that 46.9% of classrooms lack interactive boards, with the unavailability rate reaching 67.5% in some governorates.

In the non-free private sector, principals reported that 35% of schools lack interactive boards, with 31.6% on demand, and 14.5% of schools provide interactive boards in all classrooms.

Supervisors found that 35% of schools lack interactive boards, with only 14.5% having interactive boards in all classrooms. Coordinators indicated that unavailability rates in this sector range from 25% to 50%, with partial availability in most governorates. Teachers noted that 35.1% of classrooms lack interactive boards, with only 13.3% of classrooms fully equipped.

In UNRWA schools, principals reported that the unavailability rate of interactive boards is 100%. Supervisors confirmed that 100% of UNRWA schools lack interactive boards, reflecting a

severe shortage of technological equipment. Coordinators and teachers did not provide information about the availability of boards in UNRWA schools, and no separate statistics were given for these schools.

Distribution of results by governorates

In Beirut, principals reported that 50% of classrooms lack interactive boards, with 37.5% on demand, and there was a complete absence of categories like "Available in most classrooms" or "Available in all classrooms." Supervisors said that 27.3% of schools lack interactive boards, with a large portion on demand, reaching 47.8%. Coordinators mentioned that 40% of classrooms lack interactive boards, with 60% offering partial availability. Teachers indicated that 50% of classrooms in the public sector are not equipped with interactive boards, and 40% in the private sector.

In Mount Lebanon (suburbs), principals mentioned that 63.6% are on demand, with a complete absence of full availability. Supervisors stated that 47.4% of schools lack interactive boards, with a very small portion fully equipped. Coordinators reported that 25% of classrooms lack interactive boards, with 50% offering partial availability and 25% available in most classrooms, reflecting a more balanced distribution. Teachers' results showed that 35% of classrooms are not equipped with interactive boards, with 5% fully equipped, and significant variation between schools.

In the North, principals stated that 57.1% are on demand and 5.7% are fully equipped, with plans to increase equipment. Supervisors mentioned that 47.4% of schools lack interactive boards, with only a small portion fully equipped. Coordinators reported that 32.3% of classrooms lack interactive boards, with 48.6% offering partial availability and 13.5% fully equipped, with plans to improve equipment. According to teachers, 40.4% of classrooms lack interactive boards, with 9.6% fully equipped.

In Bekaa, principals reported that 7.7% of schools have interactive boards in most classrooms, with a large portion on demand. Supervisors noted that 44.4% of schools are on demand, indicating future plans to equip schools. Coordinators mentioned that 25% of classrooms lack interactive boards, with 70% offering partial availability. Teachers reported that 32.7% of classrooms are not equipped with interactive boards, with 11.2% fully equipped.

In the South, principals reported that 35.7% of schools lack interactive boards, with 35.7% offering partial availability, and no full availability. Supervisors found that 35.7% of schools are on demand, with 50% in the free private sector. Coordinators reported that 35.7% of classrooms lack interactive boards, with 35.7% offering partial availability, and no full availability. Teachers indicated that 32.8% of classrooms are not equipped with interactive boards, with 9.8% fully equipped, and plans to improve availability rates.

In Akkar and Nabatieh**,** the percentages are similar to those in other governorates, with a tendency toward a greater shortage of equipment compared to other regions.

- **In the Third Cycle of Basic Education**

Looking at the results by sector, principals in the public sector reported that 44.9% of schools lack interactive boards, and 43.5% are on demand, meaning that 88.4% of schools face a significant shortage of interactive boards. Supervisors stated that 39.2% of schools lack boards, and 35% are on demand, with only 5.5% having interactive boards in all classrooms. Teachers mentioned that 39.5% of classrooms lack interactive boards.

In the free private sector, principals reported that 43.3% of schools lack interactive boards, with a better rate in some governorates, such as Baalbek-Hermel, where the percentage of boards available in all classrooms reaches 33.3%. Supervisors pointed out that 54.8% of schools lack interactive boards, 25.8% are on demand, and only 3.2% have boards in all classrooms. Teachers reported that 47.8% of classrooms lack interactive boards.

In the non-free private sector, principals stated that 44.9% of schools lack interactive boards, with better performance in Beirut and Mount Lebanon suburbs, where the percentages are 22.2% and 21.2%, respectively. Supervisors mentioned that 36.8% of schools lack interactive boards, 31.6% are on demand, and 13.7% have boards in all classrooms. Teachers reported that 34.5% of classrooms lack interactive boards, with only 12.7% fully equipped.

In UNRWA schools, principals stated that 25% of schools have interactive boards in most classrooms, while supervisors confirmed that 100% of UNRWA schools lack interactive boards, reflecting a complete shortage of this equipment.

Distribution of results by governorates

In Beirut, principals reported that 50% of schools lack interactive boards, and 37.5% are on demand. Supervisors stated that the largest percentage of schools in Beirut lack interactive boards. Teachers indicated that 40% of classrooms in the public sector lack interactive boards, 50% in the free private sector, and 47.5% in the non-free private sector.

In Mount Lebanon (suburbs), principals stated that 27.3% of schools lack interactive boards, and 63.6% are on demand. Supervisors noted that a high percentage of schools in this governorate lack interactive boards. Teachers mentioned that 33.3% of classrooms in the public sector lack interactive boards, 37.8% in the free private sector, and 28.8% in the non-free private sector.

In Mount Lebanon (outside the suburbs), principals reported that 50% of schools lack interactive boards, and 44.4% are on demand. Supervisors noted that the best results were in the free private sector, where 25% of schools are fully equipped. Teachers mentioned significant variation in coverage rates between different sectors.

In the North, principals reported that 37.1% of schools lack interactive boards, and 51.4% are on demand. Supervisors noted that there are low availability rates across all sectors. Teachers indicated that there are high percentages of classrooms lacking interactive boards in all sectors.

In Bekaa, principals reported that 53.8% of schools lack interactive boards, and 38.5% are on demand. Supervisors noted that the best results were in the non-free private sector, with 28.6%

of schools fully equipped. Teachers mentioned that 32.7% of classrooms in the public sector lack interactive boards, 41.2% in the free private sector, and 21.4% in the non-free private sector.

In other governorates such as the South, Nabatieh, Akkar, and Baalbek-Hermel, the unavailability rates varied between 35% and 63.6%, depending on the governorate and sector, with low percentages of full coverage in most of these regions.

- **In the Secondary Stage**

In the public sector, the availability and use of interactive boards varied across governorates. In Beirut, 50% of classrooms were without boards, while the partial availability was low. Baalbek-Hermel experienced the best availability rates, reaching 23.5%. Overall, 42.5% of teachers reported the absence of interactive boards, while only 22.3% mentioned daily use.

In the free private sector, schools suffer from a severe shortage of interactive boards, especially in the South, where the absence rate was 100%. Overall, 69.6% of teachers reported that the boards were unavailable, and only 9.5% said they were partially available, with low usage as 34.7% stated they did not use them at all.

In the non-free private sector, the availability rates were relatively higher, especially in Beirut and Mount Lebanon, where 43.1% of teachers reported partial availability of the boards, with a daily usage rate of 21.9%.

In the UNRWA sector, 60.4% of schools were without interactive boards, and 39.6% reported partial availability. The usage rate was low, with 35.1% of teachers never using the boards, and only 16.1% using them daily.

Distribution of results by governorates

Beirut experienced relatively higher availability of boards, with 60%, while 70% of teachers there needed additional training. In Mount Lebanon, the availability rates ranged between 50% and 55%, with 65% of teachers needing training. In the South and Nabatieh, availability was low, with only 50% to 40% of schools equipped with boards, and a significant lack of training remained a major barrier.

In the North and Bekaa, the rates were low, with principals reporting that about 40% of schools had boards, and a significant deficiency in teacher training was noted. Akkar showed very low availability rates, with 50% to 70% of schools without boards, and a near-total absence of full equipment.

In the free private sector, Nabatieh and Akkar were among the most affected governorates, with 75% to 85% of schools lacking interactive boards. The non-free private sector showed relatively better availability rates, especially in Beirut and Mount Lebanon, but still faced major challenges in the North and Bekaa.

General Conclusions for the availability of Active Boards

The results indicate a significant shortage of interactive boards in schools across Lebanon, with availability levels varying greatly between educational sectors and geographical regions. In the public sector, around 44.9% of schools lack interactive boards, including approximately 43.5% of schools where boards are on demand, meaning more than 88% of schools in the public sector either lack them or need them.

The free private sector faces an even greater shortage, with data showing that 43.3% of schools in this sector do not have interactive boards, and this figure increases significantly in some governorates like Beirut, where 100% of schools in this sector lack interactive boards. In the non-free private sector, the shortage ranges between 33% and 44.5%, with some improvement in governorates like Beirut.

Regarding UNRWA schools, data revealed a complete absence of interactive boards in all schools in this sector, which further exacerbates the gap between these schools and the public educational sector. This data underscores the need for urgent steps to provide modern technologies in UNRWA schools to meet the needs of students in this sector.

Differences across governorates

Larger urban governorates such as Beirut and Mount Lebanon showed the highest rates of shortage in interactive boards. For example, in Beirut, data indicated that 79.7% of public schools suffer from a lack of interactive boards, while in Mount Lebanon, the rate is 65.8%. In other governorates like the South and the North, the shortage reaches 52.3% and 72.5%, respectively. However, governorates like Bekaa show lower rates of shortage, although they still face challenges in providing interactive boards.

Supervisors and coordinators noted that there is a significant disparity in availability between different governorates. For instance, in Beirut, 50% of public schools lack interactive boards, while in Baalbek-Hermel, this figure reaches 63.6%, highlighting the major challenges in rural and remote governorates.

Training and Technical Support

Principals and supervisors indicated that there is a significant shortage of training programs on using interactive boards, which prevents full utilization of this technology in classrooms. Teachers in the public sector struggle to use the boards due to a lack of training, which affects the quality of education in classrooms.

Teachers in the free private sector also suffer from a severe shortage of interactive boards, forcing them to rely on traditional teaching methods. While in the non-free private sector, despite some schools having boards, there are still challenges in using them effectively due to a lack of training and ongoing technical support.

The data also shows an urgent need to improve coordination between educational departments in allocating interactive boards to the governorates with the greatest need. While there are some future plans to increase the availability of interactive boards in certain governorates, the

current reality highlights a significant gap in the availability of this technology in all Lebanese schools, which requires immediate intervention at both governmental and educational levels to secure technological equipment in schools.

2.6.3. *Item 3: Availability of Computers*

- **In the Kindergarten**

Principals in the public sector reported a noticeable shortage of computers. In Beirut, 37.5% of schools did not have computers, while only 37.5% provided them on demand. In Mount Lebanon (suburbs), this percentage reached 72.7%, reflecting significant challenges in providing digital technology. In the South, principals indicated that 46.7% of schools were completely without these devices, which affects the quality of digital education. Supervisors in the public sector supported these results, noting high rates of device shortages in the same governorates, making the integration of technology into early education even more difficult. Coordinators also pointed out that the lack of digital resources hinders the effective use of technology. In Beirut and the suburbs of Mount Lebanon, the results showed a significant lack of devices, while the South experienced a major shortage. Teachers expressed their frustration due to the lack of computers in many schools, hindering their ability to provide effective digital education.

In the free private sector, principals faced similar issues, reporting a complete absence of computers in Beirut, while some schools in the suburbs of Mount Lebanon had devices, with a complete absence of computers in the South. Supervisors noted a significant shortage in Beirut, slight improvement in the suburbs of Mount Lebanon, and full availability in the South.

The non-free private sector showed relatively better availability of computers. In Beirut, 33.3% of schools had devices, while in Mount Lebanon (suburbs) the percentage rose to 39.4%. However, there was still a need to improve availability in governorates experiencing shortages. Teachers in this sector expressed relative satisfaction, with some challenges in governorates with significant shortages.

In UNRWA schools, principals reported a major shortage of computers, as most schools lacked these devices entirely. Supervisors confirmed these findings, explaining that the lack of digital resources impedes the use of technology in education. Coordinators described the situation as critical, as most schools lacked digital devices. Teachers in UNRWA schools faced significant challenges due to the absence of computers, weakening their ability to deliver high-quality education.

Governorate Disparities

Clear disparities appeared in the availability of computers in the governorates. In Beirut, 37.5% of schools in the public sector did not provide computers, while in the free private sector, this percentage reached 100%. Supervisors confirmed a similar shortage in the public sector, with a complete absence in the free private sector. Teachers faced significant difficulties in teaching digital curricula due to the lack of devices.

In the suburbs of Mount Lebanon, principals faced a severe shortage of computers, with 72.7% of public sector schools only providing them on demand. The free private sector offered computers in only 25% of schools, while the non-free private sector reached 39.4%. Teachers faced significant challenges due to the lack of availability, with 72.7% of public sector schools offering computers only on request.

In the South, the situation was relatively better compared to other governorates, as all schools in the free private sector provided computers, while only 46.7% of schools in the public sector lacked them. Supervisors and teachers in the South expressed significant improvement in the availability of devices.

In Nabatieh, principals reported a severe shortage of computers, with around 90% of public sector schools lacking these devices. The free private sector faced a complete absence of devices, while the non-free private sector provided computers in only 40% of schools. Supervisors noticed a clear shortage in the public sector, with slight improvement in the non-free private sector.

In Mount Lebanon (excluding suburbs), principals faced a significant shortage, with 70% of public sector schools lacking devices. The non-free private sector provided computers in only 40% of schools. Teachers in this sector faced difficulties integrating technology due to the shortage in 65% of schools.

In the North, principals reported a significant shortage, with 85% of public sector schools lacking computers. The free private sector also faces difficulties, with 95% of schools lacking computers. The non-free private sector provides computers in about 50% of schools. Teachers in the North face major challenges due to the shortage of devices, with 75% of schools experiencing a clear shortage.

- **In the First Cycle of Basic Education**

In the public sector, principals in Beirut indicated that computers were either partially available or completely unavailable, with significant variations compared to other governorates like Mount Lebanon, where more than 60% of principals reported that computers were either unavailable or only available in limited quantities. In the North, about 28.6% of principals stated that computers were only partially available, while in the South, computers were available in only 40% of schools. In Nabatieh, 25% of principals reported full availability of computers. For the supervisors in the public sector, many schools suffered from a major shortage of computers, with 35% of supervisors in Beirut reporting that computers were unavailable, and similar situations were observed in Mount Lebanon and the North. In the South, 40% of supervisors reported that computers were unavailable. As for the coordinators in the public sector, they pointed out the lack of computers in most governorates, with 35% of coordinators in Beirut stating that they were unavailable, while the situation was similar in Mount Lebanon and the North, with slight improvements in the South.

Regarding teachers, 19.8% of them in Beirut reported the unavailability of computers, and the situation in Mount Lebanon and the North was extremely difficult, with many teachers reporting a severe shortage of computers.

In the free private sector, principals in Beirut reported the unavailability of computers, while 50% of principals in Mount Lebanon indicated that computers were fully available. In the North, 83.3% of principals reported the absence of computers, while in the South, computers were fully available. In the Bekaa, the situation varied between schools that provided computers partially or fully. For supervisors in the free private sector, 100% of them in Beirut reported the unavailability of computers, while 40% of supervisors in Mount Lebanon indicated full availability. In the South, computers were fully available. As for the coordinators in the free private sector, many of them reported a significant shortage of computers in Beirut, with slight improvements in Mount Lebanon and the South.

In the non-free private sector, 33.3% of principals in Beirut reported full availability of computers, while 39.4% of principals in Mount Lebanon stated that they were available. In the North, there was a significant shortage of computers, while in the South, computers were not fully available. For supervisors in the non-free private sector, 44.4% of supervisors in Beirut indicated full availability of computers, while 41.7% in Mount Lebanon reported the same. In the North, the situation was similar in terms of the shortage of computers.

As for teachers in the non-free private sector, 33.3% of teachers in Beirut reported full availability of computers, while there was a shortage in Mount Lebanon and the North, with slight improvements in the South.

In UNRWA schools, computers were fully available in Mount Lebanon, while they were unavailable in the North, with partial availability in the South.

- **In the Second Cycle of Basic Education**

The results from the sectors indicate that in the public sector in Beirut, principals reported that 30% of schools did not provide computers, while 6.7% reported that computers were available in most classes. Coordinators indicated that 10.6% of schools provided computers in all classes. Supervisors reported that 27% of schools did not provide computers, while only 6% had computers in all classes. As for teachers, 27.8% reported that computers were unavailable, while 16.7% reported limited availability.

In Mount Lebanon (suburbs), 15% of principals in the public sector reported that computers were unavailable, and 26.7% reported that they were available in most classes. Coordinators indicated that 40% of schools provided computers in all classes. Supervisors mentioned that 20% of schools in the public sector did not provide computers. Teachers reported that 14.3% of schools did not provide computers, while 28.6% reported noticeable availability of devices.

In Mount Lebanon (excluding suburbs), 14.6% of principals in the public sector reported that computers were unavailable, while 18.3% reported availability in most classes. Coordinators indicated that 33.3% of schools provided computers in all classes. Supervisors mentioned that 18% of schools in the public sector did not provide computers. As for teachers, the "unavailable" percentage was moderate at 18.8%.

In the North, 25.6% of principals in the public sector reported that computers were unavailable, while 12.2% reported availability in all classes. Coordinators indicated that 29.1% of

schools did not provide computers, while supervisors reported 22% with no computers. For teachers, the "unavailable" percentage was 29.1%, with a significant shortage of full availability at 12.7%.

In the Bekaa Governorate, 22.4% of principals in the public sector reported the unavailability of computers, while 13.3% confirmed their availability in all classes. Coordinators mentioned that 25% of schools provide computers in most classes. Supervisors reported that 15% of schools do not provide computers. For teachers, the "unavailable" percentage was moderate at 20%.

In the South Governorate, 18% of public school principals reported the complete absence of computers, while 7.4% confirmed their availability in all classes. On the other hand, coordinators indicated that 16.7% of schools lack computers, and 19% of supervisors reported their unavailability. Teachers recorded a high percentage of computer absence at 28%, with limited availability at 12%.

In the Nabatieh Governorate, 20.5% of public school principals reported the absence of computers, while 13.4% confirmed availability in most classes. Coordinators indicated that 22.2% of schools provide computers in all classes. Supervisors reported that 17% of schools lack computers, while teachers recorded a moderate absence percentage at 17.9%.

In the Akkar Governorate, 30.7% of public school principals reported the unavailability of computers, while only 6% confirmed availability in all classes. Coordinators mentioned that 10% of schools lack computers, while supervisors reported that 28% of schools do not provide computers. Teachers recorded a high absence percentage at 28.6%.

In the Baalbek-Hermel Governorate, 24.7% of principals reported the absence of computers, with 5.2% confirming their availability in all classes. Coordinators indicated that 18.2% of schools do not provide computers, while 25% of supervisors reported a lack of computers. Teachers indicated a high absence percentage at 26.3%.

- **In the Third Cycle of Basic Education**

In Beirut Governorate, in the public sector, 23.3% of principals reported the unavailability of computers, while 26.7% of supervisors mentioned their shortage. Coordinators indicated that 32.3% of schools rely on computers on demand, while 9.6% of teachers reported that computers were available in all classes. In the free private sector, 51.6% of principals reported the unavailability of computers, and 50% of supervisors mentioned their shortage. 40% of coordinators indicated a lack of computers, while 16.1% of teachers reported that computers were available in all classes. In the non-free private sector, 13.6% of principals reported the unavailability of computers, and 19% of supervisors mentioned their shortage. 20% of coordinators indicated a lack of computers, while 25.4% of teachers reported that computers were available in most classes.

In Mount Lebanon (suburbs), in the public sector, 15% of principals reported the unavailability of computers, and 12.2% of supervisors mentioned their shortage. Coordinators indicated that 40% of schools provide computers in all classes, while 44.1% of teachers reported

that computers were available in most classes. In the free private sector, 30% of principals reported the unavailability of computers, and 25% of supervisors mentioned their shortage. 35% of coordinators indicated that computers were available in all classes, while 22% of teachers reported that computers were available in most classes. In the non-free private sector, 9% of principals reported the unavailability of computers, and 10% of supervisors mentioned their shortage. 15% of coordinators indicated that computers were available in all classes, while 30% of teachers reported that computers were available in most classes.

In the North Governorate, in the public sector, 26.7% of principals reported the unavailability of computers, and 30.8% of supervisors mentioned their shortage. Coordinators indicated that 19% of schools suffer from a lack of computers, while 31% of teachers reported that computers were available in most classes. In the free private sector, 25% of principals reported the unavailability of computers, and 20% of supervisors mentioned their shortage. 30% of coordinators indicated that computers were available in all classes, while 15% of teachers reported that computers were available in most classes. In the non-free private sector, 19% of principals reported the unavailability of computers, and 25% of supervisors mentioned their shortage. 20% of coordinators indicated that computers were available in all classes, while 35% of teachers reported that computers were available in most classes.

In the Bekaa Governorate, in the public sector, 22.4% of principals reported the unavailability of computers, and 24% of supervisors mentioned their shortage. Coordinators indicated that 22.2% of schools suffer from a lack of computers, while 23.2% of teachers reported that computers were available in most classes. In the free private sector, 15% of principals reported the unavailability of computers, and 20% of supervisors mentioned their shortage. 25% of coordinators reported that computers were available in all classes, while 20% of teachers stated that computers were available in most classes. In the non-free private sector, 10% of principals reported the unavailability of computers, and 15% of supervisors mentioned their shortage. 30% of coordinators indicated that computers were available in all classes, while 25% of teachers reported that computers were available in most classes.

In the South Governorate, in the public sector, 17.2% of principals reported the unavailability of computers, and 20% of supervisors mentioned their shortage. Coordinators indicated that 12.5% of schools suffer from a lack of computers, while 12.3% of teachers reported that computers were available in all classes. In the free private sector, 15% of principals reported the unavailability of computers, and 22% of supervisors mentioned their shortage. 10% of coordinators indicated that computers were available in all classes, while 10% of teachers reported that computers were available in most classes. In the non-free private sector, 10% of principals reported the unavailability of computers, and 15% of supervisors mentioned their shortage. 15% of coordinators indicated that computers were available in all classes, while 20% of teachers reported that computers were available in most classes.

In the Nabatieh Governorate, in the public sector, 21.4% of principals reported the unavailability of computers, and 21% of supervisors mentioned their shortage. 20% of coordinators indicated a lack of computers, while 18.8% of teachers reported that computers were available in most classes. In the free private sector, 12.5% of principals reported the unavailability

of computers, and 15% of supervisors mentioned their shortage. 20% of coordinators indicated that computers were available in all classes, while 20% of teachers reported that computers were available in most classes. In the non-free private sector, 9.4% of principals reported the unavailability of computers, and 15% of supervisors mentioned their shortage. 25% of coordinators indicated that computers were available in all classes, while 18.8% of teachers reported that computers were available in most classes.

In the Akkar Governorate, in the public sector, 30.7% of principals reported the unavailability of computers, and 32.1% of supervisors mentioned their shortage. 25% of coordinators indicated a lack of computers, while 6.3% of teachers reported that computers were available in all classes. In the free private sector, 15% of principals reported the unavailability of computers, and 5% of supervisors mentioned their shortage. 10% of coordinators indicated that computers were available in all classes, while 10% of teachers reported that computers were available in most classes. In the non-free private sector, 10% of principals reported the unavailability of computers, and 10% of supervisors mentioned their shortage. 15% of coordinators indicated that computers were available in all classes, while 20% of teachers reported that computers were available in most classes.

In the Baalbek-Hermel Governorate, in the public sector, 24.7% of principals reported the unavailability of computers, and 31.6% of supervisors mentioned their shortage. 19.4% of coordinators indicated a lack of computers, while 21.1% of teachers reported that computers were available in most classes. In the free private sector, 15% of principals reported the unavailability of computers, and 20% of supervisors mentioned their shortage. 25% of coordinators indicated that computers were available in all classes, while 20% of teachers reported that computers were available in most classes. In the non-free private sector, 10% of principals reported the unavailability of computers, and 15% of supervisors mentioned their shortage. 25% of coordinators indicated that computers were available in all classes, while 18.8% of teachers reported that computers were available in most classes.

- **In the Secondary Stage**

Principals in the public sector in Beirut reported that 38.9% of schools do not provide computers, while in Mount Lebanon (suburbs), the percentage was 14.3%. In Mount Lebanon (excluding the suburbs), the percentage reached 21.9%, while in the North, the highest percentage of schools without computers was recorded at 47.3%. In the Bekaa, the percentage was 36% of schools without computers, while in the South, 44% of schools only partially provided computers. In Nabatieh, the percentage was 25% of schools without computers, while in Akkar, the percentage reached 42.9%. In Baalbek-Hermel, the percentage of schools without computers was 31.6%.

As for supervisors, the Bekaa recorded 16.7% of schools providing computers in all classrooms, while Mount Lebanon (excluding the suburbs) recorded 17.9%. In Nabatieh, the percentage was 6.3%, while in Beirut, 36.4% of schools did not have computers in secondary education classrooms. In the North, the percentage was 8.5%, while in Baalbek-Hermel, the percentage was 5.6% of schools providing computers in all classrooms.

Coordinators reported in Beirut that 22.2% of classrooms did not contain computers, while in Mount Lebanon (suburbs), the percentage was 29.4%. In Mount Lebanon (excluding the suburbs), the percentage was 5.1%, while in the North, the percentage was 28.8%. In the Bekaa, the percentage was 15%, while in the South, it was 19%. In Nabatieh, the percentage was 25% of classrooms without computers, and in Akkar, it was 15.4%. In Baalbek-Hermel, the percentage was 22.2%.

In the free private sector, principals in Beirut reported that 100% of schools did not have computers, while in Mount Lebanon (suburbs), no classrooms lacked computers. In Mount Lebanon (excluding the suburbs), 20% of classrooms did not have computers, while in the North, the percentage was 50%. In the Bekaa, 100% of classrooms did not have computers, while in the South, the percentage was 20%. In Nabatieh, the percentage was 50%, while in Akkar, the percentage was 33.3%, and in Baalbek-Hermel, the percentage was 50%.

As for supervisors in the free private sector, they recorded 100% of classrooms in Beirut without computers, while in Mount Lebanon (suburbs), the percentage was 80% of classrooms with computers. In Mount Lebanon (excluding the suburbs), 40% of classrooms had partial availability of computers, while in the North, the percentage was 25%. In the Bekaa, all classrooms lacked computers, while in the South, the percentage was 40%. In Nabatieh, the percentage was 50%, and in Akkar, it was 33.3%, while in Baalbek-Hermel, all classrooms lacked computers.

Coordinators in the free private sector recorded 100% of classrooms in Beirut without computers, while in Mount Lebanon (suburbs), the percentage was 80%. In Mount Lebanon (excluding the suburbs), 40% of classrooms had partial availability of computers, while in the North, the percentage was 25%. In the Bekaa, all classrooms lacked computers, while in the South, the percentage was 40%. In Nabatieh, the percentage was 50% of classrooms with partial availability of computers, and in Akkar, it was 33.3%. In Baalbek-Hermel, all classrooms lacked computers.

In the non-free private sector, principals in Beirut reported that 41% of classrooms did not have computers, while in Mount Lebanon (suburbs), the percentage was 4%. In Mount Lebanon (excluding the suburbs), 0% of classrooms lacked computers, while in the North, the percentage was 13%. In the Bekaa, 25% of classrooms lacked computers, and in the South, the percentage was 50%. In Nabatieh, 45% of classrooms lacked computers, while in Akkar, the percentage was 23%, and in Baalbek-Hermel, the percentage was 36%.

As for the supervisors in the non-free private sector, they recorded 41% of classrooms in Beirut that lacked computers, while in Mount Lebanon (suburbs), the percentage was 4%. In Mount Lebanon (excluding the suburbs), 42% of classrooms had fully equipped computers, while in the North, the percentage was 32%. In the Bekaa, 6.3% of classrooms had fully equipped computers, and in the South, the percentage was 16%. In Nabatieh, the percentage was 18%, while in Akkar, 46% of classrooms had partial availability of computers, and in Baalbek-Hermel, the percentage was 27.3%.

As for coordinators in the non-free private sector, they recorded 41% of classrooms in Beirut lacking computers, while in Mount Lebanon (suburbs), the percentage was 4%. In Mount

Lebanon (excluding the suburbs), 42% of classrooms had fully equipped computers, while in the North, the percentage was 32%. In the Bekaa, 31% of classrooms had partial availability of computers, while in the South, the percentage was 50%. In Nabatieh, the percentage was 45% of classrooms lacking computers, while in Akkar, 46% of classrooms had partial availability of computers, and in Baalbek-Hermel, the percentage was 27.3%.

In UNRWA, principals in the North reported that 50% of schools did not provide computers. Supervisors and coordinators in UNRWA also reported that 50% of schools and classrooms in the North lacked computers.

General Conclusions

- **In the First Cycle of Basic Education**

The results from all respondents (coordinators, supervisors, principals, and teachers) show clear disparities in the availability of computers in schools. Coordinators reported varying levels of computer availability in classrooms, with some governorates showing high percentages of classrooms lacking computers. Supervisors pointed out differences between governorates, with a significant percentage of schools either not having computers or only partially providing them. Principals highlighted that some governorates suffer from a severe shortage of computers, while teachers noted the negative impact of the lack of computers on their ability to provide effective education.

- **In the Second Cycle of Basic Education**

The variation continued in this round across all categories of coordinators, supervisors, principals, and teachers. Principals still faced a significant computer shortage, with large disparities between governorates. Supervisors provided assessments indicating partial or complete shortages of computers, while coordinators noted the variation in the availability of computers in classrooms, which impacted the educational process.

- **In the Third Cycle of Basic Education**

This round revealed a clear gap between the different categories, with all groups showing disparities in the availability of computers in schools. Coordinators pointed out high percentages of classrooms lacking computers, while supervisors recorded significant differences in the percentages of schools providing computers partially or fully. Principals expressed continued difficulties in some governorates, and the lack of computers had a significant impact on the quality of education.

- **In the Secondary stage**

The situation repeated in this stage, with noticeable differences between principals, supervisors, coordinators, and teachers. Principals pointed out high percentages of schools not providing computers, while supervisors noted disparities based on governorates, with varying percentages of schools providing computers partially or fully. Coordinators and teachers noted a clear impact of the lack of computers on the efficiency of the educational process across various governorates.

2.6.4. Item 1: Availability and Condition of Laboratories

In the public sector, the results from Beirut show that principals report that 50% of laboratories need improvements, with 11.1% of laboratories considered unusable. Supervisors observed that 45.5% of schools needed significant improvements, while 33.3% of laboratories were unusable. Coordinators in Beirut observed that most laboratories needed minor improvements (55.6%), while none of the laboratories were well-equipped. As for teachers, 27.8% of laboratories needed improvements, while 11.1% of laboratories were considered unusable.

In Mount Lebanon (suburbs), principals report that 27.3% of laboratories need major improvements or are unavailable, with a shortage of well-equipped laboratories. Supervisors note that about 50% of schools lack laboratories, while only 12.9% have well-equipped laboratories. Coordinators observe that 40% of laboratories need major improvements, and none are well-equipped. Teachers report that most laboratories need either minor or major improvements.

In Mount Lebanon (excluding the suburbs), principals observe that 23.1% of laboratories are unavailable, and 17.9% need major improvements. Supervisors indicate that 40% of schools need major improvements, while 23.1% of schools suffer from a shortage of laboratories.

Coordinators observe that 40% of laboratories need improvements, with a decrease in the number of well-equipped laboratories. Teachers in this governorate report a balance in the condition of laboratories, with a significant proportion needing improvements, but no major shortage of laboratories.

In the North, principals face a difficult situation, with 42.9% of laboratories unavailable, reflecting weaknesses in infrastructure. Supervisors report that 60% of schools lack laboratories. Coordinators in the North observe that 50% of laboratories are unavailable, and 50% need improvements. Teachers note a severe shortage of laboratories, with more than 30% of schools lacking laboratories.

In the Bekaa, principals report that 38.5% of laboratories are unavailable, necessitating significant improvements. Supervisors observe that 16% of schools lack well-equipped laboratories, while 30% need improvements. Coordinators in this governorate report that 45% of laboratories need minor improvements, while 40% are in a non-functional condition. Teachers in the Bekaa note that 28% of laboratories need improvements.

In the South, principals note that 46.7% of laboratories need minor improvements, and 13.3% are well-equipped. Supervisors in this governorate report that 40% of laboratories need minor improvements. Coordinators observe that 33.3% of laboratories need improvements, while 19% are well-equipped. Teachers note a noticeable improvement in laboratory conditions compared to other governorates.

In Nabatieh, principals report that 31.3% of laboratories need minor or major improvements. Supervisors note that 33.3% of schools in Nabatieh lack laboratories. Coordinators

observe that 31.3% of laboratories are non-functional, and 43.8% need improvements. Teachers report that 21.4% of laboratories are well-equipped.

In Akkar, principals report that 35% of laboratories are unavailable. Supervisors note that 60% of schools in Akkar lack laboratories. Coordinators observe that 33.3% of laboratories need major improvements, while only 7.7% are well-equipped. Teachers in Akkar note a significant shortage of laboratories, with more than 30% of schools lacking laboratories.

In Baalbek-Hermel, principals report that 45.5% of laboratories need minor improvements. Supervisors note that 21.1% of schools need improvements, and 22.2% are well-equipped. Coordinators observe that 22.2% of laboratories need major improvements. Teachers in Baalbek-Hermel note that 38.9% of laboratories need minor improvements.

In the free private sector, results in Beirut indicate that 100% of schools lack laboratories. Supervisors observe that most schools in Beirut lack laboratories, and coordinators report a total lack of laboratories. Teachers observe the same situation, with no laboratories available. In Mount Lebanon (suburbs), there are no unavailable laboratories. Supervisors note that 40% of laboratories need improvements, while 60% are well-equipped. Coordinators observe that 60% of laboratories are well-equipped. Teachers note that laboratories in the suburbs are better equipped.

In the North, principals report that 50% of schools lack laboratories. Supervisors note a severe shortage of laboratories, with 60% of schools lacking them. Coordinators observe that half of the laboratories need improvements. Teachers report a significant shortage of laboratories in the northern governorates.

In the non-free private sector, principals in Mount Lebanon (suburbs) report that 40% of laboratories are well-equipped. Supervisors note that 32.5% of laboratories are well-equipped. Coordinators observe that 40% of laboratories need major improvements. Teachers in this governorate report that laboratories are better equipped. In the North, principals report that 50% of laboratories are well-equipped. Supervisors note that the situation in the North is better compared to other governorates. Coordinators observe that some laboratories need minor improvements, while teachers report that a good percentage of laboratories are well-equipped.

2.6.5. *Item 2: Availability of Libraries*

In Beirut, principals, supervisors, coordinators, and teachers all report that the percentage of well-equipped libraries in the public sector is 37.5%. This agreement among all respondents reflects a relative improvement in library facilities compared to other governorates. In the free private sector, the percentage rises to 42.9%, while in the non-free private sector it reaches 45%. Despite these relatively positive figures, UNRWA schools' libraries show a significant shortage, with well-equipped libraries comprising only 10-15%.

In Mount Lebanon (suburbs), the public sector faces greater challenges, with principals reporting that 54.5% of libraries need major improvements, while supervisors note that only 38.9% of libraries are well-equipped. The coordinator confirms that library facilities in most schools are weak, and teachers report that 33.3% of libraries need improvements. In the South, respondents

agree that only 31% of libraries are well-equipped, highlighting the need for better library facilities in most schools.

In Akkar and Baalbek-Hermel governorates, principals, supervisors, coordinators, and teachers confirm a severe shortage in library facilities, with most libraries either not equipped or needing major improvements. In both the free and non-free private sectors in these regions, libraries suffer from significant shortages, with only 10-15% of libraries in UNRWA schools being well-equipped.

In the South, 31% of libraries in the public sector are well-equipped, a modest figure compared to the actual need for improvements in libraries in the governorate. All respondents note the need for better-equipped libraries to ensure an adequate learning environment. In both the free and non-free private sectors, the South also suffers from library shortages.

In the Bekaa, all respondents note that many libraries need major improvements, observing a clear shortage in library facilities that meet educational needs.

In the North, results indicate that libraries in both the public and private sectors face significant shortages in equipment. All respondents agree that most libraries need major improvements, while in UNRWA schools in the North, reports indicate that the percentage of well-equipped libraries does not exceed 10-15%.

Overall, there is a significant disparity in library facilities across Lebanese governorates, with Beirut recording better figures compared to other regions. However, the need for library improvements is evident in all governorates to ensure a more integrated learning environment.

2.6.6. *Item 3: Availability of Playgrounds*

In the public education sector, principals report that in Beirut, only 12.5% of playgrounds are well-equipped, with 50% of playgrounds needing major improvements, the highest percentage among all governorates. In the South, playgrounds are the best equipped at 46.7%, with this figure rising to 50% in Akkar. In Mount Lebanon (suburbs), 72.7% of playgrounds need major improvements, and 27.3% need minor improvements. In Mount Lebanon outside the suburbs, 55.6% of playgrounds need major improvements, and 33.3% need minor improvements. In the North, 40% of playgrounds need major improvements, and 42.9% need minor improvements. The Bekaa shows 46.2% of playgrounds that need major improvements, while the South achieves a good rate of playgrounds needing minor improvements (46.7%). Akkar tops the list with a high percentage of well-equipped playgrounds at 50%.

Supervisors report that most schools in the public sector suffer from significant gaps in playground facilities. 2.8% of schools lack playgrounds, and 10.6% of playgrounds are unusable. 34.1% of playgrounds need major improvements, and 40.6% need minor improvements. In the free private sector, all schools have playgrounds, but 22.6% of them need major improvements, and 51.6% need minor improvements.

The non-free private sector shows better equipment percentages, with 36.8% of schools having well-equipped playgrounds, and 41.9% needing minor improvements. In UNRWA, 66.7% of playgrounds need improvements.

Coordinators indicated that in Beirut, 66.7% of playgrounds in the public sector require improvements, and 41.7% are well-equipped in the non-free private sector. In Mount Lebanon (suburbs), 41.2% of playgrounds need improvements, and 17.6% are well-equipped. In the North, 37.3% of playgrounds need minor improvements, and 35.6% need major improvements. Teachers found that 3.4% of schools lack playgrounds, and 8.3% of playgrounds are unusable. 23.6% of playgrounds need major improvements, and 37.2% need minor improvements. The non-free private sector shows better equipment, with 44.5% of playgrounds well-equipped.

In the free private education sector, principals found that all playgrounds in Beirut need major improvements. In Mount Lebanon (suburbs), 50% of playgrounds are well-equipped. In the South, 100% of playgrounds are well-equipped. Supervisors noted that all schools have playgrounds, but 22.6% of them need major improvements, 51.6% need minor improvements, and only 25.8% of playgrounds are well-equipped. Coordinators found that 40% of playgrounds in Mount Lebanon (suburbs) are well-equipped, and 20% are unusable. According to teachers, 29.2% of playgrounds need improvements, and 39.7% are well-equipped.

In the non-free private education sector, principals found that 66.7% of playgrounds in Beirut are well-equipped. In Mount Lebanon (suburbs), 51.5% are well-equipped. In the South, 42.9% of playgrounds are well-equipped. Supervisors observed that the sector shows better equipment, with 36.8% of schools having well-equipped playgrounds. Coordinators noted that in Beirut, 41.7% of playgrounds are well-equipped, and 32.3% in the North. Teachers confirmed that the sector shows good equipment rates compared to other sectors.

In the UNRWA sector, principals indicated that playgrounds are well-equipped at 100% in Mount Lebanon (suburbs) and the North. Supervisors found that 66.7% of playgrounds need minor improvements. Coordinators reported that playgrounds in the South require minor improvements at 100%. Teachers noted that the sector provides good availability of playgrounds with some need for improvements.

Conclusions on Playground Equipment Across Governorates and Sectors

 In the public sector, Beirut suffers from a severe shortage of playgrounds, with half needing major improvements, and only 12.5% are well-equipped. The South and Akkar show significant improvement, while Mount Lebanon (suburbs) has the highest percentage of playgrounds needing major improvements at 72.7%. Data shows large gaps in playground facilities in public schools, with some schools lacking playgrounds entirely or having unusable playgrounds.

In the free private sector, playgrounds in governorates like Beirut require major improvements, as all playgrounds need improvements. However, the South stands out with 100% of playgrounds well-equipped. Supervisors and teachers report a relative improvement in playground availability compared to the public sector, but the need for further improvements still exists in many schools.

In the non-free private sector, Beirut and Mount Lebanon show good equipment rates, at 66.7% and 60%, respectively. Supervisors and teachers find that the equipment is better compared to the public sector, with 44.5% of playgrounds well-equipped.

In the UNRWA sector, Mount Lebanon (suburbs) and the North enjoy high equipment rates, with 100% of playgrounds well-equipped. The South shows a balance between well-equipped playgrounds and those needing minor improvements.

The overall conclusion reflects a significant weakness in playground equipment in the public sector, with an urgent need for wide improvements. The non-free private sector shows better equipment, with good rates in some governorates. The free private sector shows some improvement, but many playgrounds still need major improvements. The UNRWA sector has good equipment rates in most governorates, with some cases requiring improvements.

2.6.7. *Item 4: Availability of Lecture Halls*

In the public education sector, the North faces a severe shortage of lecture halls, with 77.1% of schools lacking them, followed by Akkar at 65%, and the Bekaa at 61.5%. Beirut appears in a relatively better position, with only 25% of schools lacking lecture halls, although 37.5% of lecture halls need major improvements and 12.5% are well-equipped. The South shows a balanced situation, with 40% of schools lacking lecture halls, while 33.3% need minor improvements.

In free private education, Beirut and the South suffer from a complete absence of lecture halls, with 100% of schools lacking them. Akkar shows a relative balance, with 50% of schools being well-equipped, while the rest lack lecture halls. Mount Lebanon (suburbs) reflects a similar situation, with 25% of schools lacking lecture halls, and 50% needing minor improvements.

In the non-free private education sector, Baalbek-Hermel leads with 80% of schools well-equipped, followed by Mount Lebanon outside the suburbs at 60%. The South shows a noticeable balance, with 42.9% of schools needing minor improvements and 28.6% being well-equipped.

When analyzing the situation by governorates, it is clear that 28.9% of schools in Beirut lack lecture halls, while 25.8% are well-equipped. Mount Lebanon (suburbs) has a good equipment rate of 42.6%. The North suffers from a severe shortage, with 50% of schools lacking lecture halls and only 12.1% of them being well-equipped. The Bekaa and the South show similar rates, while Nabatieh and Akkar face similar challenges. Baalbek-Hermel also shows weak equipment, with 41.5% of schools lacking lecture halls and only 11% being well-equipped.

These results indicate significant disparities in the availability of lecture halls across governorates and sectors, with an urgent need to improve infrastructure in many schools, especially in the public and free education sectors.

2.6.8. *Item 5: Availability of Auditoriums*

In the public sector, Akkar, the North, and the Bekaa suffer from a severe shortage of theaters, recording the lowest availability rates. In contrast, Beirut is well-equipped with theaters, while the South shows average equipment levels.

In the free private education sector, Beirut suffers from a complete absence of theaters, while the South and Mount Lebanon show relatively good equipment rates. In the non-free private sector, Baalbek-Hermel leads the governorates with 60% of schools well-equipped with theaters. The UNRWA sector excels in the North, where all theaters are fully equipped, while the South also shows good equipment rates.

Looking at the analysis by governorates, Beirut enjoys the highest equipment rate, with most schools having theaters in good condition. Mount Lebanon (suburbs) has a reasonable availability rate, although 47.1% of schools lack theaters. Mount Lebanon (other governorates) shows similar results, with 37.5% of schools lacking theaters. The North faces major challenges, with 60% of schools lacking theaters and a very low percentage of theaters in good condition (9.1%). In the Bekaa, 53.8% of schools lack theaters, with only 25% of them well-equipped. The South shows a moderate shortage, with 33.3% of schools lacking theaters, and 26.7% being well-equipped. Nabatieh faces 46.4% of schools lacking theaters, with only 12.5% being well-equipped. Akkar records the worst situation, with 65% of schools lacking theaters and only 15.4% being well-equipped.

In Baalbek-Hermel, 60% of schools are well-equipped with theaters, the highest rate among all governorates, although nearly half of the schools still lack theaters.

Overall, Beirut and Mount Lebanon are the governorates with good theater equipment, while governorates like Akkar and the North suffer from severe shortages. The South and the Bekaa show noticeable disparities among schools, highlighting the urgent need to improve theater infrastructure in all governorates suffering from shortages or deterioration of these facilities.

The Availability of Facilities and Services for Learners with Special Needs

2.6.9. Item 1: Ramps

The results of the questionnaire directed to principals in the public education sector show significant disparities in the provision of ramps for learners with special needs. Beirut records the highest percentage in the "completely unsuitable" category at 62.5%, with no schools rated as "good" or "excellent." In Mount Lebanon, 27.3% of schools rate ramps as "completely unsuitable" or "poor," while only 9.1% rate them as "excellent." In the North, the highest percentage is in the "completely unsuitable" category at 65.7%.

In the non-free private education sector, Beirut records 55.6% in the "completely unsuitable" category. In the North, 46.2% of schools consider ramps "completely unsuitable," with 15.4% in the "good" and "excellent" categories.

The UNRWA sector shows excellent performance in some governorates, with 100% of schools in Mount Lebanon (suburbs) rated as "excellent."

The results of the questionnaire directed to the supervisors in the public sector show that more than 78% of schools suffer from inadequate facilities. 45.6% of public schools classify the ramps as "completely unsuitable," and 32.7% describe them as "poor." In free private education,

48.4% of schools consider the ramps "completely unsuitable." In non-free private education, the situation is slightly better, with 37.6% of schools rating the ramps as "completely unsuitable." In the UNRWA sector, 50% of schools regard the ramps as "completely unsuitable."

The results of the questionnaire directed to coordinators in Beirut show that 44.4% of schools in the public sector have unsuitable ramps, while 55.6% have ramps in poor condition. In the free private sector, all schools (100%) suffer from the absence of ramps. In the non-free private sector, 50% of schools have unsuitable ramps, and only 8.3% provide ramps in good condition.

In Mount Lebanon, the public sector shows that 47.1% of schools have unsuitable ramps, while in the free private sector, 80% of schools have ramps in acceptable condition. In the non-free private sector, 37% of schools have unsuitable ramps.

In the North, the public sector shows that 50% of schools have unsuitable ramps, while in the free private sector, 66.7% of schools have unsuitable ramps.

The results of the questionnaire directed to teachers in Beirut indicate a significant shortage of ramps in the public sector. In the free private sector, all schools lack ramps. In the non-free private sector, the situation reflects a variety of classifications, with some schools providing ramps in good condition.

Conclusions:

The public sector in all governorates suffers from a severe shortage of appropriate ramps, with Beirut recording the highest percentage in the "completely unsuitable" category. The free private education sector shows relative improvement in some governorates such as the Bekaa and Akkar, but still lacks "good" or "excellent" facilities. The non-free private sector shows improvement in some governorates, such as Baalbek-Hermel. The UNRWA sector shows improvement in some governorates, especially in Mount Lebanon suburbs.

2.6.10. Item 2: Elevators

The results from the principals show that Beirut is the most affected, with 62.5% of schools describing the elevators as "completely unsuitable," reflecting a significant lack of equipment, while 50% of schools in Mount Lebanon (suburbs) describe the situation as "unsuitable," with only 10% rating the elevators as "excellent," indicating a clear disparity. In Mount Lebanon (outside the suburbs), 69.6% of schools consider the elevators "completely unsuitable." In the North, 60% of schools describe the situation as "unsuitable," with no schools rating the elevators as "excellent" or "good." The Bekaa also suffers, with 69.2% of schools describing the elevators as "unsuitable," and 10% rating them as "acceptable." The South shows disparity, with 50% describing the situation as "unsuitable" and 20% rating it as "acceptable." Nabatieh faces a very weak situation, with 60.9% of schools describing the elevators as "unsuitable." In Akkar, 57.9% of schools consider the situation "unsuitable," with almost no improvements. In Baalbek-Hermel, 47.1% describe the situation as "completely unsuitable," with some improvement, as 11.1% rate the elevators as "acceptable."

The results from the supervisors show a similar picture but with some improvements in certain governorates. In Beirut, 45.5% of schools describe the elevators as "unsuitable," and 18.2%

rate the situation as "acceptable." In Mount Lebanon (suburbs), the situation is "unsuitable" in 35.3% of schools, while 11.8% rate it as "excellent," reflecting relative progress. In Mount Lebanon (outside the suburbs), 69.6% consider the situation "completely unsuitable," with almost no improvements. In the North, 55.3% describe the situation as "unsuitable," with only 5% rating the elevators as "good." The Bekaa also suffers, with 50% describing the situation as "unsuitable," and a slight improvement with 16.7%. The South shows relative balance, with 40.6% describing the situation as "unsuitable," and 20% rating the elevators as "good." Nabatieh suffers from a severe shortage, with 60.9% describing the situation as "unsuitable." In Akkar, 57.9% of schools describe the situation as "unsuitable," with 25% rating the elevators as "good." Finally, in Baalbek-Hermel, 47.1% describe the situation as "completely unsuitable," with slight improvement as 11.1% rate the situation as "acceptable."

The results from the coordinators indicate slight improvements in some governorates. In Beirut, 55.6% of schools consider the elevators "inappropriate," while 8.3% rate them as "excellent." In Mount Lebanon (Suburbs), 35.3% describe the situation as "inappropriate," with a relative improvement as 11.8% view the elevators as "good." In Mount Lebanon (excluding suburbs), the situation is "inappropriate" in 48.7% of schools, with 10.5% describing the elevators as "excellent." In the North, 45% of schools consider the elevators "inappropriate," while 15% describe them as "acceptable." The Bekaa also suffers, with 50% of schools rating the situation as "inappropriate," and a small percentage (10%) describing the elevators as "good." The South shows a rare balance, with 40% of schools seeing the situation as "inappropriate," and 10% describing the elevators as "excellent." Nabatieh is not well-equipped, with 56.3% rating the situation as "inappropriate," and 5% describing them as "good." In Akkar, 50% see the situation as "inappropriate," with 20% rating the elevators as "acceptable." Finally, in Baalbek-Hermel, 44.4% of schools consider the situation "inappropriate," with 11.1% describing the elevators as "excellent."

The teachers' responses reflect a similar view, with slight variations in some governorates. In Beirut, 48.2% of schools consider the elevators "inappropriate," with 10% rating them as "good." In Mount Lebanon (Suburbs), 33.9% view the situation as "inappropriate," with 20% describing it as "acceptable." In Mount Lebanon (excluding suburbs), 50% of schools describe the situation as "inappropriate," with 5% rating the elevators as "excellent." In the North, 40% consider the situation "inappropriate," with a slight improvement of 10% rating the elevators as "excellent." The Bekaa suffers from a significant shortage, with 44.7% rating the elevators as "inappropriate," and 7.5% rating them as "excellent." The South shows better balance, with 30% of schools considering the situation "inappropriate," and 15% rating the elevators as "good." Nabatieh faces difficulties, with 46.2% rating the situation as "inappropriate," and 7% as "excellent." In Akkar, 53.8% of schools rate the situation as "inappropriate," with 11% describing it as "good." Finally, in Baalbek-Hermel, 47.1% of schools consider the elevators "inappropriate," with 12% rating them as "excellent."

The free private education sector faces a clear shortage. Results from the school principals show that Beirut is significantly affected, with 100% of schools rating the situation as "inappropriate." In Mount Lebanon (Suburbs), 80% of schools view the situation as

"inappropriate," while 20% rate it as "excellent." In Mount Lebanon (excluding suburbs), 75% consider the elevators "inappropriate." In the North, the percentage reaches 80%, with no positive ratings. The Bekaa also suffers, with 66.7% of schools rating the situation as "inappropriate," and 10% describing the elevators as "good." The South shows a rare balance, with 50% of schools rating the situation as "inappropriate," and 50% describing the elevators as "excellent." Nabatieh stands out as a weak point, with 60% rating the situation as "inappropriate," and almost no improvements. In Akkar, 66.7% rate the situation as "inappropriate," and 10% as "excellent." In Baalbek-Hermel, 100% of schools rate the situation as "inappropriate," reflecting a complete lack of adequate equipment.

2.6.11. Item 3: Classroom Facilities

The principals' responses regarding classroom facilities for students with special needs show that the public education sector is severely lacking. 57.8% of schools rated the facilities as "inappropriate," with a very high percentage in Beirut at 62.5%. "Excellent" facilities are extremely rare, with only 1.4% of schools providing them. In the free private education sector, 43.3% of schools rated the facilities as "inappropriate," while only 3.3% rated them as "excellent," with notable improvement in the South. The non-free private sector recorded that 38.8% of schools considered the facilities as "inappropriate," with 13.3% rating them as "excellent," with noticeable improvements in Beirut (22.2%) and Mount Lebanon (excluding suburbs) (20%). In the UNRWA sector, 75% of facilities were rated as "good," showing significant attention to equipping classrooms.

The supervisors' responses showed a more severe shortage, with 82.1% of schools in the public sector lacking facilities for students with special needs. In the free private sector, 64.6% of schools faced a similar shortage. The non-free private sector recorded that 53% of schools faced a lack of classroom facilities. On the other hand, UNRWA schools rated classroom facilities as "inappropriate" in 100% of cases.

Coordinators' responses showed variations between governorates and sectors. In Beirut, 44.4% of schools in the public sector rated the facilities as "inappropriate," while the free private sector recorded "excellent" facilities in 100% of schools, and the non-free private sector recorded 58.3% as "inappropriate." In Mount Lebanon (Suburbs), 47.1% of public schools rated the facilities as "inappropriate," with 41.2% rating them as "poor." In Mount Lebanon (excluding suburbs), 35.9% rated the facilities as "inappropriate," and 38.5% as "poor." In the North, 54.2% rated the facilities as "inappropriate." In the Bekaa, 40% rated the facilities as "inappropriate." In the South, 35.7% of schools rated the facilities as "inappropriate." In Nabatieh, the percentage reached 56.3%. Akkar rated the facilities as "inappropriate" in 38.5% of cases, and Baalbek-Hermel recorded 27.8%.

Teachers' responses reflect variations between sectors. In the public sector, 41.8% of schools rated the classroom facilities as "inappropriate." In the free private sector, this percentage reached 39.7%. In the non-free private sector, the percentage dropped to 30.8%. In the UNRWA sector, 25% of schools considered the classroom facilities "inappropriate."

When looking at the results by sector, in the public sector, the principals indicate that the facilities are very weak, with 57.8% of schools categorizing them as "completely unsuitable." Supervisors find that 82.1% of schools suffer from a severe lack of facilities. Coordinators report that 44.4% of schools describe their facilities as "completely unsuitable." Meanwhile, teachers report that 41.8% of schools see classroom facilities as "completely unsuitable."

In the free private sector, the principals indicate slight improvement compared to the public sector, with 43.3% of schools categorizing them as "completely unsuitable." Supervisors find that 64.6% of schools suffer from a lack of facilities. Coordinators report that 100% of schools describe their facilities as "excellent." Teachers report that 39.7% of schools see classroom facilities as "completely unsuitable."

In the non-free private sector, principals report relatively better performance, with 38.8% of schools describing the facilities as "completely unsuitable." Supervisors find that 53% of schools suffer from a lack of facilities. Coordinators report that 58.3% of schools categorize their facilities as "completely unsuitable." Teachers report that 30.8% of schools see classroom facilities as "completely unsuitable."

In UNRWA schools, principals find that 75% of the facilities are categorized as "good." Supervisors report that 100% of schools describe classroom facilities as "completely unsuitable." Coordinators report that 100% of schools describe classroom facilities as "completely unsuitable." Meanwhile, teachers report that 25% of schools consider classroom facilities "completely unsuitable."

2.6.12. Item 4: Availability of Specialized Bathrooms

In Beirut, principals assess the situation in the public sector very negatively, with 22.2% of bathrooms categorized as "completely unsuitable" and 44.4% as "bad." 81.6% of supervisors find the bathrooms as "unsuitable" or "bad," while 44.4% of teachers consider the situation "completely unsuitable." In the free private sector, the situation is relatively better, with 37.5% of bathrooms categorized as "completely unsuitable." In the non-free private sector, Beirut shows improvement, with 58.3% of bathrooms categorized as "completely unsuitable." The UNRWA sector shows good performance, with bathrooms generally considered suitable.

In Mount Lebanon, in the public sector, 81.6% of bathrooms are categorized as "unsuitable" or "bad," and 44.4% of teachers consider the situation "completely unsuitable." In the free private sector, 46.7% of bathrooms are categorized as "completely unsuitable," with slight improvements in some districts. In the non-free private sector, 48% of bathrooms are categorized as "unsuitable," with relative improvement in rural areas. The UNRWA sector categorizes the bathrooms as "suitable" overall.

In the North, in the public sector, the area suffers from a severe lack of facilities, with 81.6% of supervisors categorizing bathrooms as "unsuitable" or "bad," and 44.4% of teachers consider the situation "completely unsuitable." In the free private sector, 75% of bathrooms are

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categorized as "completely unsuitable," indicating a worse situation compared to other districts. In the non-free private sector, the north shows relatively better performance with positive ratings in rural areas. The UNRWA sector categorizes the bathrooms as suitable overall.

In the South, in the public sector, 81.6% of supervisors categorize the bathrooms as "unsuitable" or "bad," and 34.1% of teachers consider the situation "completely unsuitable." In the free private sector, the south shows improvement compared to other districts, with 45.2% of supervisors categorizing the bathrooms as "unsuitable." In the non-free private sector, there are some improvements, with 23.1% of bathrooms categorized as "bad." The UNRWA sector does not face major issues in the south.

In the public sector in the Bekaa, 50.3% of bathrooms are categorized as "completely unsuitable," and the situation is very poor. In the free private sector, conditions are relatively better, but 45.2% of supervisors still see the bathrooms as "unsuitable." In the non-free private sector, there is notable improvement, with 48% of bathrooms categorized as "unsuitable." The UNRWA sector shows positive performance, with bathrooms considered suitable overall.

In public schools in Akkar, 44.4% of bathrooms are categorized as "unsuitable," and supervisors provide similar assessments. In the free private sector, the situation is slightly better, with 45.2% of bathrooms categorized as "unsuitable." In the non-free private sector, there are relative improvements, with 37.7% of bathrooms categorized as "unsuitable." The UNRWA sector performs well, with bathrooms generally considered suitable.

Conclusion:

The results indicate that the public sector suffers significantly from a lack of bathroom facilities, with high percentages of negative evaluations in various districts, especially in the north and Bekaa. The free private sector shows relative improvement but still faces significant problems in some areas such as the north. The non-free private sector shows relatively better performance, with notable improvements in the south and Mount Lebanon. The UNRWA sector is the best equipped, with bathrooms generally considered suitable across all districts.)

2.6.13. Item 5: Availability of Support Staff

In the public education sector, school principals report a significant shortage of support staff, with 57.8% categorizing the available support as "completely unsuitable." Beirut records the highest negative evaluation at 62.5%, while some regions like the South and Baalbek-Hermel report limited levels of good or excellent support. Around 50.2% of supervisors describe the services as "completely unsuitable," with 32.7% rating them as "bad," and a small improvement is noted as 12.4% of supervisors find the situation "acceptable." Coordinators report a significant lack of support staff, with 42.1% considering the support "completely unsuitable" and 30.6% labeling it as "bad." Among teachers, 42.1% describe the support as "completely unsuitable," and 30.6% find it "bad," while only 17.4% consider it "acceptable."

In the free private education sector, there is a relative improvement compared to the public sector, with 40% of principals labeling the support as "completely unsuitable." The South shows

relative improvement in excellent support at 10%, though many regions still suffer from a lack of good support. Supervisors find 35.5% of the services "completely unsuitable" and 9.7% "bad." On the other hand, 16.1% of supervisors describe the situation as "acceptable," and 35.5% rate it as "good," indicating a need for comprehensive development. Coordinators note a gradual improvement in support for learners, with 33.5% describing the support as "completely unsuitable" and 20.6% as "bad," while a significant percentage rates the situation as "good" or "excellent." Teachers report 33.5% describing the support as "completely unsuitable," and 20.6% as "bad," while 19.1% consider it "acceptable," and 14.8% regard it as "excellent."

The not free private sector shows a significant improvement compared to the other two sectors, with only 35.7% of principals rating the support as "completely unsuitable." In Beirut, some schools provide excellent support at 11.1%. Supervisors rate 33.3% of the situation as "completely unsuitable" and 12.8% as "bad," while 23.1% find the situation "acceptable," with a noticeable improvement as 19.7% describe it as "good." Coordinators report improvement as well, with 26.5% of them rating the support as "completely unsuitable," while a notable 19.2% see it as "good." For teachers, 26.5% describe the support as "completely unsuitable," 14.6% as "bad," and 21.4% find it "acceptable," with improvements in the provision of good and excellent support.

The UNRWA sector shows relatively better performance, with 50% of schools describing the support as good or excellent, reflecting greater attention to meeting the needs of students with special needs. The supervisors in all governorates believe that it is completely unsuitable, with a rate of 100%. The performance of UNRWA appears better from the coordinators' perspective, with 33.3% rating the support as "completely unsuitable," 33.3% as "bad," and 16.7% describing it as "good" or "excellent." Among teachers, 33.3% describe the support as "completely unsuitable," 33.3% as "bad," and only 8.3% consider it "good" or "excellent."

Comparison across governorates

In Beirut, the results from principals show a significant shortage of support, with 55.6% describing the support as "completely unsuitable." There is limited improvement in some other governorates. For supervisors in Beirut, 45.5% find the situation "completely unsuitable," and 45.5% consider it "bad." The improvement in percentages is minimal. As for coordinators, 40.2% describe the support as "completely unsuitable," and 15.5% rate it as "bad," with only 8.2% of coordinators considering it "excellent." Among teachers, 40.2% describe the situation as "completely unsuitable," and 15.5% as "bad," with a limited percentage considering it "excellent."

In Mount Lebanon (suburbs), the situation is slightly different, with noticeable improvement in some schools, but at the same time, there is an urgent need for more support in other areas. Supervisors in this governorate report that 41.2% of schools face completely unsuitable support, while 35.3% consider it "bad." For coordinators, 26.5% of schools describe the support as "completely unsuitable," and 15.1% as "bad." Among teachers, 26.5% describe the situation as "completely unsuitable," and 15.1% as "bad."

In Mount Lebanon (excluding the suburbs), the statistics show a continued lack of support in some schools, although there is some improvement in other governorates. Supervisors in these areas report that the situation is completely unsuitable in many schools. Coordinators in these

governorates find that schools are suffering from a shortage of support, with 36.0% describing the situation as "completely unsuitable." Teachers also observe a clear shortage of support, with 36.0% describing the situation as "completely unsuitable."

In the North, the educational sector is clearly suffering from a lack of support for students with special needs. Principals in the North point out a clear shortage of support, with a large percentage describing the situation as "completely unsuitable." Supervisors in the North consider 50% of schools to have significant support deficiencies, and 36.8% describe it as "bad." Coordinators in this governorate also find that 38.1% of the support is "completely unsuitable." As for teachers in the North, most describe the situation as "completely unsuitable."

In the Bekaa region, there is a slight improvement in the support provided for students with special needs, but there is still a significant shortage in many schools. Supervisors in the Bekaa describe the situation as "completely unsuitable" in 55.6% of schools, reflecting the need for further improvement in support. Coordinators in the Bekaa describe the support as "completely unsuitable" in 27.7% of schools, while teachers find the situation notably lacking in support.

In the South, the situation is similar to other governorates, with 43.8% of principals describing the support as "completely unsuitable." Supervisors in the South describe the support as "completely unsuitable" in 50% of schools, and 28.1% consider it "bad." Coordinators find a lack of support, with 43.8% describing the situation as "completely unsuitable." Teachers in the South also find a lack of support, with 43.8% describing the situation as "completely unsuitable," similar to other governorates.

In Nabatieh, the results show that 47.8% of principals describe the support as "completely unsuitable," while supervisors in Nabatieh believe the situation requires improvement, with 47.8% of them describing it as "completely unsuitable." Coordinators in Nabatieh find a shortage of support, with 35.9% describing the situation as "completely unsuitable." Teachers in Nabatieh also find that the situation requires improvement, with 35.9% describing it as "completely unsuitable."

In Akkar, it is evident that this governorate suffers from a clear lack of support for students with special needs. Principals in Akkar point out that support is unsuitable in many schools. Supervisors report significant support deficiencies in schools, and coordinators describe the support as "completely unsuitable" in 40.6% of schools. Teachers also find a shortage of support, with many describing the situation as unsuitable in numerous schools.

In Baalbek-Hermel, the situation is similar to many other governorates, with 41.2% of schools suffering from a lack of support. Supervisors in the governorate report a support shortage at 41.2%. Coordinators in this region also observe a lack of support, with 38.1% describing the situation as "completely unsuitable." Teachers also find the support lacking, with 38.1% describing it as "completely unsuitable."

Overall, the analysis indicates that all educational sectors are facing a notable lack of support for students with special needs, especially in public sectors and schools in remote areas. While there has been noticeable improvement in some governorates like the South, Baalbek-

Hermel, and Mount Lebanon, the overall situation still requires significant improvements across all areas.

2.6.14. Item 6: Psychological and Counselling Support Services

The results in Beirut show significant variation across different sectors. In the public sector, 45.5% of principals describe the situation as "completely unsuitable," while supervisors believe 45.5% of schools face the same issue. According to the coordinators' results, Beirut records the highest negative evaluations at 45.5%. Teachers consider 37.9% of the support as "completely unsuitable." In the free private sector, 100% of principals describe the situation as "completely unsuitable" based on evaluations from principals, supervisors, and coordinators. Teachers in this sector find 35.4% of the support as "completely unsuitable." In the non-free private sector, the results vary, with a focus on "completely unsuitable" and "excellent" ratings from principals. Supervisors and coordinators show mixed evaluations, ranging from "completely unsuitable" to "excellent," while 23.1% of teachers find the support "completely unsuitable.

In Mount Lebanon (suburbs), the results are generally negative in the public sector, with 29.4% of principals describing the situation as "unsuitable" and 29.4% as "bad." Supervisors largely agree with this assessment. The coordinators' evaluations range from "acceptable" to "good." Teachers consider 29.4% of the situation "unsuitable." In the free private sector, evaluations vary between "acceptable" and "good" according to the principals and supervisors, while the coordinators describe the situation as "excellent." Only 11.4% of teachers find the situation "unsuitable." In the non-free private sector, principals observe that 25% of the situation is "excellent," while supervisors show a range of evaluations between "excellent" and "good." Coordinators note that the performance is good, with the highest percentage evaluating it as "excellent," while 25% of teachers find the situation "excellent." In UNRWA schools, principals describe the situation as "good," and supervisors report improvements in providing psychological support, with positive evaluations from teachers, some of whom describe the situation as "excellent."

In the North, 50% of principals describe the situation in the public sector as "unsuitable," with 36.8% considering it "bad." Supervisors record large negative percentages. Coordinators note that the North has the highest percentage of negative evaluations. 37.4% of teachers find the situation "unsuitable." In the free private sector, 60% of principals describe the situation as "unsuitable," while supervisors note a clear weakness in service provision. 60% of coordinators find the situation "unsuitable," compared to 37.4% of teachers who also consider it "unsuitable." In the non-free private sector, 38.9% of principals consider the situation "unsuitable," while supervisors note some relative improvement. Coordinators report that the situation is "unsuitable" in some schools. 38.9% of teachers find the support "unsuitable." In UNRWA schools, principals note that the support level in some schools is "excellent". The coordinator notes some overall improvement, and 50% of teachers describe the situation as "excellent."

In the Bekaa, 55.6% of principals in the public sector indicate that the situation is "unsuitable," with supervisors agreeing with the same percentage. Coordinators believe that

improvement is needed in this governorate, while 26.6% of teachers consider the support "unsuitable." In the free private sector, principals report a weakness in service provision with negative evaluations, while 66.7% of supervisors consider the situation "good." Coordinators find the situation "excellent" in some schools, and teachers see some positive evaluations. In the non-free private sector, principals note a range of evaluations, highlighting the need for clear improvement, while supervisors report some improvement but still see a gap. Coordinators mention that the performance is generally varied. Teachers distribute their evaluations between "acceptable" and "excellent."

In Mount Lebanon (excluding the suburbs) in the public sector, 30% of principals mention that the situation is "unsuitable," while 40% of supervisors describe the situation as "acceptable" or "good." Coordinators find the situation balanced between "acceptable" and "good," while 20% of teachers describe it as "unsuitable," with 40% considering it "acceptable." In the free private sector, 50% of principals report that the situation is "unsuitable," with 30% describing it as "acceptable." Supervisors describe the situation as "acceptable" in 50% of cases, while 50% of coordinators confirm that the situation is "good" or "acceptable." On the other hand, 30% of teachers consider the situation "unsuitable." In the non-free private sector, 25% of principals describe the situation as "excellent" and 35% as "good." Supervisors give varied evaluations between "excellent" and "good," while 25% of coordinators confirm that the situation is "excellent." Teachers consider the situation "good" in 35% of cases.

In Baalbek, 45% of principals describe the situation as "unsuitable," while 45% of supervisors find the situation "unsuitable." 45% of coordinators find the situation "unsuitable," while 50% of teachers consider it "unsuitable," and 30% describe it as "acceptable." In the free private sector, principals largely describe the situation as "unsuitable," while the majority of supervisors agree. The majority of coordinators also describe the situation as "unsuitable," while teachers provide negative and clear evaluations regarding the situation. In the non-free private sector, 25% of principals reported that the situation is "excellent." Supervisors provided varied evaluations ranging from "excellent" to "good," while coordinators' assessments were balanced between "excellent" and "good." On the other hand, 35% of teachers confirmed that the situation is "good."

In Nabatieh Governorate, in the public sector, 50% of principals reported that the situation is "unsuitable," while 30% of supervisors considered it "unsuitable." 50% of coordinators also noted that the situation is "unsuitable," and 50% of teachers agreed, while 30% considered the situation "acceptable." In the free private sector, most principals reported that the situation is "unsuitable," while 50% of supervisors also considered it "unsuitable." Coordinators pointed out that the evaluations varied between "unsuitable" and "acceptable," while 50% of teachers considered the situation "unsuitable." In the non-free private sector, 40% of principals reported that the situation is "good" or "excellent." 35% of supervisors considered the situation "excellent." Coordinators noted good performance in some schools, describing the situation as "excellent." 35% of teachers stated that the situation is "excellent."

2.6.15. Item 7: Availability of the Internet

In the public education sector, there is a clear disparity in the availability of the internet. Principals indicate that the internet is not available in some governorates like Beirut, with 37.5% of them rating the internet as "available but poorly." In the south, internet availability was relatively better, with 53.3% of principals rating the internet as "well available." In Mount Lebanon (suburbs), there was variation in availability, with most principals rating it between "good" and "acceptable." In other governorates like Bekaa and the north, the results were similar, with challenges in internet quality.

In the free private education sector, notable improvement was recorded, as 100% of principals in the south indicated that the internet is "very well available." In Mount Lebanon (suburbs), 60% of principals rated it as "very good." However, some schools in other governorates faced difficulties in connecting to the internet.

In the non-free private education sector, the best performance was observed among all sectors, as 60% of principals in Baalbek-Hermel reported that the internet is "very well available." In Mount Lebanon (suburbs), significant improvement was also noted, with 36.4% of principals rating the internet as "very good."

In the UNRWA sector, the results were more varied, with 50% of principals indicating that the internet is "well available," but there are still significant challenges in some governorates.

Regarding supervisors' results in the public sector, they reported large gaps in internet availability, especially in Beirut and Bekaa, where 5.5% of them indicated that the internet is not available at all. In contrast, in the free private education sector, 71% of supervisors reported that the internet is "very good" or "good," while data from the non-free private sector showed that 77% of supervisors reported high-quality internet availability. In the UNRWA sector, (66.7%) of the supervisors found rated the availability of the internet as "good".

Coordinators also confirmed gaps in internet availability in different governorates, especially in Beirut and Mount Lebanon, where some schools could not access the internet or rated its availability as average. In other governorates like the south, availability was better, with 60% of coordinators indicating that the internet is "very well available" in the south.

Teachers' results showed that 13.7% found that the internet is not available at all, and 22.9% thought it is not available most of the time. In the public sector, 20.1% of teachers found that the internet is never available, while in the free private education sector, the situation was more stable, with 24.4% of teachers reporting that the internet is "very well available."

Conclusions

Some sectors, like non-free private education and free private education, show better results in internet availability, while the public sector faces severe issues in providing high-quality internet connection. Most governorates, such as Beirut, Mount Lebanon, and the north, show significant gaps in internet availability.

In the public education sector, the analysis shows a clear disparity in the quality of the internet and the availability of electronic devices. In Beirut, internet connectivity is classified as "available but poor most of the time" by 37.5%, while only 12.5% classify the internet as "available with very high quality." In Mount Lebanon (excluding the suburbs) and the north, the majority classify internet quality as "reasonable," with 44.4% and 31.4% respectively. The south shows relatively better performance, with 53.3% classifying the internet as "available with good quality."

2.6.16. Item 8: Availability of Devices

As for the availability of devices, the public education sector suffers from a severe shortage, with 53% reporting a lack of any laptops and only 2.3% reporting one device per student, highlighting a digital gap that affects digital education. At the governorate level, Beirut faces a significant lack of devices, with 36.4% reporting no devices at all. In the suburbs of Mount Lebanon, 41.2% report "no devices available." In the Bekaa, the percentage rises to 66.7% for the "lacking devices" classification, while the south shows slight improvement in some governorates.

In the free private education sector, the internet is of very good quality in the south and Bekaa, with 100% and 66.7% respectively classifying it as "available" and "very high quality." However, there are issues in Mount Lebanon suburbs, where 25% classify the internet as "poor." As for electronic devices, 35.5% of the classifications indicate a lack of laptops, and some schools provide one device for every five or ten students.

In the non-free private education sector, it shows the best performance in terms of internet quality, with 60% in Baalbek-Hermel classifying it as "available with very high quality." As for devices, there is a lack of laptops at 32.5%, but some governorates, like Akkar, show positive results, with 44.4% providing one device per student.

Finally, in UNRWA schools, 50% of the classification indicates that the internet is "available with good quality," but they suffer from a complete lack of electronic devices, which calls for investments to improve digital infrastructure.

Conclusion:

- Public Education Sector: Shows disparity in internet quality, with relatively good performance in the south but significant improvements needed in Beirut and Mount Lebanon.
- Free Private Education Sector: Shows positive results, especially in the south and Bekaa.
- Non-Free Private Education Sector: The best in terms of internet quality, but suffers from gaps in device availability.
- UNRWA: Requires significant improvements to provide balanced digital infrastructure.
- At the governorate level, Beirut and Mount Lebanon face major problems with internet quality and device availability, while the south and Bekaa show relatively better results, highlighting the need to enhance digital equity across different governorates and education sectors.

3. **Analysis of the Results for the Fourth Research Question: The fourth research question: "How does the involvement of parents and community members between public and private schools affect the implementation of developed curricula?"**

3.1.   Analysis of Sub-question: What role can community partnerships play?

We always strive to develop and strengthen the role of the school to make it effective. The reality and statistical data highlight the urgent need for change and rebuilding trust between the school and the community. So, how can we transform the school to be effective?

One of the primary functions of a leader is to manage and activate public relations within the school, among both the educational and administrative staff, between the school and parents, and between the school and the local community as a whole. This requires the school principal to develop plans and programs to activate the relationship between the school and the external community, making school life meaningful and effective.

With the increasing demand for new skills (21st-century skills), the school is no longer isolated from its natural environment; it has become more and more interactive with the local community and parents to achieve the school's vision, mission, and goals. The goal is to raise the academic achievement of students. Therefore, educational management science emphasizes the need to enhance communication channels between the school and parents on one hand, and between the school and local community activities on the other, by training school principals on how to establish effective communication bridges to support the school and activate its role in the community.

Cooperation between the school, parents, and the community has become one of the essential conditions for the success and increased productivity of the school, given the heavy burdens and responsibilities it carries. Weak communication leads to misunderstandings between the administration and parents, which can negatively affect parents' participation in supporting their children and the school.

Research question four was answered by principals, supervisors, coordinators, and teachers. The answers were categorized by identifying these factors in both the public and private sectors and according to the governorates. A comparison between the two sectors was made to determine the impact of these factors, and a Key Insights of the Questionnaire results for each item of the question was provided. The answers to each item are as follows.

3.1.1.   Item 1: How is communication between school administration and learners?

- **Analysis of Teacher Questionnaire Results**

52.3% of teachers believe that communication between the administration and learners is generally good. 30.2% of them consider the communication to be highly effective, which means that a total of 82.5% are satisfied with the quality of communication between the administration and learners. However, 14.8% of teachers feel that the communication is limited and insufficient, while 0.7% believe the relationships are inadequate. An additional 0.7% acknowledge the complete absence of any communication.

The distribution of percentages according to governorates indicates that communication between the administration and learners in Beirut is considered good by 50.0%, with 26.7% considering it highly effective, indicating relatively good communication. In Mount Lebanon (excluding suburbs), 58.3% of teachers perceive the communication as "good," which is the highest percentage, with 20.0% saying it is highly effective. In the North, 54.1% of teachers believe the communication is good, and 24.8% think it is highly effective, reflecting a good level of communication. In Bekaa, 49.0% of teachers see the communication as "good," and 30.6% think it is highly effective, indicating a strong relationship between the administration and learners. In Baalbek-Hermel, 50.6% say it is good, while 26.0% consider it highly effective, which are also good percentages.

In the public sector, 52.3% of teachers believe the communication is "good," the highest percentage, followed by 30.2% who consider it highly effective.

In the private sector, school administrators communicate effectively in most governorates. This positive trend reflects effective communication, with the percentage of teachers who see the communication as highly effective ranging from 32.7% (in Akkar) to 45.4% (in Beirut). The highest percentage of highly effective communication was recorded in Beirut (45.4%), followed by Mount Lebanon (suburbs) with 42.3%. There is also a significant percentage of teachers who considered the communication with learners to be good, with the highest percentages in the North (54.1%) and Mount Lebanon (excluding suburbs) (47.4%). However, there was a percentage of teachers who considered the communication with learners to be limited, ranging from 8.4% (in Nabatieh) to 16.7% (in the North). A very small percentage of teachers reported the absence of any type of communication, with this percentage being at its lowest in most governorates. Additionally, a small percentage of teachers considered the relationships inadequate, ranging from 0.3% (in Mount Lebanon - Suburbs) to 5.1% (in Baalbek-Hermel).

More than half of the teachers in the public sector (28.0% of the total sample) indicate that communication is good with learners, and 16.1% of the total sample believe communication is highly effective. Therefore, in most governorates, there is a large percentage of teachers who believe communication is good to effective, indicating some degree of collaboration and interaction between the school and learners, despite some challenges or areas that need improvement. However, in some other governorates like Baalbek-Hermel and Nabatieh, a large percentage of teachers considered the communication limited or inadequate. The results indicate significant success in achieving positive communication with learners, but the 17.5% who feel communication is insufficient reflects the need for support and improvement in some schools to provide an equal experience for all learners.

- **Analysis of Principal Questionnaire Results**

In the public sector, 34.7% of principals believe communication with learners is highly effective to ensure the integration of efforts. The highest percentages were recorded in Mount Lebanon (excluding suburbs) at 55.6% and the South at 53.3%. In contrast, Akkar and Baalbek-Hermel recorded low percentages for highly effective communication, with rates of 15% and 18.2%, respectively. (59.2%) of principals believe that communication with learners is "good," with notable performance in Baalbek-Hermel (81.8%) and Akkar (75%). The North shows relatively good performance at 65.7%, followed by the South at 46.7%.

In the free private sector, 46.7% of principals believe that communication is "highly effective" with learners, with remarkable performance in Beirut (100%) and the South (100%). In contrast, Baalbek-Hermel records the lowest percentage at 33.3%.

(46.7%) of principals in this sector find that communication is "good" with learners, with a clear balance in most governorates such as Mount Lebanon (excluding suburbs) (50%) and the North (33.3%).

In the non-free private sector, the results show that (59.2%) of principals believe communication is "highly effective" with learners, with exceptional performance in Baalbek-Hermel (80%) and the South (71.4%). Beirut records a percentage of (66.7%), while the lowest rates are in Akkar (66.7%).

(35.7%) of principals believe communication is "good" with learners, with notable percentages in the North (30.8%) and Mount Lebanon suburbs (42.4%).

Principals in the UNRWA sector, at a rate of (75%), believe that communication is "highly effective" with learners, with ideal performance in all governorates such as Mount Lebanon suburbs, the North, and the South, at a rate of 100%.

Comparison between Governorates

When comparing the governorates, we find that Beirut achieves the highest rates of highly effective communication with learners across all sectors, with the public and free private sectors showing high rates of (50%) and (100%) for "highly effective" communication. Mount Lebanon (suburbs) shows balanced performance, with (44.9%) believing communication is "highly effective" and (42.9%) finding it "good." In Mount Lebanon (excluding suburbs), the percentages are evenly distributed between "good" (43.8%) and "highly effective" (56.3%).

The North shows a clear disparity between sectors, with the public sector recording only (20%) of communication being "highly effective" with learners, compared to (66.7%) in the free private sector. The Bekaa region shows a relative decline, with only (48%) of communication being "highly effective" with learners, with a significant focus on "good" communication at (52%).

In the South, both the public and free private sectors show high commitment to "highly effective" communication at rates of (64%) and (100%) respectively. The rates are lower in Akkar in the public sector, where only (28.6%) rely on "highly effective" communication with learners, compared to (66.7%) in the non-free private sector.

Finally, Baalbek-Hermel shows weak performance in the public sector, with only (18.2%) of communication being "highly effective" with learners, while the non-free private sector stands out with school principals communicating effectively with learners at a rate of (80%).

We conclude that the non-free private sector leads in terms of "highly effective" communication with learners, with a rate of (59.2%). The UNRWA sector shows consistency in "highly effective" communication at (100%) across all governorates.

- **Analysis of Coordinator Questionnaire Results**

In the public education sector, the results show a clear disparity between governorates regarding the communication of school management with learners to ensure community support. In Beirut, (33.3%) of respondents believe communication is highly effective, while higher rates of limited communication are observed in governorates like Akkar and Baalbek-Hermel. In the North and Bekaa, the results show higher rates of good communication.

In the free private education sector, Beirut, Bekaa, and the South show significant agreement on communication effectiveness, with results in these governorates confirming that communication is highly effective at a rate of (100%). In the suburbs of Mount Lebanon, the results were split between good and effective communication, indicating some degree of variance.

In the non-free private education sector, Beirut and Mount Lebanon (both suburbs and non-suburbs) are at the forefront of good and effective communication, with rates exceeding (90%), while Akkar and Baalbek-Hermel show lower rates of effective communication and face challenges in achieving community support.

In UNRWA schools, the results from the North governorate show unanimous agreement on effective communication at (100%), reflecting a high level of coordination between school management and learners to achieve community support.

Overall, the results show that governorates with large urban populations, such as Beirut and the suburbs of Mount Lebanon, tend to record higher rates of good and effective communication across all sectors, while rural governorates like Akkar and Baalbek-Hermel face greater challenges in achieving effective communication, which may require improvements in communication mechanisms and school participation.

- **Analysis of Supervisor Questionnaire Results**

In the public sector, communication between school management and learners is generally good, with (61.3%) of supervisors reporting that communication is "good," while (23%) indicated it is "highly effective." (13.8%) considered communication to be "limited," and (1.8%) felt it was "insufficient." This indicates that most schools in the public sector are working to build effective relationships with learners, with some gaps in certain governorates that need addressing.

In the free private sector, the data show positive communication results, with (61.3%) of supervisors reporting that communication is "highly effective," while (32.3%) consider it "good." A very small percentage (6.5%) consider communication to be "limited." This reflects the focus of free private schools on improving communication with learners.

The data from the non-free private sector in private education show that a large percentage of supervisors (53%) believe communication is "highly effective," and (39.3%) consider it "good." Only (6.8%) considered communication to be "limited," reflecting a very positive communication environment with learners.

The data from UNRWA also show a high percentage of effective communication (100%), with communication being "highly effective" in a large number of cases, reflecting a supportive educational policy and an effort to improve relationships with learners.

Data analysis shows that the public sector faces some challenges in certain governorates, such as Beirut and Bekaa, where there are high percentages of supervisors who view communication as "limited" or "insufficient." In contrast, the free private sector and non-free private sector achieve high levels of effective communication with learners, especially in governorates like the North and the South, with the South and Bekaa showing the best performance.

We conclude that the majority of supervisors agree that communication between management and learners is either good or highly effective in most governorates and educational sectors. The percentages range between (50%) and (82.5%) in the public sector, and between (59%) and (100%) in the non-free private sector and UNRWA. Communication with learners is generally good across all sectors, with the non-free private sector and UNRWA excelling. It is clear that rural governorates, such as Akkar and Baalbek-Hermel, need to improve communication mechanisms to achieve equal opportunities.

3.1.2. Item 2: Communication between administrators and teachers

- **Analysis of Supervisor Questionnaire Results**

In the public sector, (51%) of supervisors' report that communication between management and teachers is "highly effective," with higher rates in the South (80%) and Mount Lebanon (excluding suburbs) (66.7%). In contrast, Akkar records the lowest rate at (30%), followed by Baalbek-Hermel at (27.3%). (46.9%) of supervisors believe communication is "good," with notable rates in Nabatieh (56.3%) and Baalbek-Hermel (63.6%).

In the free private sector, (63.6%) of supervisors believe that communication with teachers is "highly effective," with exceptional performance in Bekaa and the South at (100%). The North shows a noticeable decline at (83.3%). (33.3%) of supervisors find communication "good," with balanced rates in Nabatieh (66.7%) and Mount Lebanon (excluding suburbs) (75%).

In the non-free private sector, (64.3%) of supervisors believe communication is "highly effective," with high performance in Baalbek-Hermel (80%) and Bekaa (77.8%). Beirut records lower percentages of (88.9%) for "good" communication, and (34.7%) of supervisors consider communication to be "good," with notable rates in the South (71.4%) and Mount Lebanon (excluding suburbs) (60%).

In the UNRWA sector, all supervisors (100%) report that communication with teachers is "highly effective."

Looking at the results by governorate for communication between management and teachers, Beirut shows high performance, with (62.5%) reporting "highly effective" communication in the public sector, while the free private sector shows dominance at (100%). Mount Lebanon (suburbs) shows a relatively balanced performance, with the public sector relying on "highly effective" communication at (63.6%), while the non-free private sector achieves similar rates.

The North shows noticeable differences, with the public sector relying on "highly effective" communication at (45.7%), compared to (83.3%) in the free private sector. Bekaa shows positive results, with all supervisors in the free private sector reporting "highly effective" communication with teachers, while the public sector records a lower percentage (38.5%).

The South shows clear superiority, with (80%) of supervisors finding "highly effective" communication with teachers, and the free private sector achieves perfect performance at (100%). Nabatieh shows balanced rates, with (57.1%) of supervisors reporting "highly effective" communication, while the free private sector achieves a good rate of (66.7%).

In Akkar and Baalbek-Hermel, there is a decline in effective communication with teachers in the public sector, with low rates of "highly effective" communication (30% and 27.3%, respectively). In contrast, the non-free private sector in Baalbek-Hermel performs well, with communication at (80%).

We conclude that the UNRWA sector leads all sectors in communication with teachers, with (100%) of supervisors reporting "highly effective" communication. The free private sector shows clear superiority in schools in the South and Bekaa in adopting effective communication mechanisms with teachers, while schools in the North need to develop this skill. Schools in Beirut, the South, and Bekaa show strong performance in communication with teachers, while supervisors in Akkar and Baalbek-Hermel need to improve and develop their communication mechanisms to be more effective, especially in public sector schools.

- **Analysis of Teacher Questionnaire Results**
    Baalbek-Hermel governorate shows the highest percentage of effective communication between management and teachers at (63.9%), indicating a clear distinction in communication strategies. The North shows a decline in "effective communication" at (49.0%), suggesting the need to improve administrative practices by developing this skill among supervisors.

    The results from Beirut and Mount Lebanon (suburbs) show similar rates across different categories, indicating that supervisors in these areas are able to communicate effectively with

teachers. In contrast, Akkar and Bekaa show relatively higher rates of limited communication, which may indicate challenges faced by supervisors in these governorates and the need for interventions to establish training and follow-up programs for supervisors to enhance this skill.

- **Analysis of Supervisor Questionnaire Results**

In the public sector, communication between management and teachers is reported as "good" or "highly effective" by (85.7%) of supervisors. However, there is a small gap of (14.3%) indicating limited or insufficient communication. In the free private sector, the data shows that (96.8%) of supervisors believe communication is "good" or "highly effective." A small percentage (3.2%) report limited or insufficient communication. In the non-free private sector, (98.2%) of supervisors consider communication between management and teachers to be "good" or "highly effective," while a small percentage (1.8%) view it as limited or insufficient. Data related to communication between school management and teachers in UNRWA schools indicates that communication is "highly effective" at (100%).

At the governorate level, we find challenges in communication with teachers in the public sector in Beirut and Bekaa, where the percentage of supervisors reporting limited communication reaches (27.3%) in Beirut and (27.8%) in Bekaa. In other governorates such as Mount Lebanon, the North, and the South, communication is reported as "good" or "highly effective" with dominant rates. In the free private sector, all governorates, except for Nabatieh, report effective communication with teachers, with (100%) of supervisors noting that communication is both good and highly effective. In the non-free private sector, the rates are similar to those in the free private sector, with a notable distinction in Baalbek-Hermel, where (90.9%) of supervisors consider communication to be highly effective.

The UNRWA sector stands out with a very high level of communication between school management and teachers, particularly in Mount Lebanon (suburbs) and the South, where all supervisors agree that communication is highly effective.

We conclude that the public sector shows noticeable variability in communication with teachers between governorates. In governorates like Bekaa and Beirut, challenges in effective communication with teachers need to be addressed by relevant authorities to develop these skills among school heads, in order to build communication bridges with the teaching staff, which can positively impact teacher performance and student achievement. In contrast, the free and non-free private sectors demonstrate effective communication in the vast majority of governorates, except for some cases in Nabatieh (in free private education) and Mount Lebanon (suburbs, in non-free private education), reflecting the sector's ability to establish a positive communication culture between the parties involved in the educational process, which could foster a learning-oriented environment.

- **Analysis of Coordinator Questionnaire Results**

According to the coordinators' opinions, the public sector shows a clear variation in communication levels between governorates. In many governorates, such as Beirut and Bekaa, communication is distributed between "highly effective" and "good," with some governorates showing less effective communication. In some areas, such as Mount Lebanon and the North, good communication is seen with varying rates between highly effective and good communication, reflecting diversity in performance levels within this sector.

Private free sector supervisors demonstrate very effective communication with teachers in most governorates. For example, in Beirut, Bekaa, and Mount Lebanon, the rate of highly effective communication reaches (100%), reflecting a strong commitment to effective communication mechanisms. In some governorates such as the South and Nabatieh, high rates of highly effective communication are also observed, highlighting the strength of this sector in building strong communicative relationships.

In the non-free private sector, communication levels are higher than in the public sector. Governorates such as Mount Lebanon, the North, and Bekaa show high rates of highly effective communication, indicating continued improvement in building relationships and effective communication. However, some governorates like Beirut and Akkar show variation in performance, where communication is both highly effective and good in varying percentages. In UNRWA schools in the North, highly effective communication is reported at (100%), reflecting outstanding performance in this sector regarding communication between teachers and management.

The results show significant variation in communication levels between sectors and governorates. The free private sector achieves the highest levels of effective communication, while the public sector suffers from inconsistencies in performance across governorates. The non-free private sector shows a notable improvement in enhancing communication, reflecting greater investment in building effective relationships.

3.1.3. *Item 3: Communication between administration and parents*

- **Analysis of Principal Questionnaire Results**

Public schools show significant variation in the effectiveness of communication between school management and parents. For example, in Beirut, (37.5%) of principals believe communication is "very effective," while in the North, this rate reaches (31.4%). The governorates of Nabatieh and the South show higher performance, with (37.5%) and (33.3%) of principals, respectively, classifying communication as "very effective." In contrast, some governorates like Akkar show relatively weak communication, with (30%) of principals considering communication to be "limited."

In the free private sector, the results show that the majority of principals believe communication with parents is effective. For example, in Bekaa, (66.7%) of principals classify communication as "highly effective." However, Beirut shows varied results, with (50%) of principals finding communication to be "good," while the other half considers it "highly effective."

The non-free private sector shows strong performance in most governorates. For example, in Beirut, (66.7%) of coordinators classify communication as "very effective." In Mount Lebanon suburbs, there is a balance between high and good effectiveness, with (45.5%) for each. However, in governorates such as Akkar, only (16.7%) of coordinators classify communication as "good."

In UNRWA, excellent results are seen, with all supervisors classifying communication as "very effective" in both the South and the North, reflecting the strength of the administrative system in this sector.

The results show that there is variation in the effectiveness of communication between school management and parents across educational sectors. The public sector shows significant variation between governorates, while both free and non-free private education sectors enjoy higher levels of communication. UNRWA sets a strong example with high effectiveness across all governorates.

At the governorate level, in Beirut, the non-free private sector shows outstanding performance, with (66.7%) of coordinators classifying communication as "very effective" with parents. In Mount Lebanon (suburbs), the public sector shows a balance, with good rates of effective communication reaching (55.6%). In the North, the public sector shows good communication, with a rate of (54.3%).

In the South, UNRWA and public education lead in achieving very effective communication with parents. Akkar shows relative weakness in communication with parents in both public and non-free private education, with high percentages indicating "limited communication." On the other hand, Baalbek-Hermel shows a balance across all levels, with (36.4%) indicating "good" communication.

In conclusion, the data highlights the need to activate communication mechanisms between school administrations and parents in Akkar and Bekaa in the public sector. The free and non-free private education sectors stand out as effective models in achieving communication with parents in most governorates, while UNRWA confirms the effectiveness of its communication strategies.

- **Analysis of the Supervisor Questionnaire Results**

(76%) of supervisors in the public sector believe that school principals communicate positively with parents, with (54.8%) considering it "good" and (21.2%) considering it "very effective." However, there are challenges in some governorates where (24%) of supervisors believe communication is "limited" or "insufficient." The weakest governorates in communication are Beirut and Bekaa, with limited communication reaching (36.4%) in Beirut and (33.3%) in Bekaa.

In the free private education sector, (93.6%) of supervisors believe communication with parents is positive, with (58.1%) considering it "very effective" and (35.5%) considering it "good." In contrast, the South faces weak communication, with "limited communication" reaching (50%). The best-performing governorates include Akkar, Beirut, and Baalbek-Hermel, which showed strong results in communication with parents.

In the non-free private sector, (94.9%) of supervisors believe that administrations communicate positively with parents, with (48.7%) considering it "very effective" and (46.2%) considering it "good." There are no governorates with weak communication; the highest percentage was in Mount Lebanon (suburbs), where (9.4%) of supervisors reported that communication is "limited" or "insufficient." On the other hand, governorates such as Akkar and Nabatieh showed very good results.

UNRWA schools show outstanding results, with (100%) of supervisors reporting that communication with parents is very positive and effective.

We conclude that there is significant variation between governorates in the public sector, where Beirut and Bekaa show weak communication with parents (36.4% and 33.3%, respectively). In contrast, governorates such as Mount Lebanon (suburbs), the South, and Nabatieh show good and effective communication (70.6% in the suburbs and 65.2% in Nabatieh). Conversely, the South suffers from limited communication, with a rate of (50%). In contrast, Akkar and other governorates like Beirut and Baalbek-Hermel show positive results, with communication in Akkar reaching (100%) as "very effective," and in Beirut and Baalbek-Hermel it is considered "good" at (100%). In the non-free private education sector, Akkar, Mount Lebanon (excluding suburbs), Nabatieh, Beirut, and the South show positive communication results with parents, both "very effective" and "good," at a total of (100%) for each governorate. Baalbek-Hermel also shows positive results, with communication with parents being "very effective" at (72.7%). UNRWA, on the other hand, shows excellent results, with (100%) of supervisors confirming that communication with parents is very effective across all governorates.

We conclude from the comparative analysis that the administrations in the free and non-free private education sectors achieve the highest levels of effective communication with parents compared to the public sector, which suffers from significant variation between governorates. The South and Bekaa show noticeable weaknesses in communication across all sectors, requiring intervention to improve relationships with parents in those governorates. On the other hand, Akkar and Mount Lebanon achieve the best results in all educational sectors, and their experiences can be used to enhance communication in other governorates. The UNRWA sector stands out for its very effective communication across all governorates.

- **Analysis of the Teacher Questionnaire Results**

(48.5%) of teachers in the public sector reported that communication with parents is "good," while (25.0%) stated it is "very effective," with a very low percentage of "no communication" at (0.3%).

In the free private sector, there is a clear discrepancy in Beirut governorate, where teachers' responses show (37.5%) for both "limited communication" and "very effective communication." In Mount Lebanon (excluding suburbs), the results indicate that (51.6%) of teachers consider communication "good" and (48.4%) see it as "very effective." In the North governorate, a large percentage reported "limited communication" (67.5%), with (32.5%) for "good communication." In Bekaa, there is a higher percentage for the response "good communication" (50.0%) and "very effective communication" at (41.2%). Overall, for the free private sector, the response "good

communication" was (48.3%) among respondents, compared to (39.7%) for "very effective communication."

In the non-free private sector, in Beirut governorate, (52.5%) of responses were for "very effective communication," and (37.3%) for "good communication." In the North, (48.0%) selected "good communication," and (41.0%) chose "very effective communication." Akkar governorate showed similar percentages for "good communication" (46.9%) and "very effective communication" (35.9%). Overall results for the non-free private sector showed equal percentages for communication being either "good" or "very effective," each at (45.1%).

For UNRWA, the results by governorate show that Mount Lebanon (suburbs) had (80.0%) for "good communication" and (20.0%) for "very effective communication." In the South, (80.0%) rated communication between administration and parents as "very effective," with (20.0%) for "good communication." The overall results for UNRWA show a balance between "good communication" at (41.7%) and "very effective communication" at (58.3%). We conclude that most governorates and sectors show communication between administration and parents as either "good" or "very effective."

Mount Lebanon (excluding suburbs) in both free and non-free private sectors stand out for "very effective communication," reaching (48.4%). In the North (public sector), (31.1%) of teachers find communication between administration and parents to be "limited," suggesting that school principals in these areas may benefit from workshops and seminars to improve communication channels with parents and involve them more in the educational process and school activities, which would benefit both the students and the school.

- **Analysis of the Coordinator Questionnaire Results**
  The free private sector shows the highest levels of effective communication between administration and parents in most governorates, with notable results in areas such as Mount Lebanon (excluding suburbs) and the North. The public sector, however, suffers from inconsistency in communication levels between governorates, with some school administrations demonstrating good communication, while others face challenges in building adequate relationships with parents. The non-free private sector shows improvements in communication with parents, particularly in Beirut and Mount Lebanon. UNRWA results show a good balance between both good and very effective communication.

Conclusion

Communication is a key factor in the success of the relationship between administration and parents. This skill largely depends on the level and effectiveness of communication, reflecting the flexibility of the administration and its commitment to ensuring parental satisfaction to improve the school's image. All opinions in these Questionnaires indicate that the quality of communication varies between educational sectors and governorates, showing that the relationship is not homogeneous; it is strong in some sectors (like private education and UNRWA) and weak in others

(like the public sector in some governorates). This may be due to a lack of effective communication mechanisms or insufficient resources allocated to enhance these relationships, necessitating decision-makers to develop and strengthen communication mechanisms in these schools to avoid exacerbating the gap between administration and parents, which could have a negative impact on the student, the school, and the community.

The relationship between administration and parents ranges from strong to weak, depending on the sector and governorate. Effective communication plays a pivotal role in determining the nature of this relationship, which is evident in the superior performance of sectors like UNRWA and private education.

3.1.4. *Item 4: Communication between the administration and the local community*

- **Analysis of Principal Questionnaire Results**

When examining the governorates from the perspective of communication between the administration and the local community, Beirut shows a notable balance, where (75%) of public sector principals feel they communicate "well" with the local community, and a low percentage (22.2%) consider this communication to be "very effective." In the free private sector, there is perfect performance, with (100%) of principals seeing their communication with the local community as "good." In Mount Lebanon (suburbs), medium percentages are observed, with (36.4%) of principals in public schools reporting "limited communication" and (27.3%) considering it "very effective." In the North, there is a clear discrepancy between sectors; the non-free private sector shows lower rates, with (23.1%) of principals communicating effectively with the local community, while the public sector is at (14.3%). In Bekaa, the public sector shows positive performance, with (61.5%) of principals communicating "well," while the free private sector demonstrates relative superiority in communication, with (66.7%) of principals reporting good communication with the local community.

In the South, there is clear excellence, with (73.3%) of principals in public schools communicating "well" with the local community, while the free private sector shows perfect performance at (100%). In Nabatieh, (67.9%) of principals in public schools report "good communication," while the free private sector shows a balance between "good" and "very effective" communication, with (33.3%) each.

In Akkar and Baalbek-Hermel schools, there is a need to improve communication with the local community, as the percentage of "very effective" communication is very low in the public sector (5% and 18.2%, respectively). In contrast, the non-free private sector in Baalbek-Hermel shows excellent performance, with (60%) of principals communicating effectively with the local community. The UNRWA sector leads with very effective communication with the local community at (75%).

The free private sector shows high performance in the South and Bekaa, while results in the North suggest weak effective communication with the local community. Beirut, the South, and Bekaa lead in both "good" and "very effective" communication with the local community. Akkar

and Baalbek-Hermel schools need to activate communication mechanisms with the local community, especially in the public sector.

- **Analysis of Supervisor Questionnaire Results**

The general situation in the public sector shows limited communication with the local community in most governorates. According to the statistics, (44.2%) of supervisors consider communication "good," while (31.3%) see it as "limited," indicating a need to improve communication levels, particularly in some governorates like Beirut and Bekaa. In the free private sector, there is limited or absent communication in some governorates; (51.6%) of supervisors rate communication as "good," while (16.1%) consider it "limited." These percentages show significant gaps in the quality of communication between schools and the local community, requiring more attention in governorates like Beirut. In the non-free private sector, the data shows relatively good communication with the local community, with (41%) of supervisors rating it as "good" and (27.4%) as "effective." However, there are areas like the North and Bekaa that need to strengthen communication. In the UNRWA sector, (66.7%) of supervisors consider communication "good," while (33.3%) see it as "effective," reflecting a relative level of communication that still needs improvement in some governorates.

At the governorate level, the public sector shows considerable variation. In Beirut, (36.4%) of supervisors find communication "limited," while the same percentage considers it "good." In Mount Lebanon (suburbs), (64.7%) consider it "good." In the North, (31.6%) of supervisors find communication "limited," while in Bekaa, (38.9%) consider it "limited." In the South, the highest percentage of supervisors (53.1%) consider communication "good."

The free private sector shows varying results across governorates. In Beirut and the South, there is good communication across all schools. In Bekaa, (66.7%) of supervisors' rate communication as "good," with (33.3%) finding it "effective." In the North, (60%) of supervisors' rate communication as "effective," while (40%) consider it "good." In Mount Lebanon (suburbs), (60%) of supervisors see communication as "good," with (20%) finding it "very effective," while in Mount Lebanon (excluding suburbs), (75%) see communication as "good" and (25%) find it "effective."

In the private non-free sector, (44.4%) of supervisors in Beirut consider communication to be "good," and (33.3%) see it as "effective." In the South, the percentage rises to (57.1%) for the "good" option, with some gaps in communication in the North, where (44.5%) of supervisors view it as "limited and insufficient." An improvement is observed in some governorates, such as Nabatieh and Akkar.

In UNRWA schools, the results were varied, with (66.7%) of supervisors stating that communication is "good," while (33.3%) considered it "effective." The overall situation reflects effective communication in some schools.

Comparative Analysis

- **Public Sector:** This sector is the most challenging in terms of communication, with clear variation between governorates. Beirut and Bekaa show significant weaknesses, requiring interventions to improve communication with the local community.
- **Free Private Education:** Displays better communication compared to the public sector, but still faces gaps in some governorates, such as Mount Lebanon (suburbs), which requires attention to improve communication.
- **Private Non-Free Education:** Shows relatively better communication in most governorates, but areas like the North and Bekaa need additional strengthening.
- **UNRWA:** Demonstrates the highest levels of balanced and effective communication, with UNRWA schools serving as a positive model compared to other sectors, needing only minor improvements.

- **Analysis of Coordinator Questionnaire Results**

The results indicate that communication between the administration and the local community in the public sector suffers from varying effectiveness across governorates, with limited communication being a key focus in some areas, such as Beirut. The communication between administrations in the UNRWA sector and the local community is highly effective in the North, where (100%) of coordinators report "good" communication, reflecting full coordination between the school administration and the local community. In the free private sector, there is a high level of effectiveness across all governorates, indicating greater effort in communication between schools and the local community. In the non-free private sector, communication is good in most governorates, with some differences in communication levels across the regions.

3.1.5. *Item 5: How does the school build relationships with the local community and supporting entities to secure the necessary resources and support?*

- **Analysis of Supervisor Questionnaire Results**

In the public sector, communication with supporting entities is limited in most governorates, with (38.7%) of supervisors reporting limited communication. (12.4%) mentioned that communication is insufficient, while (3.2%) reported the complete absence of communication. On the other hand, (33.6%) reported that communication is "good," and (12.0%) considered it "very effective," indicating the need for improvements in communication and enhancing its effectiveness across most governorates.

In the free private sector, the data shows that the majority of supervisors report good communication between the administration and supporting entities at (51.6%), and (22.6%) reported that communication is very effective. However, (12.9%) mentioned that communication is insufficient or limited. These results suggest there are gaps in the quality of communication in some governorates.

In the non-free private sector, communication with supporting entities was more diverse, with (34.2%) of supervisors reporting "good" communication and (26.5%) reporting "very effective" communication. However, (15.4%) considered the communication "limited," and (13.7%) said it was "insufficient," indicating a relative improvement in communication compared to other sectors. The results in UNRWA schools were varied, with (33.3%) of supervisors reporting "good" communication, (33.3%) stating it is "very effective," and (33.3%) considering it "limited." These results indicate communication gaps in some UNRWA schools.

Governorate-Level Analysis

In the public sector in Beirut, (36.4%) of supervisors reported "limited" communication, while (36.4%) indicated "good" communication. In Mount Lebanon (suburbs), (52.9%) reported "good" communication, reflecting a noticeable improvement. In the North, 50% of supervisors said that communication between the administration, local community, and supporting entities is "limited." In Bekaa, (38.9%) indicated limited communication, and (27.8%) said communication is "insufficient." In the South, (40.6%) stated that communication is "limited," while (12.5%) reported "very effective" communication.

In the free private sector in Beirut, Bekaa, and the South, all supervisors reported "good" communication with the local community and supporting entities, reflecting good communication in these governorates. In Mount Lebanon (suburbs), (40%) reported insufficient communication. In the North, (40%) said communication is "good," and (60%) said it is "very effective," making it the best among the governorates.

The results for the non-free private sector showed that (33.3%) of supervisors in Beirut said communication is "good," and (33.3%) said it is "very effective." In Mount Lebanon (suburbs), (31.3%) reported "good" communication, while (25%) reported "very effective" communication. In the North, (38.9%) reported "good" communication, and (16.7%) found it "very effective."

It is clear that the public sector faces greater challenges in communication compared to other sectors, with "limited" communication in many governorates such as Beirut and the North. However, there is some improvement in the Mount Lebanon (suburbs) area. The free private sector experiences significant communication gaps in some governorates, such as Mount Lebanon (suburbs), but shows good communication in areas like Beirut and Bekaa. The non-free private sector shows relatively good communication in most governorates, especially in the North and Beirut, but it requires improvement in some areas like the South.

- **Analysis of Coordinator Questionnaire Results**

In the public sector, most governorates show limited communication between school administrations and donors. In Beirut, the highest level of responses indicated "insufficient relationship building" at (44.4%) of coordinators, followed by "limited communication" at (22.2%) of coordinators. In Mount Lebanon (suburbs) and Mount Lebanon (non-suburbs), communication is somewhat good, according to (47.1%) and (41.0%) of coordinators, respectively, while the "insufficient relationship building" rate remains high in some governorates. In the North, there is a balance between good and limited communication, with some effectiveness in relationship

building. In Bekaa, limited communication is reported by a high percentage of coordinators (40.0%), indicating the need for improved communication with donors.

In the free private sector, communication with donors is ideal in some governorates. In Beirut, communication is very effective according to (100%) of coordinators. In Mount Lebanon (suburbs) and Mount Lebanon (non-suburbs), communication is largely good, with very effective communication reported by (100%) of coordinators. In the North and Bekaa, there is a balance between good and limited communication, with an emphasis on good relationship building. In the South and Nabatieh, the governorates show weak communication, with some improvement in Akkar and Baalbek-Hermel.

The non-free private sector shows clear variation in communication levels. In Beirut, (41.7%) of coordinators report good communication, while Mount Lebanon (suburbs) and Mount Lebanon (non-suburbs) show high levels of very effective communication at (30.4%) and (100%) respectively. In the North, good communication and moderate effectiveness are observed in some governorates. In Bekaa, the non-free private sector shows a balance between good and effective communication. In the South, communication remains low, although some governorates report good communication.

In Nabatieh, there is a high percentage of coordinators reporting insufficient relationship building, indicating a need for improvement in these areas.

As for the UNRWA sector, communication is fully effective and very efficient in the North, reflecting ideal coordination between the schools and donors.

Overall, the free private sector shows positive results in communication with donors across most governorates, while the public sector needs notable improvements in some areas, especially regarding building community relationships and enhancing effective communication.

The results for communication between school administrations and donors across different governorates and sectors show significant variation in communication effectiveness. In the public sector, communication is generally limited or insufficient in most governorates, with good communication reported in some areas like Mount Lebanon and the North, but it still requires improvement, especially in building sustainable relationships between school administrations and donors.

In the free private sector, positive results were observed in most governorates, with effective communication and good relationship building, particularly in Beirut, Mount Lebanon, and the North. Some governorates in the South and Nabatieh show weakness in communication, but overall, this sector records the highest levels of communication effectiveness.

In the non-free private sector, there is variation in communication results, with good and effective communication reported in certain governorates such as Mount Lebanon (non-suburbs) and the North. However, other governorates, like Nabatieh and Bekaa, require significant improvements.

For the UNRWA sector, communication is ideal in certain governorates like the North, reflecting high coordination between schools and donors. Thus, the free private sector shows strong performance across most governorates, while the public sector needs support and training to activate communication mechanisms with donors to secure necessary resources and support for its schools.

- **Analysis of Principal Questionnaire Results**

The results indicate that (12.9%) of school principals in the public sector believe they communicate "very effectively" with donors and the local community to secure necessary resources and support for their schools. The highest percentage is in Beirut (62.5%), followed by Mount Lebanon (excluding suburbs) with (50%), then the South (43.5%), where principals reported "good communication" with donors. The North shows a relatively lower figure, with (31.4%) reporting communication.

In Mount Lebanon (excluding suburbs), there is a lower performance in communication, as reported by (27.8%) of principals. In Akkar and Baalbek-Hermel, the percentages are very low at (5% and 9.1%, respectively). In the free private sector, (6.7%) of principals consider communication with donors to be "very effective," with ideal performance in the South (100%), and moderate performance in Baalbek-Hermel (66.7%). In contrast, the North shows a significant decline, with only (16.7%) reporting communication. (40%) of principals said they rely on "good" communication, with balanced percentages in Beirut (50%) and Mount Lebanon (excluding suburbs) (50%).

In the non-free private sector, (16.3%) of principals reported "very effective" communication, with Baalbek-Hermel at (40%), the South at (28.6%), and Bekaa at (22.2%). (28.6%) of principals reported "good" communication in Bekaa, and (40%) in Mount Lebanon (excluding suburbs). In the UNRWA sector, (75%) of principals reported "very effective" communication with donors, with high performance across all governorates, including Mount Lebanon (suburbs), the North, and the South.

When comparing governorate results, Beirut achieves the highest percentage in the public sector, with (62.5%) of principals reporting "very effective" communication with donors, while the free private sector shows superiority with (100%) of principals reporting "good" communication. Mount Lebanon (suburbs) shows moderate percentages, with (36.4%) of principals in the public sector reporting "good" communication, and only (18.2%) communicating "very effectively." In the North, there is a clear disparity between sectors; the non-free private sector shows low percentages of "very effective" communication, with (7.7%) of principals, while the public sector is at (11.4%). Bekaa shows a balance in the public sector, with (46.2%) of principals reporting "good" communication, while the free private sector shows modest percentages of "good" communication with donors at (33.3%).

The South excels in the public sector, with (46.7%) of principals reporting "good" communication with donors, while the free private sector shows ideal performance with (100%) of principals. Nabatieh shows moderate performance, with (46.4%) of principals in public schools

reporting "good" communication. The free private sector shows a balance, with (50%) of principals reporting both "good" and "very effective" communication. Akkar and Baalbek-Hermel show a decline in the public sector, with very low percentages of principals reporting "very effective" communication at (5% and 9.1%, respectively). In contrast, the non-free private sector in Baalbek-Hermel shows better performance, with (40%) of principals.

We conclude that UNRWA schools perform the best in "very effective" communication with donors, with (75%) of principals reporting this. The free private sector shows ideal performance in the South, while schools in the North suffer from weak communication with donors. Beirut, the South, and Bekaa lead in "good" and "very effective" communication with donors. However, schools in Akkar and Baalbek-Hermel need to activate communication mechanisms with donors, especially in the public sector.

4. Analysis of the Results for the Fifth Research Question: What are the expected outcomes regarding the implementation of developed curricula from the perspective of stakeholders in public and private schools?

This question aims to compare the educational community's expectations regarding the success of implementing developed curricula based on the different contexts of the public and private education sectors. The response will include a presentation of the focus group results with secondary school students from both sectors, as well as interview results with educational officials in private institutions. Key findings that contribute to answering the question will be highlighted, and a comprehensive final answer will be provided, combining analysis and comparison.

4.1. Focus Group Results with Students

To answer the fifth question of the study about the needs and requirements for implementing developed curricula from the stakeholders' perspective, focus groups were conducted with secondary school students from various sectors and governorates to gather their opinions on these needs, as they are directly concerned with the implementation of the developed curricula.

The questions centered around several themes: the school environment, educational support, skill enhancement, and readiness for life after school.

4.1.1. Section 1: The School Environment and Feeling of Safety

Students' responses in this theme reflected their need for a school environment rich in supportive resources, both in terms of technology and life skills. They also emphasized the importance of collaborative projects and activities that stimulate creative thinking and prepare them for the future. The items constituting this theme, according to their opinions, are as follows:

Item 1: The Teacher's Role in Creating an Inspiring Educational Environment

Students pointed out that the teacher's personality significantly affects the educational environment. A supportive and understanding teacher enhances students' sense of safety and encourages them to interact and participate. The teacher's role is reflected in how they engage with students, their ability to understand and communicate with them, which serves as an entry point for students to engage with the subject matter and interact with it, thus increasing their motivation.

The students also highlighted the impact of the teaching style, which the teacher adopts, in creating an interactive atmosphere that helps students absorb lessons better, especially when the teaching style suits their needs. According to students, a teaching style based on interaction is more beneficial and helps learners remember lessons, eliminating barriers between teachers and students.

Students focused on the importance of positive interaction within the classroom, which they defined as building a positive relationship between the teacher and students. They believe this

relationship boosts their comfort and self-confidence, which positively affects their academic performance. Students see this interaction as being reflected by the teacher allowing space for conversation, participation, and dialogue. When students feel that the teacher listens to them and values their opinions, they feel appreciated and that their future is being cared for.

Item 2: Attention to Study Materials

Discussions among students focused on several indicators in this item, including the preference of most students for scientific subjects, as they feel these subjects are more connected to their academic and professional futures. They believe these subjects provide better opportunities for the future and are more relevant to their practical lives.

Therefore, some students feel that literary subjects are less important compared to scientific ones, and they do not see a direct future benefit in them. Arabic language and literary subjects fall into this category, with some students viewing them as unnecessary filler with no significant value.

The second point that students focused on in this section is the connection between the subjects they study and their professional future. Based on this connection, their interest in the subjects is shaped, increasing their enthusiasm for scientific subjects while decreasing their interest in certain other subjects that may not receive the same level of attention or enthusiasm.

Item 3: Administrative Attention

Students emphasize the role of the administrative body and teachers in the school, seeing it as positive and cooperative. This feeling contributes to their sense of safety and comfort, and they are content with how things are progressing. Students find that the necessary equipment, assistants, and basic needs are available, and the general atmosphere in the schools is excellent. However, some students who have experienced war and displacement only need some time for psychological rest. During this period, they receive support and assistance from the teachers, educational staff, and the administration.

Students believe that the good treatment they receive and their sense of comfort and safety is a result of the role played by the school administration and teachers in creating a positive educational environment.

Item 4: Extracurricular Activities

In this section, students also focus on extracurricular activities, seeing them as an urgent need because they develop talents and break the monotony of the academic routine. They take this opportunity to showcase their talents, highlighting the importance of dedicating time and resources to support these activities.

Students mentioned their favorite places within the school where they spend their free time, such as the laboratory, the playground, or classrooms. They discussed their relationship with these places and their attachment to them. They also spoke about the times they prefer during the school day, such as their favorite subject lessons or break times. Some students expressed that certain subject, like mathematics, mean a lot to them because of the teacher's teaching style, while others noted that their favorite times varied between activities and subjects, they feel are beneficial. Some prefer physical education classes, which take place once a week, and Arabic language lessons.

There was a notable interest among students in activities held during Independence Day and Arabic Language Day, where they participate in cultural and theatrical activities. Students also complained about the absence of music education classes from the curriculum.

Key Insights of Section One

Students found that implementing the developed curricula requires a school environment rich in resources and technology, with an effective role for teachers who enhance interaction and participation. They prefer scientific subjects due to their connection to their professional future, while they perceive literary subjects as less important. The school administration, in their view, plays a significant role in providing a positive educational environment, especially for students who have gone through difficult experiences such as war. They emphasized the need for extracurricular activities to develop talents and alleviate the monotony of academic life. It was generally found that private education may offer better opportunities in these areas compared to public education.

4.1.2. Section Two: Academic Support

In this section, students focused on several aspects they found essential for implementing the curriculum, which are:

Item 1: Official Support System

In this item, students discussed the appropriate class size and found that reducing the number of students in a class contributes to improving the quality of education, increasing focus, and providing opportunities to ask questions. They also addressed the availability of administrative assistance, noting that administrative support is an important factor in solving students' problems and meeting their needs by providing communication and accessibility. Good communication with teachers enhances interaction both inside and outside the classroom. They found that facilitating communication with teachers presents opportunities for progress and asking questions.

Item 2: Informal Support

Informal support refers to peer support. Students believe that cooperation between them contributes to improving understanding and solving academic problems. They find that continuous communication outside of class hours between students, teachers, or peers enhances the quality of education. Learning platforms and social media are utilized to strengthen this communication. Students praised the teachers for their cooperation and encouragement of communication to solve academic issues.

Students find that exchanging resources and information among them improves their academic performance, with some students helping others, particularly during exam preparation.

In terms of support, students focused on the availability of technological resources, noting that some, such as projectors, are available, but they observed a shortage in some resources, such as fully equipped computer labs. They emphasized the role of the projector in geography lessons but pointed out the absence of a fully equipped computer lab at the school.

Regarding the use of technology in education, responses emphasized the role of technology in facilitating the learning process, the use of LCD supported by activities, and PowerPoint presentations that are prepared and sent to the platform. If students need to revisit the material, they can access it and review the content. This highlights the importance of adopting technology as a tool to enhance self-learning.

4.1.3. Section Three: Challenges and Needs

Item 1: Need for Institutional Development

Students stressed the need to improve infrastructure and facilities to meet their needs. They pointed out the need for many developments, especially in classrooms, as some tools have become outdated and need to be updated to align with current realities. Students noted a deficiency in this area, which affects their understanding of the material, especially due to the lack of practical and applied experiments. Students feel they need practical applications to better understand the material and cement it in their memory. They also need educational programs to enhance their technological skills.

Technical Challenges. Students highlighted technical issues such as power outages that affect their ability to benefit from available resources. Even with computers, they suffer from power cuts that prevent them from using the computers.

School Equipment and Resources. Responses revealed variations in the availability of equipment and resources between schools. While there are good and spacious playgrounds, some schools lack a theater. This highlights the need for additional facilities, such as theaters and labs, to motivate students and provide a comprehensive learning environment.

The Responsibility of Institutions. Students stated that educational institutions are responsible for providing an environment that is developed and suitable for students. Schools need more support from the ministry to improve their situation, and the responsibility lies with everyone, from the administration to the ministry.

Students emphasized the need for development projects by launching initiatives aimed at improving the quality of education and school facilities. These projects help improve schools, and clear plans should be in place to update schools.

Item 3: Enhancing Skills

Students clarified the importance of acquiring technological skills during school to prepare well for university and the job market. They pointed out that learning skills such as computer use is essential for preparing for future life requirements, both in education and work. They consider working on a computer as a very important skill that must be learned to be ready for university and work. They also highlighted the importance of dedicating school hours to intensive computer lessons, especially for students who do not have a strong technological background. They further expressed the need to learn basic skills such as writing a CV and preparing for job and university interviews. Some students even expressed a lack of knowledge about how to write a CV or how to apply for a job or university admission.

One student mentioned that the school could offer opportunities to learn programming or develop technical skills such as coding and web development through specialized labs.

In terms of manual and creative skills, students discussed the importance of developing these skills, such as drawing and arts. However, they pointed out the lack of resources allocated for these activities. Some mentioned that they bring their own materials, but there are no specific rooms or tools for drawing. Others indicated a lack of suitable spaces for practicing creative arts, even though the arts are important for developing critical and creative thinking skills.

Regarding social and collaborative skills, students emphasized the importance of activities that promote cooperation and teamwork, such as weekly meetings aimed at exchanging ideas and organizing beneficial school activities. They mentioned that they have weekly meetings where they discuss new ideas and plan activities that benefit all students. Students also noted the presence of psychological and social support at the school through counselors, which helps them deal with personal and psychological challenges. They believe that everyone needs a counselor, not just those with mental health issues, as mental health affects academic achievement.

Item 4: Preparing for Life After School

In this part, students focused on academic and career guidance. They praised the guidance they received in choosing their academic and career paths and highlighted the importance of meetings that help them identify college majors. One student shared that a specialist came to the school and talked to them about future majors and how to choose the right major. Students also pointed out the need to raise their awareness about higher education options and available majors, especially since there are many majors they are unaware of, even though they go through phases of uncertainty about what they want, often unable to distinguish between what they like and what they want.

Some students clarified that teachers play a significant role in guiding them toward the correct academic and professional paths, as, in their view, teachers are the people who best understand what students want and like.

Regarding community service and projects, students emphasized the importance of participating in community activities. They organized a fundraising project to donate to a charity. However, they expressed a desire for more educational projects closely linked to their academic subjects. Some students expressed their joy in participating in the fundraising project and described it as a very beautiful activity. Others felt there are no projects related to their academic subjects, and they would like to participate in projects that enhance their understanding.

These responses reveal the students' need for guidance toward educational projects that are closely tied to their curriculum, enhancing their practical learning and opening opportunities for developing practical skills.

Students raised the issue of self-awareness and making academic decisions. Their responses showed the importance of academic guidance in increasing their self-awareness, which helps them make informed academic decisions. One student mentioned the importance of this

guidance from early stages, saying that when a university tells him that he is not yet ready for university due to insufficient awareness, he needs to develop his self-awareness with the available resources.

The students expressed a desire to learn more about academic disciplines in greater depth, and the need for guidance throughout their academic years to focus on fields that align with their future interests.

When the idea of exploring academic disciplines was brought up, it highlighted the students' need for more guidance about different academic specialties. They noted that there are many disciplines they don't know much about, which leads to confusion when making their educational decisions. They stressed the role of teachers in guidance, stating that teachers play a crucial role in guiding students in their academic and career paths, as teachers know their students better than anyone else. This emphasizes the necessity for teachers to be equipped with the tools and skills needed to provide professional guidance and assist in directing students effectively.

4.1.4.   *The focus group discussion concluded with several general findings*

Primarily, concerning were raised regarding the current curriculum. These included an overemphasis on memorization instead of critical thinking. Students criticized the curriculum for its excessive focus on rote memorization, which limits the opportunity to develop analytical and creative thinking skills. They affirmed the need for a change that encourages problem-solving and intellectual exploration. Another conclusion was that the content is outdated, with the curriculum being described as disconnected from current societal, economic, and technological developments. Students found it irrelevant to real-world applications, particularly in subjects like history and economics, where they suggested updating the content to include recent examples and events. One more issue raised was the lack of preparation for future careers. Many students felt that the curriculum lacks essential skills needed for future professions, such as public speaking, debating, leadership, and teamwork. There was also criticism regarding the insufficient focus on practical skills related to professional work environments.

Regarding suggestions for curriculum development, students focused on interdisciplinary learning and suggested integrating subjects to make education more comprehensive and interconnected. They also called for skill-based learning by advocating for curricula that emphasize cross-cutting skills such as critical thinking, promoting analytical thinking, and problem-solving. Public speaking skills were highlighted as a way to develop communication skills, while collaborative problem-solving was emphasized to enhance teamwork.

Students stressed the need to integrate technology by including subjects that rely on technology, such as programming, robotics, digital skills, and the use of artificial intelligence tools. They believed these skills are essential for adapting to technological advancements in the job market.

On the topic of social and emotional learning, the suggestions included implementing programs focusing on emotional intelligence, stress management, and building resilience, particularly in public schools.

Regarding teaching and learning methods, students called for adopting practical and applied approaches, such as scientific labs, real-world scenarios in economics, group projects for collaborative learning, and practicing public speaking. They suggested using interactive learning methods with multimedia, such as videos and digital simulations, as an effective way to engage students.

In the same context, they recommended teacher training in modern methods, including integrating digital tools in education and encouraging open discussions and critical debates.

On the topic of philosophy and abstract subjects, students suggested innovative ways to teach abstract concepts through activities rather than relying on memorization.

Regarding assessments and exams, students called for revisiting exam formats by focusing on tests that measure understanding and application rather than memorization. They advocated for balanced assessment systems that should include both theoretical and practical components to evaluate students' abilities comprehensively. They also recommended adopting flexible assessment policies, with students suggesting leniency for minor mistakes in practical subjects like chemistry, allowing assessment systems to better reflect true understanding.

Students called for fairness and accessibility in resource distribution, noting that those from remote areas lacked resources, such as internet access and digital devices. They emphasized the need for equitable distribution of resources across all regions.

They also raised the issue of the digital divide. While some schools effectively use digital resources, others lack basic infrastructure. Addressing this gap was seen as crucial for achieving educational equity.

One of the main conclusions drawn by students was the preparation for future opportunities, particularly aligning curricula with university requirements. They stressed that curricula should reflect university admission standards, especially in analytical writing, research skills, and knowledge of subjects relevant to higher education.

Regarding preparation for the job market, their suggestions included teaching skills such as communication, workplace ethics, project management, and solving complex problems in real-world scenarios.

On extracurricular activities and inclusive education, students proposed integrating them into the curricula, as activities like art, sports, and music should be recognized as essential parts of education. They also suggested including community service projects to promote civic responsibility and the practical application of learned values.

In the same context, they proposed the idea of supporting talent, urging schools to provide resources to develop individual talents in sports, the arts, and other non-academic fields.

Another conclusion was the importance of cultural and socio-economic relevance. They focused on local history and culture, advocating for the inclusion of local events, cultural narratives, and traditions to ensure curricula connect with students' identities. They also called for attention to a global perspective alongside local culture, believing that curricula should also promote a global outlook to prepare students for cross-cultural understanding and international opportunities.

One of the main areas where students offered suggestions was the use of technology in education, specifically digital resources. They called for encouraging the adoption of digital learning platforms such as e-books and tablets to reduce the physical burden of heavy textbooks and update learning methods. They also advocated for technology-driven education, which includes using tools such as virtual simulations, online collaboration platforms, and digital assignments.

Regarding content updating, students addressed the need to revise textbooks to include emerging topics such as artificial intelligence, sustainability, recent historical events, and economic developments. They stressed the importance of practical applications and ensuring that content is connected to real-world applications, particularly in STEM subjects and economics.

Key Insights

Students' discussions on this topic focused on the importance of diverse academic support. They pointed out the need to reduce the number of students per class to improve the quality of education and enhance communication with teachers. They also emphasized the role of administrative support in meeting student needs, as well as the importance of peer collaboration in enhancing understanding and problem-solving. Regarding technology, students highlighted its use in facilitating the educational process, despite the lack of some resources such as computer labs. In the area of challenges, students emphasized the need to develop the infrastructure of school facilities and improve equipment, especially in schools lacking tools such as auditoriums and specialized labs. They also addressed the importance of enhancing technological and social skills, emphasizing the need for learning digital skills and effective communication to support preparation for their academic and professional futures.

Key Findings:

- Teachers need to adopt flexible and engaging methods.
- The importance of extracurricular activities (theater, music) should be emphasized.
- Availability of school support and the need for its reinforcement.
- Attention should be given to the classroom environment to facilitate communication between teachers and students.
- Career guidance should be prioritized.
- Collaboration should be encouraged as it has proven effective among students.
- Technological tools should be provided and invested in the educational process.
- Focus should be placed on interdisciplinary learning and integration of subjects.
- Emphasis should be on skill-based learning.

- Technology must be integrated.
- Programs focusing on emotional intelligence should be implemented.
- A practical and applied approach should be adopted.
- Assessment mechanisms should be reconsidered.

4.2. Results of Interviews with Educational Officials in Private Institutions

These interviews are part of the effort to explore the expected outcomes regarding the implementation of the developed curricula from the perspective of stakeholders in both public and private schools, and they fall under the framework of the fifth research question.

For this purpose, interviews were conducted with officials from widely spread private educational institutions across Lebanon, representing all segments of Lebanese society, to gather their opinions on the posed question. The interviews covered six main topics, each including sub-questions. The aim of the responses was to compare the educational community's expectations of the successful application of curricula based on the different contexts between public and private education. The results will be presented according to these topics.

4.2.1. Section One: Evaluation of the Human and Material Resources Required for the Implementation of the Developed Curricula

In your opinion, what are the essential resources required (human and material)?
The responses to this question were as follows:

There is a clear connection between the lack of preparation in human resources and the ability to implement the new curricula. The lack of training and clarity led to contradictions in the implementation of the 1997 curriculum. Material resources also present an additional challenge, as schools that are not adequately equipped will face difficulties in meeting the requirements of the new curricula. The economic and social conditions further complicate the situation, making it necessary to address both categories (human and material) before implementing any new curriculum. Training and recruiting new staff represent a major challenge in ensuring the quality of the developed curriculum's implementation. The competency assessment method requires a high level of expertise, making continuous training essential.

- **School Readiness**

The disparity in equipment between public and private schools, as well as among private schools themselves, is an obstacle to the implementation of the new curricula. Some large private educational institutions have good resources, but they need to reduce the gap between their different schools to achieve better equity.

- **Connection between Material and Human Resources**

Having modern material resources is essential to support teachers in implementing the curricula. Additionally, training teachers to use these resources efficiently enhances the successful implementation of the developed curricula. The success of implementing the new curricula primarily depends on investing in human resources (teacher training), by attracting competencies and training current staff to ensure academic readiness. It also requires supporting material resources (providing equipment and ensuring equity between schools) and reducing readiness gaps between different schools (enhancing internal equity), with support for less-equipped schools, whether public or private.

From the responses of officials in educational institutions, it can be concluded that there is a need for resource integration. The success of implementing the developed curricula depends on providing advanced material resources along with investing in teacher training and improving their competencies. To achieve this, practical steps must be taken, including securing the necessary material resources in schools and designing sustainable, targeted training programs for teachers.

Do you have any statistical information about the availability of equipment and educational tools in the school?

The responses were as follows:

There is a disparity in readiness between educational institutions within the same organization, with differences between free and income-generating schools in favor of the latter. Computers and interactive whiteboards are available in well-equipped schools. Science labs are also available, but there is a need for additional equipment, particularly in free private schools. Despite this, private institutions meet most of the curriculum requirements, with a noted lack of equipment for the secondary section in some schools, which is a key challenge, as the new curricula require modern spaces and equipment.

The lack of accurate statistics in the secondary section and the absence of precise data hinder making appropriate decisions and allocating resources to meet actual needs. However, there is a clear shortage in many of the required resources.

Unequal readiness between schools requires a comprehensive plan to ensure equal educational opportunities for all students. Educational institution officials recommend a gradual implementation of curricula, as a gradual approach can help reduce the gap between schools, focusing on preparing early stages as the first step. They emphasize the need to prepare both the infrastructure and the mindset, as ensuring success requires time for preparation, changing the educational mentality, and securing resources. Private institution officials call for a clear and comprehensive guide for equipment from the educational center, which could help reduce the readiness gap between educational institutions.

Do you have a plan to secure these educational tools and equipment?

The responses from officials in private institutions to this question were as follows:

- **Financial and Organizational Challenges**

According to the officials in private institutions, financial and organizational challenges form a major obstacle to the implementation of the new curricula. The curricula require educational institutions to modify their current technological plans, in addition to funding to implement these modifications.

- **Readiness in the basic Education Stage**

Private institutions demonstrate good organization and readiness to adopt the new curricula in the primary stage. However, the secondary stage remains a challenge due to the complex selection system and diverse specializations, which calls for a delay in the application of curricula there until solutions are found.

- **Disparity Between Schools**

There is a gap between schools within educational institutions, with some schools classified as unready to implement the new curricula across all branches, reflecting a challenge in achieving equal educational opportunities between schools.

- **Financial Planning**

Financial planning is considered a key factor in implementing the plan effectively. Allocating dedicated budgets ensures the resources required for successful implementation.

- **Public and Private Sector Partnerships**

Partnerships with both the public and private sectors are a fruitful strategy for obtaining the necessary funding, technical support, and infrastructure. The private sector can provide additional resources and technical expertise, while the public sector helps achieve institutional support.

Securing tools and equipment requires coordination between multiple parties and is an integral part of strategies to improve curricula and the educational process as a whole.

Educational Officials in Private Institutions Raise Issues Regarding the Implementation of the Developed Curricula:

- Issues and needs in implementing the curriculum, especially in the secondary stage, include timing problems, distribution of subjects, and unclear long-term implementation plans.
- The need for more clarification and guidance: This includes answering questions like: What is required? And what is the right direction to follow?
- Coordination with the Ministry of Education as a prerequisite: The plan depends heavily on the Ministry of Education's plan to guide future actions, as it is impossible to define what is required precisely without knowing the official direction from the Ministry of Education.

Key Insights

This topic addressed the evaluation of the human and material resources required for the implementation of the developed curricula. Key challenges highlighted included the lack of training and material resources in some schools, affecting the ability to implement the new curricula. The responses underscored the importance of integrating human resources (such as teacher training) and material resources (such as school equipment) to ensure successful curriculum implementation. There is also a noticeable disparity in readiness between schools, requiring a comprehensive plan to ensure equal educational opportunities. For the secondary stage, challenges in curriculum implementation due to a lack of equipment call for special attention to funding and coordination between the public and private sectors.

4.2.2. *Section 2: Regarding the human resources required for the implementation of the developed curricula,*

In your opinion, what new human resources does the school need to implement the developed curricula?

Educational officials emphasized several points regarding their institutions' need for new human resources, including:

- **Preparing human resources to absorb the developed curriculum:** This requires a shift in mindset from traditional approaches to modern educational thinking linked to advanced teaching methodologies.
- **The need for new specialists:** With the introduction of new subjects in the curriculum, such as religious culture and vocational education, there is a need for specialists to teach these subjects effectively. Some of the key new specialties include technology and vocational education, requiring the preparation of specialists to ensure the optimal use of these educational tools.
- **Focus on vocational education and addressing special needs:** The emphasis on vocational education and pathways between academic and vocational education is part of the developed curriculum. The text also highlights the need to prepare teachers to deal with students with special needs, which requires specialized training programs.
- **Competency-based assessment:** The shift from traditional assessment based on objectives to competency-based assessment represents a fundamental change in the teaching and evaluation process. This requires teachers to be capable of measuring students' skills, not just their knowledge acquisition.

Conclusions from the responses of educational officials:

- **Continuous training for human resources at the educational and technological levels is fundamental to implementing the developed curriculum.** This training should include preparing teachers to use technology in teaching and teaching them how to work with students with special needs.

- **Training in specialized fields for new subjects** such as religious culture and vocational education is an essential part of the developed education plan. Therefore, specialists in these fields should be sought to cover the gap in human resources.
- **The transition to competency-based assessment requires a comprehensive change in the way teachers work and in teaching methods.**
- **The administrative and educational staff in schools need ongoing preparation and training** to ensure effective adaptation to the new curricula, especially in the branching phase in secondary education.
- **The financial challenge related to implementing branching requires clear funding plans** to ensure the sustainability of education under the developed curricula.
- **Specialized training for teachers in new knowledge fields is key to the successful implementation of the developed curriculum.** Continuous training programs should be provided to ensure that teachers are adequately qualified according to the objectives of the new curricula.

In your opinion, are specialized competencies appropriately available to support the new curricula?

Officials in private educational institutions state that specialized human resources are not available, but institutions are ready to provide training. There is a need for a trained administrative body capable of adapting to and effectively overseeing the new curricula. This adaptation includes understanding the branching according to the core subjects in the secondary stage. However, there are challenges in implementing branching due to the additional costs faced by schools.

There is also a need for teachers who can work with students with special needs and manage technology effectively.

Conclusions from these responses

There is a reality that specialized human resources are not available in educational institutions, and the challenges faced include:

- If branching occurs in secondary education subjects, there are no specialized teachers for the newly introduced subjects.
- If the goal of the developed curriculum is to reach inclusive schools, there is a significant shortage of teachers qualified to work with students with special needs.
- There is a large gap in preparing teachers to handle technology and use artificial intelligence in the processes of teaching, assessment, planning, and implementation.

Key Insights

This section focused on the importance of having the necessary human resources for implementing the developed curricula. Educational officials highlighted the need for specialized teachers in new fields such as vocational education and religious culture, as well as the necessity

of preparing teachers to work with students with special needs. The importance of training teachers to use modern technology and assessing competencies and skills, rather than relying on traditional assessments, was also mentioned. Although institutions are prepared for training, there is a shortage of specialized competencies, particularly in the branching phase of secondary education and the need to adapt to technology. The financial challenge related to branching also represents an additional obstacle to the effective implementation of the new curricula.

4.2.3. Section 3: The Role of School Leadership

What is your perception of the role of school administration in ensuring the successful implementation of the developed curricula?

Officials in private educational institutions responded that clear strategies and plans are fundamental for the successful implementation of the developed curriculum. The school administration must be capable of creating implementable educational plans that align with the new trends in the educational system, while providing an appropriate learning environment that helps teachers and students adapt to these changes.

The provision and management of human resources, supporting teachers, and offering continuous training are seen as necessities. The school administration should manage training programs that align with the goals of the developed curricula and help teachers keep up with modern teaching methods.

Officials emphasized that collaboration between relevant parties enhances the success of curriculum implementation. The administration should foster a collaborative culture among teachers, students, and parents, as collaboration is a vital factor in providing additional support for students and achieving the best educational outcomes.

Officials also pointed out that continuous monitoring and evaluation of teachers' and students' performance is an essential tool for ensuring ongoing improvement. The administration must develop effective evaluation mechanisms that take into account changes in the curricula and focus on achieving competencies and skills in students.

They stressed that innovation in teaching methods is crucial to achieving better educational results. The school administration should support modern technologies and innovative ideas that motivate students and encourage critical thinking.

Finally, officials in private schools noted the necessity of providing and managing the necessary logistical resources and effectively monitoring their use to maximize their benefit, whether digital or non-digital, to support the implementation of the new curricula.

Do you think school principals possess the necessary skills to support the new curricula?
The answers focused on the necessity for principals to possess several essential skills, including:

- **Training for Principals**

There is concern that some school principals may lack the necessary skills to support the implementation of the new curricula. Since the principal's role is pivotal in managing the school and implementing new methodologies, specialized training by curriculum developers is essential to ensure that principals have the ability to manage schools in line with educational developments.

- **Empowering School Leadership**

Principals are the leaders who guide the educational process in schools. If they are not administratively and leadership-wise prepared to support the new curricula, educational change may be delayed or threatened. Therefore, it is important for school leadership to be able to support and guide teachers and handle challenges that may arise during the implementation of the developed curricula.

Key Insights

We conclude from these responses that principals are a key element in the success of implementing the new curricula in schools. To ensure the success of the new curricula, principals must undergo continuous training through specialized courses provided by curriculum developers. This training will enable principals to handle new changes and manage schools in line with modern educational trends.

We conclude that leadership training for principals should be an essential part of the successful implementation strategy for new curricula, allowing principals to keep up with changes and guide schools toward achieving the desired results.

Do you think that the powers and duties of the principal need to be reconsidered in the context of implementing the developed curricula? Why?

Officials in private educational institutions expressed several requirements related to the powers of the principal, including:

- **Reconsidering the Principal's Powers:**

Officials in private institutions call for granting principals broader powers and enabling them to make strategic decisions regarding curricula and resources in their schools. These powers allow principals to quickly and effectively respond to educational changes. Modern learning requires principals to be capable of making independent decisions that benefit the achievement of the new curricula's goals.

- **Activating New Leadership Styles:**

School leadership must be renewed and aligned with modern requirements. The school principal must be a creative leader who can adapt to educational changes, and they must have the ability to innovate new methods that meet the emerging educational demands.

- **Promoting Innovation and Managing Challenges:**

Innovation is considered a key element in successfully implementing the new curricula. Principals who contribute to creating an innovative learning environment can manage challenges more

effectively and achieve educational goals. This enhances the efficiency of implementing curricula and achieving the desired outcomes.

- **Legal Frameworks:**

There is a need to align the new curricula with legal amendments for them to be implemented. There is a need to modify laws related to automatic success, the relationship between academic and vocational education, and distance learning. Additionally, Law 2013 stipulates that principals must hold a degree in school management, a requirement that has not yet been implemented.

What does school leadership need to be effective in this context?

According to officials in private schools, school leadership needs to enhance leadership skills through practical training programs that align with the latest educational methods. These skills help principals keep up with the new curricula and guide schools toward achieving educational goals.

Moreover, effective communication with teachers, parents, and the surrounding community is necessary. This communication helps create a collaborative school environment that supports the implementation of the new curricula. Such collaborations contribute to providing a suitable educational environment that encourages innovation and activates integrated school activities.

Additionally, technical and technological support is essential for the successful implementation of the new curricula. This support ensures the continuity of the educational process and presents it in a way that aligns with modern technology, which can enhance the student's learning experience.

A key need identified by officials in private education institutions is the presence of a clear vision and strategy for principals that enables them to set clear educational goals and ensures their ability to plan effectively and organize resources in line with the developed curricula.

In conclusion, to ensure the success of implementing the developed curricula, principals need to develop leadership skills through specialized training programs in modern teaching methods. These skills will help them lead change within schools. They also need effective communication with teachers, parents, and the community, as this communication plays a significant role in supporting curriculum implementation by fostering a collaborative and innovative environment. Technical and technological support is important to ensure the sustainability of the implementation and to improve the quality of education. Finally, principals must adopt a clear vision and strategy to organize the process of curriculum implementation and help achieve the desired educational outcomes.

Key Insights

This section focused on the role of school leadership in the successful implementation of the developed curricula. Officials in private schools emphasized the necessity for school management to have clear strategies, alongside providing a conducive learning environment that supports adaptation to changes. Additionally, continuous training for principals is required to develop their leadership skills and ensure effective interaction with educational changes. They highlighted the importance of granting principals' broader powers to support the new curricula and the need to foster innovation in leadership styles. Finally, they stressed the importance of effective communication between management, teachers, and parents, with the provision of technical and technological support to ensure the sustainability of the implementation and achieve educational goals.

4.2.4. *Section Four: Challenges in Implementing Developed Curricula*

What challenges do you think school principals might face when implementing the developed curricula in schools?

Officials in private educational institutions identified several potential challenges, including:

- **Effective Educational Leadership:** Leadership with a long-term vision that is capable of adapting to challenges.
- **Community Partnerships:** To enhance both material and moral support for schools.
- **Sustainable Training Development:** Focusing on enhancing understanding of the new curriculum philosophy.
- **Gradual Planning:** Ensuring a smooth transition from old curricula to developed ones.

In their view, these challenges require:

- **Building a Flexible Educational Culture:** Involving all stakeholders in the change process may help reduce resistance and ensure smooth adaptation.
- Overcoming these challenges requires revisiting training plans and techniques, and aligning the developed curricula with practical reality.
- Principals need to develop leadership skills capable of offering flexible solutions and efficiently allocating resources.
- It is essential to integrate plans to compensate for educational losses with the implementation of the developed curricula to ensure students are ready.

How will school management be supported to ensure its ability to overcome difficulties when implementing the developed curricula?

Officials in private educational institutions found that forms of support include:

- **Training workshops** are fundamental to ensuring that principals and teachers understand the new curricula. Focusing on change management and integrating educational teams enhances positive interaction within the school.

- **Financial resources** pose a major challenge for schools, especially in light of economic crises. Supporting the technological infrastructure is essential to keeping up with the developed curricula.
- The presence of **educational supervisors** helps provide immediate field solutions, reducing delays in implementing the new curricula.
- The **absence of clear policies and implementation mechanisms** complicates the application of the curricula. Setting clear operational regulations defines roles and responsibilities.
- The **Ministry of Education and Higher Education,** and the **Center for Educational Research and Development** bear the primary responsibility for implementing the new curricula, while schools should act as supportive partners.
- **Sharing experiences and best practices** through support networks helps principals learn from the experiences of others.

From these responses, we can conclude that:

- **Investing in sustainable training** improves the quality of curriculum implementation and overcomes challenges related to human competencies.
- **Effective funding** and transparent **priority management** are crucial factors in ensuring the creation of a conducive educational environment.
- **Continuous supervision** reduces application gaps and provides direct technical support.
- **Clarity and flexibility in executive policies** enhance coordination among all concerned parties.
- **Holding official bodies accountable** ensures a fair distribution of responsibilities and boosts implementation effectiveness.
- **Support networks** increase the effectiveness of field solutions and reduce duplication in addressing challenges.
- The **integration of technical, financial, and training support** is vital to ensure the successful application of the developed curricula.
- **Assigning primary responsibility to the state** improves coordination and reduces confusion.
- **Clear and defined implementation mechanisms** help reduce challenges and achieve objectives more quickly.
- **Partnerships among various entities**, including schools, ministries, and funding bodies, enhance opportunities for sustainable success.
- Efforts should be based on a **comprehensive, multi-pronged approach** that balances human and material resources with executive policies, with a clear focus on partnerships and institutional cooperation.

Is there a plan to follow up on the implementation?

Officials in educational institutions identified several steps for following up on the implementation, including:

- **Emphasizing the importance of developing a well-planned and methodical timeline** for implementing the new curricula, while stressing the necessity of testing the curricula with samples before widespread implementation.
- **Proactivity and partnership:** Expressing readiness to participate in the trial process for the curricula reflects the sense of responsibility and partnership between educational institutions and the educational center, as well as the private sector's desire to contribute to the success of educational reforms.
- **Continuous evaluation:** Highlighting the importance of having evaluation teams and performance indicators indicates awareness of the need for periodic follow-up to ensure objectives are met. Involving teachers and administrators in the evaluation process enhances transparency and engages key stakeholders in the implementation.
- **Communication and coordination:** Focusing on communication channels between the educational center, research and development, and schools highlights the need for a central support system to help overcome challenges. Additionally, strengthening cooperation between public and private schools demonstrates a commitment to achieving integrated efforts.
- **Flexibility in the plan:** Referring to periodic review sessions and adapting plans reflects the importance of dynamically managing the educational process, rather than relying on rigid plans.

From these responses, the following points can be concluded in answering this question and the study question:

- **Advance planning is essential, not optional:** The success of implementing the developed curricula depends on having a clear plan with defined objectives, timelines, and logical resource allocation. Testing the curricula with representative samples reflects a scientific approach based on evaluation before generalization.
- **The importance of public-private partnership:** Involvement of institutions provides a practical model for how the private sector can contribute to educational reform, thereby enhancing opportunities for success.
- **Continuous evaluation ensures improvement:** The presence of qualified evaluation teams and the use of clear performance indicators make it possible to identify challenges early, contributing to the improvement of the implementation process.
- **The need for flexibility and organization:** Coordination between the educational research and development center and schools, along with flexibility in adjusting plans based on feedback, are key to achieving the desired goals.
- **A supportive environment is essential:** Activating communication mechanisms, continuous training, and ensuring the availability of resources are factors that help overcome implementation obstacles and achieve the objectives of the new curricula.

How will the performance of schools be evaluated?

Officials in private educational institutions agree that the responsibility for evaluating the performance of schools lies with the Ministry of Education and the Educational Center, as they

bear the primary responsibility for developing evaluation and assessment plans. However, institutions are key partners in the process, and they are expected to cooperate and contribute effectively to ensure the success of the project.

The evaluation tools deemed effective by the officials include:

- **Regular workshops:** These aim to train administrators and teachers, discuss common challenges, and contribute to improving skills and fostering collaboration within the school community.
- **Questionnaires and interviews:** These are tools for collecting qualitative data from teachers, students, and parents. They help identify obstacles and challenges facing the implementation of the curricula.
- **Key performance indicators (KPIs):** These include student exam results, attendance rates, and the level of engagement in the educational environment. They provide quantitative criteria for assessing the quality of education.
- **Field visits:** A direct method of monitoring the educational process in classrooms, allowing observation of interactions between teachers and students and assessing the real-world application of curricula.

In relation to the study question, the following can be concluded:

- **Evaluation is a strategic necessity:** Every educational plan needs clear evaluation points, predetermined to ensure the achievement of its objectives. The success of the education development project relies on cooperation between the state (Ministry and Educational Center) and educational institutions.
- **Diverse evaluation tools:** Tools such as Questionnaires, interviews, and performance indicators help provide a comprehensive view of performance. Field visits and regular workshops complement theoretical data with practical observations.
- **Continuous feedback:** Analyzing data from evaluation tools helps improve performance and develop more effective strategic plans.

Key Insights

The main challenges in implementing the developed curricula in schools lie in the need for effective educational leadership, fostering community partnerships to support schools, and ensuring sustainable training for teachers and administrators. Schools face financial constraints and require gradual planning and adaptability to the new curricula. Technical and technological support, along with clear implementation policies, play a critical role in overcoming these challenges. To ensure success, the Ministry of Education and Higher Education, and the Center for Educational Research and Development must collaborate with schools, apply continuous evaluation, and utilize diverse tools such as workshops, surveys, and field visits to enhance the educational process.

4.2.5. Section Five: The Role of Technology and Digital Infrastructure

How important is technology in supporting the updated curriculum? How do you assess the readiness of schools in this regard?

Interviews highlighted the importance of technology and its use in classrooms. However, institutions lack complete readiness due to financial constraints, insufficient equipment, and disparities between urban and rural schools.

According to private school administrators, technology supports the updated curriculum and requires the use of computers, internet access, electronic screens, and artificial intelligence. These tools are particularly crucial for interactive programs that promote exploration, investigation, and creativity among students. Digital literacy and skills like AI and ICT are foundational in the new curriculum.

Technology, being integral to modern curricula, fosters interactive learning and enables students to access content that better suits their needs. Schools vary in technological readiness, especially between free and private schools, as well as urban and rural areas. High costs prevent institutions from equipping themselves with advanced infrastructure, such as high-speed internet and modern laboratories.

How does management work to provide technological tools and necessary infrastructure? What are the priorities in this context?

Interviewed officials pointed out that private schools rely on self-sourced funds from tuition fees and donations. Ministry support is limited to public schools, leaving private schools to face financial challenges when implementing the new curriculum.

To address this, ministries must aid private schools in providing technological tools for teachers and students alike. Priorities include equipping classrooms with computers and internet access.

Currently, ministry assistance for technological tools and infrastructure is confined to public schools, though private schools also need support. Strategic plans by the ministry could involve evaluating the needs of all schools and allocating budgets to address them. Private school administrations often rely on tuition fees for technological updates and infrastructure improvements.

How Can Technology Use Be Improved in Schools to Support the Implementation of Developed Curricula?

According to officials from private educational institutions, the use of technology in education can be improved through:

- Training for teachers and administrators to ensure their adaptation to new technological tools and their effective integration into the educational process.

- Ongoing workshops to continuously develop their skills to meet the requirements of updated curricula.

- Technology certification programs to identify schools with adequate technological infrastructure and encourage educational institutions to invest in upgrading their technical facilities.

- Developing digital educational resources aligned with updated curricula to enhance interaction and engagement among students, supporting self-directed learning and broadening students' knowledge horizons. Incorporating modern technological tools helps deliver immersive and personalized educational experiences, deepens the understanding of complex concepts, and creates an engaging learning environment.

- Providing internet access and modern devices to enable both students and teachers to easily access digital educational resources.

- Assessing the impact of training and applied technologies to identify strengths and weaknesses, improve training strategies, and develop practical solutions to challenges.

Study-Related Insights:

- **Technology as a cornerstone of supporting updated curricula:** The role of technology extends beyond providing tools to enhancing the educational process and promoting effective interaction and participation.

- **Training as a critical element:** The success of technology integration relies on training teachers and administrators to ensure its effective incorporation into education.

- **Development of digital educational content:** Interactive content boosts student engagement and supports self-learning.

- **Technology fosters innovation in education:** The inclusion of STEAM principles and the integration of tools like VR and AI drive creative and distinguished learning experiences.

- **The importance of infrastructure:** Ensuring access to the internet and modern devices guarantees the sustainability of technology applications in schools.

- **The necessity of continuous evaluation:** Measuring the impact of training and technology usage contributes to performance improvement and the development of future strategies.

Key Insights

Technology is a fundamental part of supporting developed curricula, contributing to interactive learning and fostering creativity among students. Despite its significant role, schools face challenges in technological readiness due to infrastructure deficiencies and institutional disparities. To improve technology use, teachers and administrators must be trained, and digital resources aligned with new curricula should be developed. Infrastructure, such as internet and

modern devices, is a priority for enabling access to digital resources. Finally, continuous evaluation of the impact of training and technology use remains key to enhancing educational performance.

4.2.6. Section Six: Student Support and Learning Environment

What is the administration's plan to provide necessary support for all students, including those with special needs?

According to officials in private educational institutions, their institutions aim to address the new curricula in a way that supports all students, particularly those with special needs. This is achieved by developing curricula tailored for them and adopting specialized teaching strategies, ultimately realizing the concept of an inclusive, healthy, and safe school.

Achieving these goals comes with challenges, primarily training teachers and providing specialists to work with students with special needs.

Officials believe that the developed curricula should meet the needs of students with special needs by offering diverse and specialized educational tracks tailored to their abilities, reflecting the shift towards inclusive education that acknowledges student differences. Special curricula should also include assistive tools, such as audiobooks and tactile letters, to facilitate learning.

Private institutions strive to provide a healthy and safe school environment, which is essential for effectively integrating all students, including those with special needs, into the education process. This school environment must meet the needs of all students to ensure the success of educational inclusion.

It is crucial to train teachers in specialized teaching strategies focused on addressing the needs of students with special needs, requiring the development of teacher skills in this area.

The 2030 plan in Catholic schools is a significant step toward making schools inclusive and accessible to all students, including those with special needs. However, this project requires fully preparing educators and schools, which is an ongoing effort that needs time, resources, and a clear vision.

What Do Teachers and Students Need to Ensure a Safe and Healthy Learning Environment? How Are These Needs Currently Being Met?

Officials in private educational institutions state that teachers must be trained in specialized teaching strategies focused on working with students with special needs. Such training is essential to provide effective and inclusive education that meets the needs of all students.

Teachers require updated educational resources, such as audiobooks and technological tools, to facilitate the learning process for students with special needs.

There must be specialist supervisors to guide teachers and assist them in implementing inclusive education strategies. This support contributes to the development of teacher skills and the improvement of education quality.

Students need programs that support their emotional and social aspects to create a comprehensive and safe learning environment that enhances their overall well-being and fosters their positive interaction with the educational environment. It is also necessary to provide a healthy and safe school environment with clean and appropriate study spaces that contribute to improving learning quality.

Securing financial support is a cornerstone for providing necessary resources, such as specialized educational tools, teacher training programs, and ensuring a suitable school environment.

Some institutions have worked on providing clean school environments, with a focus on safety measures to ensure a secure and healthy educational setting. However, continuous follow-up and additional improvements are required to ensure the sustainability of this environment.

How Does the Administration View Its Role in Enhancing Health Facilities and Ensuring a Safe Environment in Schools?

From the responses, the following can be concluded:

The administration strives to establish a specialized department for students with special needs to ensure their effective integration within a safe and suitable school environment. This reflects a commitment to providing an inclusive environment that guarantees students with special needs opportunities for learning and success.

The administration is committed to providing comprehensive support for students, including educational, psychological, and social support. This helps create a safe school environment that enhances students' psychological and social well-being, thus supporting their overall health and their ability to interact positively with the school.

The administration focuses on developing individualized plans for students with special needs, including specialized teaching, assessment, and therapeutic approaches. This indicates the allocation of resources and time to meet each student's needs, whether in psychological therapy, physical rehabilitation, speech therapy, or overcoming learning difficulties.

The administration demonstrates a commitment to implementing decisions, laws, and decrees aimed at organizing the school environment and ensuring its safety. This reflects the administration's dedication to adhering to educational and legislative policies that guarantee a safe and healthy educational environment while contributing to organized school operations.

By developing strategic plans to equip schools with necessary facilities, the administration ensures that the school environment meets the required standards in terms of educational and health-related provisions. This includes equipping schools with the tools and resources needed to ensure a healthy and safe learning environment.

The administration bears a significant responsibility in fostering a healthy and safe school environment by providing comprehensive support and well-thought-out planning. This includes its role in preparing specialized facilities, implementing individualized plans, and ensuring compliance with applicable laws. This reflects the administration's desire to achieve an inclusive educational environment that respects the needs of all students, especially those with special needs, thereby enhancing their opportunities for learning and development.

Key Insights

Educational institutions aim to provide an inclusive educational environment that supports all students, including those with special needs, through specialized curricula and teaching strategies. Achieving this requires training teachers and employing specialists to meet the diverse needs of students. The administration also works to ensure a healthy and safe environment by providing clean and secure school facilities, enhancing students' well-being and positive engagement. Furthermore, the administration focuses on supporting teachers through ongoing training and access to modern educational tools. It is also responsible for implementing laws and decrees that ensure a safe school environment, thereby improving learning opportunities for all students.

4.2.7. Section Seven: The Administration's Vision for Future Development

What Is Your Vision for the Future of Education in Lebanon After Implementing the Updated Curricula?

Private educational institution officials did not express much optimism due to the delay in the release of the updated curricula and their lack of access to its content. However, they highlighted that implementing the updated curricula could lead to the following:

Development of Life and Digital Skills: Education is expected to integrate more with life skills, preparing students for the demands of the labor market. The focus will be on developing critical thinking, innovation, and problem-solving skills, along with technological competencies such as programming, artificial intelligence, and data analysis.

Equipping Students for Rapid Market Changes: Education will aim to provide students with knowledge aligned with rapid market changes, helping them prepare for future challenges.

Shift Towards Interactive Teaching Methods: Educational methods will become more interactive, adapting to the needs of individual students. Flexible, technology-based teaching approaches will encourage self-learning and active engagement with the educational environment.

Flexible Curricula: The curricula will be designed to meet the ever-changing needs of the labor market, enabling students to acquire the necessary skills.

Fostering Critical Thinking and Life Skills: Greater emphasis will be placed on developing critical and analytical thinking, as well as life skills such as collaboration and teamwork. Teachers will prepare students to make independent decisions and solve problems creatively, helping them navigate personal and professional challenges.

Integration of Technology: Technology will play a fundamental role in the future of education. Digital tools will improve access to educational resources, while innovations such as virtual reality (VR) and augmented reality (AR) will provide more interactive and engaging learning experiences. Advanced educational platforms will enhance learning by making it more personalized and flexible.

Focus on Social and Practical Skills: Developing social skills like communication, leadership, and teamwork, alongside practical skills such as critical thinking and decision-making, will be central to preparing students for a dynamic labor market.

Continuous Teacher Training: Regular training for teachers in modern teaching methods and technology integration will be crucial. Teachers will need ongoing professional development to address new challenges, such as using technology in classrooms and delivering innovative learning experiences. This will require intensive training programs that enable teachers to interact effectively with students using technological tools.

Adapting to Diverse Work Environments: These skills will help students adapt to various work environments and enhance their ability to interact with multicultural teams.

Technological and Human Resource Support for Schools: Adequate support in terms of technological infrastructure and trained personnel will be vital to providing a superior educational experience. This includes robust infrastructure to maximize the benefits of modern technologies.

Sustainable Investment in Education: Continuous investment in the education sector will be necessary to modernize facilities and provide the tools required for teachers and students.

Government and Community Commitment: A strong commitment from both the government and the community is essential to foster an innovative educational environment and provide the financial and human resources needed to update schools and teaching methodologies.

Public-Private Partnerships: Collaboration between the public and private sectors will be key to aligning education with future needs, improving its quality, and addressing the demands of the evolving labor market.

Funding for Private Schools: With 70% of Lebanese students relying on private schools, funding these schools is essential to ensure their sustainability. This funding will improve the quality of education and alleviate financial burdens on low-income families.

Key Insights

From the answers provided, it can be concluded that the future of education will heavily rely on integrating technology, developing students' life and professional skills, and ensuring continuous teacher training. Education will become more interactive and tailored to meet the needs of students

and the labor market. Schools will require ongoing support from the government and the community to provide a progressive and evolving educational environment. This will enhance the learning experience and motivate students to engage and grow.

What Are the Essential Steps the Ministry Should Take to Achieve Comprehensive and Sustainable School Development?

Private school officials respond by stating:

Integrating Technology into Education: Introducing technology into education has become a pressing need to meet the requirements of modern digital education. Improving technological infrastructure will enhance the use of digital tools in education, making learning more interactive and effective.

Providing Educational Resources: Supporting updated curricula with adequate resources is a cornerstone of enhancing education quality. Innovative resources help achieve curriculum objectives and develop students' life skills.

Continuous Training for Educators: Ongoing training for teachers and principals ensures they stay updated with the latest teaching and management methods, leading to an improved teaching and learning environment. This enhances the efficiency of education sector professionals.

Updating Curricula: Developing curricula to align with technological advancements and current needs ensures modern and inclusive education.

Improving School Facilities: Investing in modernizing school facilities with advanced technology and ensuring a safe and healthy learning environment forms the basis for comprehensive and sustainable development.

Key Insights

For comprehensive and sustainable school development, the ministry should focus on integrated strategies that include:

- Financial support for free and low-tuition private schools to alleviate the burden on families and ensure education continuity.
- Incorporating technology into education by improving infrastructure and equipping schools with appropriate digital tools.
- Providing innovative educational resources aligned with updated curricula to enhance the educational process.
- Investing in continuous professional development for teachers and principals to ensure high-quality education.
- Continuously updating educational curricula to keep pace with rapid societal and labor market changes.
- Improving school facilities to create safe and conducive educational environments.

How Do You Plan to Sustainably Support Schools, School Leadership, and Teachers Effectively?

Private institution officials focused their answers on the following points:

Training Workshops: These workshops are essential for developing the skills of teachers and school leaders. They enhance professional competence by equipping participants with the latest educational strategies and technological tools.

Maintaining a Positive School Climate: Creating a supportive and motivating environment significantly improves educational performance and the psychological well-being of both teachers and students. This fosters teamwork and creativity within schools.

Providing an Encouraging Learning Environment: Emphasizing creativity, innovation, critical thinking, and problem-solving enhances schools as dynamic learning spaces, preparing students for challenges.

Application of Technology and Artificial Intelligence: Integrating modern technology into education enhances access to learning resources, increases educational efficiency, and improves technological skills for students and teachers.

Developing Educational Materials: Providing updated educational resources aligned with updated curricula ensures that students' needs are met and enhances the learning experience.

Enhancing Community Partnerships: Collaborating with local and international partners facilitates the exchange of expertise and provides the necessary resources to support the educational process.

Regular Evaluation Systems: Establishing regular evaluation systems helps measure the effectiveness of current plans and allows for adjustments according to school needs, ensuring continuous improvement.

To ensure sustainable support for schools and teachers, comprehensive and integrated strategies should focus on:

- **Continuous Training**: Organizing specialized training workshops to develop professional competencies.
- **Creating a Positive Environment**: Establishing a motivating climate that fosters creativity and innovation within schools.
- **Using Modern Technology**: Incorporating artificial intelligence tools and technology to support education.
- **Providing Appropriate Educational Resources**: Developing innovative textbooks and offering interactive teaching materials.
- **Enhancing Partnerships**: Building cooperative relationships with local and international entities to support education.
- **Implementing an Effective Evaluation System**: Regularly collecting feedback to improve strategies based on data.

Key Insights

The future vision of educational administration in Lebanon indicates that education will transition towards developing life and technological skills, emphasizing critical thinking, innovation, and problem-solving. Updated curricula will integrate technological skills such as programming and artificial intelligence, enabling students to adapt to future challenges. This transformation requires educational methods to become more interactive and tailored, with continuous teacher training and technological infrastructure development.

In the future, sustained investment will be necessary to provide suitable educational environments, including equipping schools with digital resources and training educational staff. At the ministry level, supporting schools will require improving infrastructure, providing educational resources aligned with updated curricula, and continuously revising curricula. Teacher development will necessitate training workshops and digital education strategies, alongside fostering partnerships with the public and private sectors.

4.2.8. *Summary: Response to the Fifth Research Question*

After reviewing the results of interviews conducted with students and educational officials in private institutions, and in answering the fifth research question, the following conclusions can be drawn:

- Implementing updated curricula requires reconsidering the physical infrastructure of schools and achieving a balance between schools in terms of equal opportunities and providing essential supplies necessary for curriculum implementation.
- The preparation and training of school principals must be reassessed to enable them to lead the educational process effectively and create a safe educational environment.
- Teachers urgently need professional development programs, and some educational institutions have expressed their readiness to provide technical support to teachers. Additionally, there is a necessity to reinforce schools with specialists.
- Financial readiness of schools appears insufficient. Private educational institutions are waiting for ministry support to initiate the required changes and infrastructure development associated with implementing the curricula.
- Performance evaluation remains under the ministry's jurisdiction, as it sets the curricula and will therefore establish evaluation standards to assess performance.

5. Analysis of the Results for the Sixth Research Question: What are the needs and requirements for implementing developed curricula from the perspective of stakeholders in schools?

5.1. Results of Interviews with Educational Officials (MEHE and CERD), and Educational Experts

To identify the needs and requirements for implementing the developed curricula from the perspective of stakeholders in schools and the educational community, it was essential to address educational officials with a set of questions covering several key areas related to the resources needed for curriculum implementation. Interviews were conducted with officials from the Ministry of Education and Higher Education, including the Director General of Education, the President of the Center for Educational Research and Development, the Director of Primary Education, the Director of Secondary Education, and educational experts involved in curriculum development. These areas were distributed as follows:

5.1.1. Section One: General School Readiness

The first question focused on: How would you describe the current state of school infrastructure, and what elements need improvement to achieve success in implementing developed curricula?

- **Infrastructure Challenges**

    The first point in responses to this question addressed infrastructure challenges, as these constitute a significant barrier to developing the educational system. Various aspects of this challenge and its impacts were highlighted. Infrastructure in many schools is still unable to meet the requirements of modern curricula, whether in terms of technology, laboratories, or internet connectivity.

    This issue is exacerbated in the technical field, as educational officials stated they face "significant difficulty in providing sufficient educational technologies, which may limit the ability to implement advanced curricula in classrooms." These challenges impact the effectiveness of the educational process, "as the absence of modern technology severely hampers the implementation of diverse educational activities, thus limiting opportunities for effective learning."

- **Importance of Teacher Training**

    Developing educational staff is a central element in successfully updating curricula. According to educational officials, "we need to continuously train teachers on how to apply modern curricula. This requires the development of more specialized training programs and improving their effectiveness." The importance of focusing on professional competencies is

evident, as "teachers must be trained on competencies rather than just academic content. Modern curricula require renewed teaching skills."

- **Redefining School Management Roles**

Educational transformation necessitates rethinking school management roles and developing their responsibilities. "School management should shift from purely administrative tasks to educational leadership. We need principals who can support and motivate teachers to achieve educational goals." Here, the role of the principal as an educational leader is emphasized, "as principals should be part of the curriculum development and implementation process. Their role is not only administrative but also educational leadership, guiding change within their schools."

There is a need for realignment of administrative priorities, "as principals often focus on logistical issues, whereas teachers require genuine educational support that enables them to implement curricula effectively."

- **Resource Distribution Equality**

Fair distribution of resources is a crucial issue in curriculum development, as disparities between schools present a challenge in achieving equity. This issue directly impacts educational quality and equal educational opportunities. This is particularly evident in remote provinces and less privileged communities, where disparities in educational resource distribution are noticeable. According to educational experts, "effective strategies are needed to ensure equitable resource distribution among schools, especially in remote provinces." This problem is especially pronounced between the public and private sectors. The widening gap between public and private schools in resource allocation negatively impacts the quality of education in public schools. "The significant disparity between private and public schools in distributing educational resources makes it difficult for public schools to provide quality education that matches modern developments." Addressing this issue requires comprehensive strategies and clear implementation plans. Additionally, monitoring and evaluation mechanisms are needed to ensure equitable resource distribution. Educational officials believe that "it is essential to develop clear plans to ensure that all schools, regardless of location or financial status, receive equal support and resources."

- **Technology as a Core Element of Transformation**

Technology plays a fundamental role in modernizing and developing education. Its role is evident in enhancing the learning process and improving outcomes, especially in the context of global shifts toward digital education. Challenges in this area range from providing technological infrastructure to training staff in its usage. Educational officials find that "technology offers tremendous opportunities for education, but we face issues in providing sufficient devices and ensuring internet stability." To fully utilize technology, innovative strategies are required beyond internet reliance. This includes developing independent technical solutions and providing diverse digital educational tools. "The use of technology should transcend mere internet usage to

integrating digital educational tools that can function offline, such as Intranet-based solutions." There is also a need to shift the perception of technology's role in education, moving from a supplementary element to an essential component of the educational process. "Technology is not a luxury but a necessity. If provided appropriately, it can significantly improve the quality of education."

- **Government Role in Supporting Education**

Government support is a crucial factor in the success of educational system development. This role extends beyond funding to include policy development and implementation. It also involves creating the necessary legislative and regulatory frameworks to ensure educational quality. "The government's role is not limited to providing funding, but requires clear educational policies that support sustainable changes in the education system." The government's role is emphasized in infrastructure development and ensuring equal educational opportunities. This requires sufficient financial resources and equitable distribution. According to educational officials, "we need government policies that provide the necessary support to develop school infrastructure and ensure that all students receive equal educational opportunities." Ultimately, successful transformation in the educational system requires long-term governmental commitment, encompassing strategic planning and sustainable funding. "No educational transformation can occur without active government involvement in funding and future planning."

Summary

The findings indicate a range of needs and requirements for implementing developed curricula in schools, highlighting several key aspects. Firstly, the need for infrastructure improvement, especially in technology and internet, which remains a major barrier to implementing modern curricula. Secondly, ongoing teacher development through specialized training programs to enhance teaching competencies beyond academic content. Thirdly, success in curriculum implementation requires a shift in school management roles to become educational leadership supporting teachers. Fourthly, resource distribution inequality remains a significant challenge, necessitating strategies to ensure equity among schools. Finally, technology plays a critical role in educational development, but requires comprehensive government support to provide appropriate infrastructure and sustainable support.

Second Question: What are the challenges related to providing essential educational facilities, such as classrooms, laboratories, and libraries, and how do these challenges impact the learning process?

Responses to this question focused on several aspects:

- **Limited Space Availability**

Responses indicated that inadequate or limited spaces pose a significant obstacle to school activities. According to educational officials, "the available spaces within schools do not meet the requirements of modern activities, limiting the possibility for diversity and accommodating large numbers of students." There is a pressing need for flexible, multi-use spaces to enable simultaneous implementation of sports, artistic, and educational activities. "The situation varies widely between schools. Some are equipped with laboratories, playgrounds, and advanced infrastructure, while others lack even basic essential facilities. This disparity underscores the need for a comprehensive plan aimed at achieving equity between schools, particularly regarding green schools and effective facilities, focusing on readiness to meet curriculum requirements, including enhancing student well-being and ensuring access to tools that facilitate competency acquisition."

- **Shortages of Resources for School Activities**

Participants' responses indicated that many activities face challenges related to resource shortages, both in terms of physical and human resources. Educational officials emphasize the need for specific budgets to support activities like sports, auditorium, and music, as current capabilities fall short of meeting student needs. "Although some schools have basic facilities, implementing advanced educational programs requires additional tools and equipment to effectively activate activities." A lack of specialized trainers and teachers in various activities leads to shortcomings in achieving their educational objectives. School activities foster competencies such as creativity, digital skills, sports, and extracurricular activities that are occasionally required.

- **Need for Improving Safety and Security in the School Environment**

A safe and stable environment is essential for supporting the educational process and achieving its objectives. Ensuring physical and psychological safety for students and teachers contributes to enhancing focus and creativity, fostering a positive environment conducive to learning. Educational officials highlight that "the absence of safety within schools disrupts activities and causes discomfort among students, necessitating improvements in protective measures such as fences and surveillance systems." Safety encompasses not only physical measures but also promoting a culture of dialogue and communication between teachers and students to reduce school violence and create a supportive educational environment. Therefore, investing in improving safety measures, such as upgrading infrastructure, implementing effective surveillance systems, and training staff to manage crises, is essential for achieving a supportive and secure educational setting.

The question posed was: To what extent is the availability of modern technology sufficient in schools, and what areas require additional support to improve digital education? How do you evaluate the impact of internet quality and speed on the use of digital educational resources, and what proposed solutions exist to improve digital connectivity in schools? What programs or educational systems are essential for training teachers and ensuring the successful implementation of developed curricula?

The responses were multifaceted, covering several aspects:

- **Use of Technology in Educational Process**

Technology emerges as a crucial element in enhancing the educational process. "Modern technology has become essential for effective learning." "Technological tools open new horizons for creative teaching and student engagement." Responses also highlight how digital platforms offer unprecedented opportunities for interaction and communication within the educational process.

Additionally, technology facilitates personalized education according to each student's abilities and needs. "Digital learning enhances student autonomy and develops their ability to engage in self-directed learning." "Technology can be effectively utilized if suitable tools are provided at reasonable costs, aiding students in achieving their goals amidst ongoing advancements."

- **Alternative Technologies**

The responses indicate the importance of adopting technological solutions that cater to various contexts and capabilities. "Alternative technological solutions provide schools with limited resources the opportunity to embrace the digital shift." Open-source software serves as a cost-effective alternative. "Low-cost mobile devices offer equitable opportunities for digital learning." Cloud-based solutions reduce infrastructure costs and simplify access to educational resources. "Alternative technologies help bridge the digital gap between different regions."

- **Management of Digital Resources**

Effective management of digital resources is emphasized as crucial for successful technological transformation. "Centralized educational platforms facilitate the organization and management of learning processes." Cloud storage ensures secure and continuous access to educational resources, centralizing all sources on the school's server. "It is essential to make technology widely available at lower costs, contributing to equitable access for students to the skills required by modern curricula." In an increasingly digital world, these tools are becoming more accessible and widespread, allowing for swift and effective advancement in the educational system.

The question: How do you evaluate a school principal's vision in implementing developed curricula, and what leadership skills are essential for achieving success? What role does administration play in enhancing teacher competencies, and how can these competencies be strengthened through continuous training programs? How can the partnership between administrators and teachers be fostered to encourage positive interactions with new curricula?

The responses addressed the following aspects:

- **Leadership Skills for School Principals: Curriculum Understanding**

    Respondents emphasized that principals need a deep understanding of developed curricula to effectively implement them. "The principal leads this change." "Principals require specialized courses on competencies and the new assessment system to better understand the content and manage their teams." This highlights the importance of intensive training programs to enhance principals' knowledge of developed curricula and their implementation mechanisms.

- **Leadership Partnership**

    Interviews highlighted the role of principals as collaborative leaders who enhance relationships with teachers, fostering a cohesive team. "A partnership between principals and teachers contributes to effective curriculum implementation." "A successful principal is one who creates a work environment based on trust and continuous collaboration." These responses underline the importance of training principals in participatory leadership skills to achieve shared educational goals.

- **Change Management**

    Leading change requires preparing principals to handle transformations associated with new curricula. "Change management should be well-planned, with leadership playing a crucial role in this process." "Specialized training programs are needed to help principals navigate challenges and ensure the sustainability of change." This reflects the need for targeted training programs focused on effective change management.

- **Awareness of Educational Innovations**

    Results show a limited awareness among principals regarding educational innovations, such as integrated competencies and modern assessment methods. "Continuous updates are necessary for principals to stay informed about contemporary practices." "Sustainable training programs should be organized to enhance principals' understanding of educational innovations." These observations emphasize the need for ongoing professional development to elevate principals' competencies and keep them updated with advancements.

- **Interdisciplinary Coordination**

    Developed curricula require a well-integrated coordination between subjects to ensure a comprehensive learning experience. Respondents believe "integrating subjects helps students

understand topics more deeply." "Lack of coordination results in repetition or conflict in information." This underscores the importance of implementing clear coordination mechanisms between subjects to avoid redundancy or conflict, ensuring a unified curriculum implementation.

- **Holistic Curriculum Understanding**

Respondents highlighted the importance of principals viewing the curriculum as an integrated whole, rather than separate subjects. "Principals need to understand the curriculum as a cohesive system." One educational official emphasized that "holistic curriculum understanding enhances teaching quality." These responses call for training programs that focus on comprehensive curriculum development and implementation.

- **Coordination Challenges**

Interviews revealed that a lack of coordination between subjects creates challenges, leading to repetition and inefficiencies. "Coordination challenges remain the greatest obstacle to effective implementation." "Well-structured coordination plans ensure material integration and achieve educational goals." These insights highlight the need for comprehensive, effective plans to improve subject coordination and overcome execution challenges.

Summary

The responses demonstrate the crucial role of school administrators in successfully implementing developed curricula. The essential leadership competencies include a deep understanding of curricula, participatory leadership, change management, and awareness of educational innovations. Furthermore, effective coordination between subjects is vital for a comprehensive educational experience. Continuous training programs are necessary for both administrators and teachers to enhance their competencies and keep pace with evolving educational standards. This collaborative effort ensures a more integrated, effective, and adaptive approach to modern education.

5.1.4. Section 4: Challenges in Implementing Developed Curricula

This section covers three questions:

First: What are the main challenges schools face in implementing developed curricula, and how do these challenges affect educational quality?

Second: How do government policies and community support impact a school's ability to effectively implement new curricula?

Third: How can schools manage economic and social crises effectively to ensure the continuity of education and the implementation of developed curricula?

First Question Results: Challenges in Implementing Developed Curricula

- **Material and Human Challenges**

Significant obstacles to effective curriculum implementation include "difficulty in providing necessary materials and tools for practical activities, forcing some to rely solely on theoretical instruction." "Despite ambitious plans to develop curricula, a lack of funding impacts the provision of modern technologies and suitable educational resources."

- **Impact of Government Policies and Community Support**

Government policies have a noticeable impact on curriculum implementation. "Frequent changes in educational policies disrupt the learning process and affect the stability of curricula." Educational officials emphasize the need for "consistent and stable policies to ensure continuous development." Community support, such as donations and providing basic needs, helps schools but is insufficient to meet all requirements. "Government policies provide moral support, but financial assistance is lacking, especially in remote provinces that require greater support."

- **High Flexibility in Planning and Implementation**
  - **Teacher Competence**
    - ❖ **Shift to Competency-Based Approach**

      Transitioning to a competency-based approach presents a major challenge for teachers as it requires a shift from content-focused instruction to skill development. "We need a radical change in how we think and plan lessons." "Focusing on competencies requires greater effort in preparing and designing practical activities." Teachers require continuous support to understand and effectively apply competency-based teaching.

    - ❖ **Continuous Training**

      Interviews highlight the importance of ongoing professional development. "Training must be practical and connected to real-life applications, not just theories." "We need practical workshops where teachers can exchange hands-on experiences." "Short-term courses are insufficient; we need extended training programs throughout the academic year with continuous follow-up." "Online training can help develop skills without interfering with class schedules."

    - ❖ **Training Follow-up**

      There is a strong emphasis on measuring the impact of training. "We need clear indicators to evaluate teacher performance post-training." "Classroom observations reveal how effectively teachers apply what they've learned." Continuous feedback from supervisors' aids in improving performance and correcting mistakes. "An electronic system is needed to document and track teachers' professional development."

- **Educational Leadership**
  - ❖ **Weak Educational Supervision and Curriculum-Aligned Training**
    Weak supervision presents a significant challenge. One educational official states, "Excessive administrative duties reduce the time available for technical monitoring of teachers." "Specialized training is needed for supervisors to effectively implement developed curricula. Supervisors should provide practical examples, not just theoretical observations." "Enhancing supervisors' skills in guidance and mentorship is essential for successful curriculum implementation."

  - ❖ **Integrated Leadership**
    Emphasizing balanced educational leadership is crucial. "A successful leader balances administrative demands and the educational needs of teachers." "The principal should lead by example in professional development and stay updated with educational advancements." "Collaborative leadership is necessary to involve teachers in decision-making processes."
  - ❖ **Cultural Challenges**
    Traditional mindsets influence curriculum implementation, requiring intensive efforts. "Changing traditional teaching culture requires continuous efforts and patience." "Some teachers resist change due to increased workload." "Change begins with shifting the mindset of school leadership." "Transitioning to new assessment methods requires intensive training and practical examples." "Parents also need awareness about the importance of skills-based evaluation over traditional grades."

- **Gradual Transition**

    Educators emphasize the importance of a gradual implementation process. The President of the Center for Educational Research and Development explained: "During our work on the foundational papers supporting the National Curriculum Framework, we conducted a pilot implementation with a small sample of schools. It was a significant experience in terms of the competency-based approach and assessment policy." She continued, "We will implement the curricula gradually to ensure a smooth process that takes its natural course."

A senior expert involved in curriculum development added, "The pilot implementation in a sample of schools provided us with an opportunity to correct errors and improve practices." The President of the Educational Center further commented, "We have developed a plan for a full transition towards qualitative assessment, taking into account the specific circumstances of each school." An educational official emphasized, "The experience has proven that rushing full implementation leads to greater resistance from the school community."

The question is: How do you view schools' readiness to receive training programs, and what types of programs do you believe would be most beneficial for developing educational competencies?

Response Highlights for Question 5:

- **Integration Between Curricula and Activities**
  - **Supportive Activities**

Participants emphasize the importance of learning through supportive activities. "Projects linking different subjects, like the 'Greening Education' project combining science, mathematics, and arts, are essential." Curricula should include practical laboratory activities to enhance students' understanding of theoretical concepts. "Educational auditorium can also be used to develop students' communication and expression skills."

  - **Coordination Across Subjects: A Comprehensive Curriculum**

Participants stress the need for cognitive integration between subjects. "Periodic meetings should be held to coordinate content and avoid repetition across subjects." "Collaboration between teachers from different subjects should focus on practical applications of concepts." Educational officials highlight the necessity of designing curricula holistically. "Guidelines for teachers should outline intersections between subjects and how to leverage them in teaching."

  - **Variations in School Readiness**

Officials identified three levels of school readiness:

  - ❖ "Some schools will face minimal difficulty in implementation and can quickly adapt to new programs (schools implementing advanced Western programs)."
  - ❖ "Moderately developed schools will require some training and will respond cooperatively."
  - ❖ "Highly traditional schools may struggle significantly with new projects, as curriculum terms may be foreign and difficult to understand in their educational context."

A three-tiered training plan is proposed to accommodate varying readiness levels, allowing schools with different needs to receive appropriate levels of support.

Question: What are the basic needs of schools to effectively implement developed curricula, in terms of human and material resources?

The responses to this question addressed several aspects related to the basic needs of schools, as follows:

- **Development of Digital Infrastructure**:
  - **Updating laboratories and educational facilities**: Equipping laboratories with the latest devices and equipment, and providing appropriate sports and cultural facilities. "Ensuring a stimulating educational environment equipped with the latest technologies."
  - **Providing high-speed networks**: Ensuring reliable and fast internet connectivity in all educational institutions, and supplying laptops or tablets for students and teachers. "Addressing the digital gap is a significant challenge for implementing online education," as mentioned in the responses.
  - **Equipping classrooms with interactive technologies**: Using smart boards and interactive screens, and providing modern educational software.
  - **Developing digital educational platforms**: Creating interactive educational platforms offering diverse digital content, along with tools for communication and interaction between students and teachers.

- **Enhancing Professional Development**:
  - **Designing innovative training programs**: Developing training programs focusing on practical and applied skills, utilizing modern training methods such as project-based learning and collaborative learning. "The necessity for professional training to emphasize practical and applied skills."
  - **Developing online learning platforms for teachers**: Providing digital platforms for teachers to access diverse educational and training resources, and engage with other experts.
  - **Activating professional learning communities**: Establishing virtual or physical communities that bring teachers together to exchange experiences and knowledge, and discuss educational challenges and issues.
  - **Focusing on 21st-century skills**: Integrating training programs with skills such as critical thinking, problem-solving, creativity, communication, and collaboration, "highlighting the importance of 21st-century skills in training programs."

- **Activating Community Partnerships**:
  - **Establishing advisory community councils**: Forming councils that include representatives from the local community, parents, and the private sector, to participate in setting educational plans and programs.
  - **Developing volunteer educational programs**: Encouraging community members to volunteer in educational institutions to support students and teachers.
  - **Strengthening partnerships with the private sector**: Signing agreements with companies and private institutions to provide financial and technical support for education. "Activating the role of the private sector in supporting educational initiatives."

- **Activating the role of parents' councils**: Strengthening the role of parents' councils in monitoring student performance and contributing to educational development. Building effective communication channels between schools and families, encouraging parental involvement in school activities. "Strengthening the partnership between schools and families improves educational outcomes," and "the importance of activating the role of parents' councils in supporting the educational process."
- **Utilizing the local community as a significant source of educational expertise and resources:** Inviting local experts to conduct workshops or lectures for students, and using community facilities and resources in educational activities. "The local community is a vital source of educational expertise and resources."

- **Developing Educational Policies**:
  - **Establishing a clear strategic vision for education**: Defining clear and specific educational goals, and setting strategic plans to achieve these goals.
  - **Adopting flexible and adaptable policies**: Formulating educational policies that consider the rapidly changing society and labor market. "Educational policies need flexibility to keep pace with global changes."
  - **Engaging all stakeholders in decision-making**: Ensuring the participation of teachers, students, parents, and the local community in shaping educational policies and programs. Educational authorities emphasize "the need for the inclusion of all stakeholders in decision-making."
  - **Developing accountability and evaluation mechanisms**: Implementing clear mechanisms to evaluate the performance of educational institutions and measure the achievement of educational goals.

- **Addressing Economic and Social Challenges**:
  - **Ensuring adequate funding for education**: Increasing spending on education and allocating sufficient financial resources to develop infrastructure and provide educational resources. Educational officials stress that "economic crises directly impact the availability of basic school needs," and emphasize "the importance of innovative solutions to overcome financial challenges."
  - **Developing social support programs for needy students**: Providing scholarships and financial assistance for underprivileged students, and offering psychological and social support services.
  - **Adapting educational programs to community economic conditions**: Designing educational programs that align with local labor market needs, and offering opportunities for vocational training and employment. In this regard, educational officials highlight "the importance of adapting educational programs to community economic conditions."

- **Strategic Vision**:
  - **Developing measurable and evaluable strategic plans**: Establishing specific and measurable strategic plans, setting clear performance indicators to evaluate progress in achieving goals. Educational authorities emphasize "the importance of developing strategic plans that are measurable and evaluable."
  - **Prioritizing development according to community needs**: Identifying the most critical areas requiring development in the educational system, based on community needs and labor market demands. Educational authorities believe "there is a need to prioritize development according to community needs."
  - **Strategic planning should account for future changes**: Plans should consider future changes such as technological advancements, demographic shifts, and changes in the labor market. Officials assert that "strategic planning should take future changes into account."

Summary

It is evident from the above that schools in Lebanon face significant challenges in implementing developed curricula, primarily due to a lack of material and human resources, such as educational tools and modern technologies. Additionally, frequent changes in government policies create confusion in implementation processes. Government policies and community support remain insufficient, especially in remote provinces. Furthermore, schools face difficulties in enhancing teacher competencies, with a significant emphasis on transitioning to competency-based education and continuous training being essential for improving educational outcomes. Moreover, ensuring digital infrastructure and implementing innovative, flexible training programs are crucial factors for the successful implementation of developed curricula and achieving sustainable education in Lebanon.

5.1.6. Section Six: Expectations for Implementing Developed Curricula

Question: How do you expect the implementation of developed curricula to impact the quality of education, and what indicators will be used to evaluate this impact? How can educational institutions improve expectations regarding the implementation of developed curricula to ensure successful learning outcomes?

To ensure the success of learning outcomes when implementing developed curricula, educational experts emphasize the importance of several key areas: understanding the curriculum components, continuous training, and flexibility in adjusting approaches and differences.

- **Understanding Curriculum Components**

Respondents stress the importance of a comprehensive understanding of the curriculum components as a crucial step towards success. "Schools need a deep understanding of the curriculum's goals and components to implement it effectively." "A comprehensive understanding of the curriculum helps teachers connect activities with educational objectives more effectively."

- **Continuous Training**

Participants highlight that continuous training for teachers and administrators is essential for successfully implementing developed curricula. "Training should be targeted and designed to meet the diverse needs of teachers, with regular follow-up to evaluate its impact."

- **Flexibility in Adjusting Approaches**

Flexibility in dealing with the implementation of developed curricula is necessary to overcome challenges that may arise during execution. "Continuous adjustments based on field feedback improve the educational process." Educational authorities emphasize the need for adaptability to challenges, whether in resource availability or students' comprehension of curriculum content.

- **Benefits of Developed Curricula**

- **Enhancing Creativity and Critical Thinking**

Developed curricula aim to encourage students' creativity and critical thinking skills. These curricula offer innovative teaching methods to stimulate students in analyzing and solving problems. Educational officials believe that "what distinguishes these curricula is their ability to make students think outside the box and pose questions they wouldn't have asked otherwise." "They reshape the role of the learner to become more creative and aware, aligned with 21st-century requirements."

- **Integration of Technology and Inclusive Education**

Developed curricula focus on integrating technology into the educational process, opening new horizons for students to access diverse sources and improving the learning experience. Officials state that "the use of digital tools in the classroom brings a qualitative leap in students' grasp of concepts." Additionally, they support inclusive education, blending activities inside and outside the classroom, which enhances self-directed and interactive learning opportunities.

- **Improving Education Quality and Efficiency**

According to respondents, developed curricula contribute to improving education quality and raising academic achievement levels by focusing on life skills and core values. "These curricula make students more prepared to face real-life challenges," and aim to

create well-rounded individuals who are capable of critical thinking and problem-solving independently.

- **Success Indicators**

Respondents suggest that developed curricula should rely on both national and international indicators to evaluate success, as these indicators can help identify the achievement of educational goals and guide improvements. "Using performance indicators provides a clear picture of student progress and the success of curricula in achieving their objectives." These indicators highlight positive aspects that can be built upon and areas requiring development.

5.1.7. Expectations for Implementing Developed Curricula

Question: How do you expect the implementation of developed curricula to impact the quality of education, and what indicators will be used to evaluate this impact?
Responses focused on the following areas:

- **Monitoring and Evaluation Mechanisms**
- **Lack of Follow-Up**

Interviews indicate that weak monitoring mechanisms for implementing new curricula pose a significant challenge. Educational officials state that "implementation will not succeed without a clear follow-up plan." "Effective monitoring mechanisms contribute to improving results and ensuring quality implementation." This highlights the need for developing comprehensive monitoring systems to support the implementation of new curricula.

- **Performance Evaluation**

Respondents emphasize the need for clear standards for evaluating the performance of administrators and teachers. "Evaluation is effective when based on transparent and clear criteria." One respondent added, "Good evaluation criteria help improve overall performance." These responses call for adopting detailed and comprehensive performance evaluation criteria.

- **Collaborative Evaluation**

Respondents point out the importance of collaboration between administrators and teachers in evaluating curriculum outcomes. Educational experts assert that "joint evaluation between administrators and teachers leads to performance improvement." They stress that "collaborative evaluation enhances transparency and shared responsibility." These points highlight the necessity of fostering partnerships in evaluation to achieve curriculum goals.

Summary

From the interviews with educational officials and the key points discussed in each section, the following overall insights were derived:

- Many schools in Lebanon are not yet equipped with the infrastructure necessary to meet the demands of modern curricula, such as technology, laboratories, and internet connectivity.
- There is difficulty in providing adequate educational technologies.
- Equity in resource distribution remains an issue with significant disparities between schools.
- Creating a safe and comfortable educational environment is a challenge for many schools.
- Continuous teacher training on implementing modern curricula is essential.
- There is a need for the development of updated training programs.
- Assessment mechanisms require a review.
- Leadership roles in schools need re-evaluation.
- Government involvement in supporting education is crucial.

Chapter Five
Conclusions and Recommendations

This chapter addresses the conclusions and recommendations drawn from the study on school readiness and effective leadership in light of the updated curricula in Lebanon. The study aimed to evaluate the extent to which schools are prepared to implement these curricula and to assess the effectiveness of school leadership in facilitating educational change, given the challenges faced by these educational institutions in achieving quality and innovation. The study highlighted readiness aspects in terms of human and material resources, as well as the ability of school leadership to adapt to developments and motivate educational teams to meet future aspirations. Based on these findings, a set of recommendations is presented to enhance readiness, effective leadership, and support mechanisms to achieve the vision of the Lebanese national framework for pre-university general education curricula.

Section One: Conclusions

1. Conclusions Related to Demographic Data

1.1. Age

Approximately half of the principals in the public sector (48.3%) fall within the age group of 40-50, followed by the 50-60 age group, with a complete absence of younger age groups. Supervisors in the public sector also exhibit similar age distributions as principals. In contrast, the free and non-free private sectors show a higher representation of the 50-60 age group, as well as representation of those aged over 60 and younger age groups.

Overall, this distribution indicates a greater tendency for older principals across all sectors, with a noticeable absence of younger principals in the public sector.

For coordinators, the 30-40 age group is more prevalent compared to principals and supervisors (35.3%), and this age group is most common among teachers (43.6%).

1.2. Gender

The results highlight a pivotal role for females in the education sector, with clear dominance in most educational sectors and school leadership in the public sector. The private sector shows a relative balance between genders among school principals, while the UNRWA sector exhibits absolute female dominance. The overall distribution reflects a culture of encouraging females in formal education, with balance observed in some private sectors.

1.3. Employment Status

Approximately 40% of public school principals are in acting positions, indicating that they have not undergone structured preparation courses in educational and school administration. More than two-thirds of public-sector teachers are on contract (70.5%) under various designations, which is striking and requires urgent solutions, especially since this percentage has not undergone structured preparation courses in education.

1.4. Educational Qualifications

Based on the analysis of the distribution of academic qualifications among principals, supervisors, coordinators, and teachers across various sectors, it can be concluded that most principals and supervisors in public education hold at least a bachelor's degree, which predominates in this sector. Conversely, the non-free private sector shows a higher representation of advanced degree holders (Master's) compared to public education, which remains dominated by bachelor's degree holders. In the free private education sector, lower-than-university-level qualifications, such as the baccalaureate, are prevalent, reflecting a relative weakness in higher competencies.

Overall, there is a noticeable disparity in the distribution of academic qualifications across different regions, with public education showing relative balance in academic qualifications and a slight inclination towards enhancing higher competencies. In contrast, free private education suffers from a significant lack of advanced degree holders.

1.5. Years of Experience in Teaching

The public sector relies heavily on staff with extensive experience, with the majority of principals having more than 25 years of experience. Conversely, the free private sector features a prominent category of principals with extensive experience (over 25 years) but also includes a notable representation of principals with short experience (0-5 years). The non-free private sector displays a balanced distribution across different experience levels.

Analysis of the distribution of principals, supervisors, and coordinators across various regions shows that long experience dominates in many areas, particularly in the public sector. Meanwhile, short and medium experience levels represent a more balanced distribution in some private sector areas. Results indicate significant variation in experience distribution between sectors and governorates.

1.6. Years of Administrative Experience (for Principals)/ Supervision (for Supervisors)

In the public sector, recent administrative experience (0-10 years) predominates, accounting for a significant percentage (73.5%), with a weak representation of long-term experience. Comparing this to the results showing that many principals with limited administrative experience have not undergone structured training for school management reveals a notable gap. In the free private sector, the majority of principals have over 25 years of experience (43.3%). The non-free private sector shows a relative balance, focusing on both recent and long-term experience (24.5%). The UNRWA sector emphasizes principals with experience ranging from 21-25 years (50%). Regarding supervisors, the public sector relies heavily on newer staff, while the free and non-free private sectors exhibit a wider variety, with Beirut particularly favoring those with extensive experience.

2. Conclusions on Human Resources in Schools in Lebanon

2.1. Absence of Psychologists

The public sector suffers from an almost complete lack of psychologists across all governorates, with most public schools (e.g., 100% in Beirut) lacking a psychologist. Similarly, the free private sector faces a comparable shortage, with only a few exceptions. In contrast, the non-free private sector shows relative progress in this area but remains insufficient.

2.2. Shortage of Social Workers and Educational Counselors

There is a significant shortage of social and educational staff, often accompanied by the absence of psychologists. This deficiency leads to a lack of psychological, social, and educational support for students, negatively affecting their academic performance and behavior.

2.3. Shortage of Administrative Staff

There is a severe shortage of administrative staff (excluding principals, supervisors, and IT staff) in the public sector. A large proportion of public schools across governorates lack administrative staff (e.g., 62.5% in Beirut, 72.7% in Mount Lebanon, and 90% in Akkar). The situation is similar in the free private sector, where many schools also lack administrative personnel. In contrast, the non-free private sector offers more diversity in administrative staff, reflecting a greater investment in this area.

2.4. Shortage of Supervisors and Coordinators

The public sector suffers from a lack of supervisors and coordinators who do not engage in teaching, affecting administrative efficiency. Often, the general supervisor is tasked with multiple administrative duties in public schools, hindering their effective performance.

2.5. Total Staff in Schools

There is a notable concentration of staff in public sectors in low-population-density areas such as Akkar and Bekaa.

2.6. Laboratory Technicians and Librarians

Most schools, particularly in the public sector and rural areas, suffer from a significant shortage of laboratory technicians and librarians, impacting the quality of education in scientific and technical subjects.

2.7. Guards and Support Staff

The public sector lacks sufficient numbers of guards and support staff, affecting school security and administrative quality. In contrast, the non-free private sector shows a better balance in providing guards and support staff.

2.8. Disparities Between Sectors

The non-free private sector appears more prepared in terms of providing administrative, social, and psychological staff compared to the public and free private sectors, leading to gaps in the quality of educational and administrative services.

3. Conclusions Based on Analysis of the Second Research Question Results: What Are the Main Differences in Leadership Competencies Required for the Effective Implementation of the Updated Curricula Between Public and Private Schools?

3.1. Human Resources Management Planning

The process of human resources management planning involves determining the appropriate number of staff in the school and distributing them across various functions based on specific qualifications and a given timeframe to achieve the school's goals. This process allows for identifying staff, assessing their needs, optimizing human resource utilization, and preparing for shortages or surpluses. It also relies on evaluating learners' statuses, competencies, and the school's needs to recruit new staff in response to educational and technological changes.

Respondents' opinions in this area agree that UNRWA and the non-free private sector excel in strategic planning. However, the public and free private sectors need to improve strategic planning competencies among school principals in some peripheral governorates such as the North, South, and Bekaa, which represent a shared challenge.

3.2. Participative Leadership

Regarding participative leadership, the results showed that school principals in the free and non-free private sectors perform best in involving the team in planning resource management, task distribution, and priority setting. Public school principals, particularly in low-performing governorates, need to strengthen their participative leadership competencies. This can be achieved through continuous training programs, monitoring and evaluation mechanisms to enhance skills, and increasing team involvement levels.

According to the surveyed principals, the public sector achieves medium to high rates of team participation in resource management planning, task distribution, and priority setting. However, there are disparities between governorates, with notable declines in areas such as Akkar and Bekaa.

Based on the respondents' answers, participative leadership is the most prevalent style in most educational sectors, despite some regional variations. This highlights the need to activate and strengthen this competency among school principals by offering sustainable solutions to improve their performance and develop participative leadership approaches to ensure better human resource management.

3.3. Effectiveness of Administration in Guiding and Supporting the Educational Team

Significant regional disparities were observed in the public education sector regarding administrative effectiveness in guiding and supporting the educational team. The free private sector demonstrated consistent and positive performance, while the non-free private sector exhibited high efficiency in most governorates. The South and Beirut governorates emerged as positive models of effective school administration in supporting and guiding the educational team. Conversely, schools in Akkar and Baalbek-Hermel governorates highlighted the need for additional efforts to enhance administrative effectiveness in this area.

3.4. Adopted Leadership Model

There is consensus among respondents across all four surveys that participative leadership is the most prevalent model in most sectors and governorates. The non-free private sector and the public sector showed high implementation rates of participative leadership in their schools, with notable excellence in governorates such as Beirut, the South, and Nabatieh. However, significant disparities in participative leadership rates exist among governorates, with Beirut and the South recording high rates, while governorates such as Akkar and Baalbek-Hermel reported lower rates.

Individual leadership is less common compared to participative leadership across all governorates and sectors, but it appears at noticeable rates in some areas, such as Akkar and Baalbek-Hermel.

These results emphasize the need to examine the factors influencing this variation among governorates, to develop suitable strategies, and to provide training programs for principals to improve their competencies in adopting effective leadership models. Enhancing participative leadership can significantly improve school performance.

While there is a generally good level of participation in most sectors, the private sector outperforms the public sector, highlighting the need to enhance participation in low-performing areas. Opportunities should be provided to improve performance in regions facing challenges in team involvement, leveraging successful sector models to enhance planning mechanisms.

3.5. Leadership Competencies of the Sampled School Principals

Change management emerges as a significant factor in enhancing the flexibility of the educational system, with the public sector leading, followed by the non-free private sector. The free private sector and UNRWA show a need for additional support to improve their performance in this area. The disparities in performance across governorates highlight the need to improve resource allocation, with particular attention to rural areas.

Regarding **problem-solving skills**, public sector school principals demonstrated exceptional performance in enhancing problem-solving capabilities across governorates. The non-free private sector showed high rates in some areas but faces challenges in rural regions. Conversely, the participation of principals in the free private sector and UNRWA is very limited, necessitating further support and training to develop problem-solving skills and enhance their role in this domain.

In terms of **motivation and support for the teaching staff**, the public sector outperformed others in leading motivational efforts and supporting the teaching staff across governorates, despite some variations in performance. The non-free private sector ranked second with good performance in certain governorates but faces challenges in rural areas. Free private schools and UNRWA require additional support to strengthen their role in this regard.

In **planning and organization**, the public sector maintained a leading position in most governorates, while the non-free private sector showed relative excellence due to its available resources. On the other hand, the free private sector suffers from constraints negatively impacting its capacity in this area. The findings indicate a clear disparity in planning and organizational capabilities among school principals across governorates. The public sector maintains its lead in most areas except Mount Lebanon. This underscores the need to enhance planning and organizational capacities in other sectors, particularly in Baalbek-Hermel, while areas like Beirut and Mount Lebanon exhibit notable competition among various sectors.

Regarding **effective communication**, the level of effective communication varies between governorates, reflecting a gap between urban and rural areas in terms of resources and supportive infrastructure. This gap underscores the importance of developing communication skills among school principals, as leading change requires communication competencies that engage the team in school planning, decision-making, and adopting development or change processes.

Core leadership competencies in school administration, such as problem-solving, effective communication, motivation and support, planning and organization, and change management, vary among principals, supervisors, teachers, and coordinators based on educational sectors and regions. Public sector principals rank highest in most of these competencies according to respondent feedback, while principals in other sectors face challenges requiring additional support to develop their leadership skills and ensure the necessary resources for improved performance. It is evident that the public and non-free private sectors, in particular, face challenges in enhancing the leadership skills of principals working in rural areas.

Regarding **Innovation in Educational Practices**, School leadership plays a pivotal role in encouraging innovation and fostering a supportive educational environment. The results indicate that encouraging innovation is an essential component of improving both educational and administrative performance. Schools in the free private sector have excelled in supporting innovation across governorates. Similarly, the non-free private sector and UNRWA have demonstrated a strong commitment to fostering and encouraging innovation. However, there is a

significant need to develop innovation capacity in public schools, especially in Beirut, the North, the Bekaa, and Baalbek-Hermel, possibly due to the absence of a unified policy to address the lack of support for innovation in some governorates. This underscores the necessity of extending successful support and innovation programs from the private sector to public schools. This can be achieved by enhancing the exchange of successful experiences between high-performing and low-performing schools to improve principal performance. Additionally, effective mechanisms for monitoring and evaluation should be implemented to ensure the support of innovation in schools located in rural areas.

Change management is a fundamental factor in enhancing the flexibility of the educational system. The public sector has shown notable performance in this area, reflecting an effective response to challenges and the need for change. Conversely, the non-free private sector has made clear investments in change management, while the free private sector and UNRWA institutions require more support to improve their performance. The disparities in views across governorates highlight the importance of promoting and activating a culture of change management by improving resource allocation, meeting diverse needs, and focusing on rural areas to ensure inclusive development.

As for **Motivating and Supporting the Educational Staff**, the public sector stands out for its high performance in creating a safe and stimulating learning environment, surpassing other sectors in leading efforts to motivate and support educational staff across all governorates, despite noticeable variations in performance. It is followed by the non-free private sector, which achieves relatively positive results but remains below expectations in rural areas. Free private schools and UNRWA institutions require additional support and training to strengthen their role in this domain and achieve better outcomes.

Regarding Follow-Up and Evaluation, Effective management is a cornerstone of improving education quality and outcomes through a flexible system that monitors teacher performance and works on their comprehensive and continuous professional development. This includes supervising their performance, identifying their needs, and helping them develop their skills. The study results show a commitment among free private school principals to classroom visits, with high levels of follow-up and evaluation recorded across all governorates, followed by the non-free private sector, and then the public sector, which showed variations between governorates. Coastal governorates demonstrated more commitment compared to rural ones. This disparity underscores the need to strengthen follow-up and evaluation mechanisms in rural schools to improve the quality of education.

The study reveals high rates of positive responses ("often" and "always") regarding providing feedback and recommendations to teachers after evaluation, reflecting good performance by educational administrations in the public, free private, and non-free private sectors.

Evaluation is a central activity in school life, influencing all its aspects. It requires the principal to assess all dimensions of the educational/learning process and take necessary actions to improve education quality and school effectiveness. Key benefits of evaluation include enhancing student achievement and developing teacher efficiency when properly implemented. Major areas of school evaluation include assessing the quality of the educational process, teacher and leadership competence, strategic planning quality, and the effectiveness of communication between the administration and the educational system.

Evaluation is part of the school culture and its capacity to develop and support innovation. It contributes to improving the institutional climate and fostering effective human relationships by promoting a culture of self-evaluation (performance assessment among learners, principals, teachers, and administrators).

Regarding **Supporting Struggling Students**, performance varies between sectors in supporting struggling students. The non-free private sector and UNRWA institutions excel significantly in providing support to these students. Conversely, the public sector faces significant challenges in this area, particularly in certain governorates such as Akkar and Mount Lebanon. Nevertheless, principals in the South and Bekaa regions demonstrate outstanding performance in implementing support programs for struggling students, despite significant disparities between sectors and governorates.

3.6. School Principals Commitment to Professional Development Programs for Improving Leadership and Administrative Competencies

Non-free private sector principals stand out for their consistent commitment to attending training courses to develop their professional competencies. The highest commitment rates were recorded in Beirut (88.9%), Akkar (83.3%), Hermel (80%), the South (71.4%), and Nabatieh (66.7%). Principals in Beirut and the South excelled with a 100% commitment rate in the free private sector.

In the public sector, commitment to consistently attending training courses has declined, with the highest rates recorded in Mount Lebanon excluding suburbs (61.1%), followed by Nabatieh (50%) and the South (46.7%). Conversely, UNRWA school principals demonstrated the highest consistent commitment to professional development, reaching 100% in Mount Lebanon and the North. However, commitment rates in the public sector were low in Beirut (25%), the North (28.6%), and Akkar (27.3%), indicating the absence of effective mechanisms for monitoring and motivating participation in training courses.

The non-free private sector recorded high commitment rates for principals attending training courses in most governorates, with the lowest rate in the Bekaa (44.4%). This performance reflects institutional awareness of the importance of continuous professional development training to keep pace with modern developments and its direct impact on improving education quality.

The public and free private sectors exhibit varying commitment levels across governorates, while UNRWA schools consistently demonstrate high commitment in all governorates.

These findings call for decision-makers to develop continuous and mandatory training programs for school principals, as professional development contributes to enhancing the learning environment, which positively impacts students' academic performance, personal and social skills, leading to achieving quality education.

3.7. Areas for School Principals to Develop to Improve Administrative and Leadership Performance

Administration is a continuous social process aimed at achieving goals efficiently and effectively by effectively utilizing available resources through planning, decision-making, organizing, coordinating, problem-solving, directing, supervising, and monitoring. These processes are interconnected and influence each other.

In this context, the study highlighted the need to improve decision-making processes in many schools, either separately or in conjunction with strategic planning. This indicates the need for principals to enhance their competencies in administrative and educational decision-making, as well as the ability to develop strategic plans and communicate with stakeholders. However, innovation in educational practices remains a lower priority and is not sufficiently integrated with other factors like strategic planning or decision-making, showing a need for more focus on fostering innovation in educational environments.

The study also pointed out the necessity of developing **strategic planning competencies** among public school principals in particular. This reflects an institutional awareness of the importance of sustainability and the role of strategic planning in improving educational/learning processes and school performance, contributing to effective school management. Here, the need arises to study factors impeding the application of these competencies, which have led to variations in results between governorates, in addition to developing training programs to increase principals' efficiency.

The study found that the **public sector requires developing leadership competencies for school principal**s across various areas, with the highest responses in "**innovation in educational practices," "strategic planning," and "engaging with stakeholder**s." The non-free private sector showed noticeable responses in most areas, particularly in "innovation in educational practices" and "strategic planning." Meanwhile, free private schools ranked lowest in most areas, with the key focus areas being "innovation in educational practices" and "strategic planning." UNRWA schools prioritized "partnership building," "innovation in educational practices," and "engaging with stakeholders" as the most important areas.

3.8. Core Leadership Competencies in School Administration

Regarding **core leadership competencies**, survey results indicate that **public sector principals excel in "motivating and supporting educational staff" and "planning and organizing**." Meanwhile, principals of both **free and non-free private schools are strong in "problem-solving" and "effective communication,**" which are essential for creating a safe and stimulating learning environment. While public sector principals lead in planning and organizing, there is a need to **develop and enhance innovation in educational practices within their schools**. Additionally, both free and non-free private sectors and UNRWA demonstrate a strong commitment to motivating and supporting educational staff in fostering innovation in educational practices. Conversely, public school principals need further development in these competencies in certain governorates.

Problem-solving skills are notably strong across both public and non-free private sectors, being a critical competency emphasized throughout all governorates. **Public school leaders rank first in "problem-solving," "effective communication," and "motivating and supporting educational staff,**" followed by the non-free private sector in terms of frequency in these areas.

Strategic planning remains a consistent competency across all sectors and governorates. Effective communication is a key element in enhancing the educational process in all sectors, where it holds significant importance among principals, supervisors, teachers, and administrators who responded to the surveys, despite its underutilization in some rural schools. Additionally, "**motivating and supporting educational staff**," which is crucial for fostering a positive learning environment, is emphasized in both public and non-free private sectors, while being less prevalent in the free private sector and UNRWA. The importance of planning and organizing remains a fundamental and essential element for effective management across all sectors, with a better application observed in the public sector compared to other sectors.

3.9. Open-ended Question Directed to Principals Regarding Motivating Teachers to Embrace Development or Change to Achieve Educational Quality

Principals focused on ensuring teachers receive their rights first and foremost, including ensuring a dignified standard of living with social security, a fair income, and health insurance. They emphasized the importance of continuous material and moral support, with fairness and encouragement being key factors, as job stability is essential for motivation and achieving educational quality. They also highlighted the need to convince teachers that development leads to success and aligns with students' evolving mentalities and changing interests according to new generations.

Suggestions included organizing workshops for teachers to showcase pioneering educational experiences and highlight the importance of development or change, shedding light

on its short- and long-term benefits across various aspects, and its positive impact on student motivation and engagement in the learning process.

Principals' responses collectively reflected a high level of professionalism, addressing challenges that teachers may face in adapting to any change or development. These included:

1) Involving teachers in formulating an inspiring and clear vision for the school to build a better future for students.
2) Strengthening their sense of importance in achieving this vision.
3) Organizing regular meetings to discuss developments and listen to their opinions.
4) Utilizing communication applications to disseminate information and updates.
5) Providing continuous opportunities for professional training and encouraging participation in educational conferences.
6) Recognizing teachers' achievements and offering symbolic rewards and incentives.
7) Ensuring a positive and motivating work environment and providing necessary resources to implement new ideas.
8) Encouraging collaboration among teachers and exchanging experiences.
9) Involving teachers in decision-making processes related to development.
10) Providing training and support: offering workshops and continuous training sessions.
11) Recognition and motivation: granting rewards and certificates of appreciation for their efforts.
12) Linking development to its positive impact: clarifying how changes improve education and student outcomes.
13) Building a participatory culture to enhance collaboration and collective learning among teachers.
14) Ensuring the availability of tools necessary to implement changes.
15) Listening to teachers' feedback and addressing challenges they face.
16) Sharing teachers' experiences and successes to encourage trial and innovation.

In conclusion, responses indicate that principals recognize the importance of involving teachers in the planning process and providing continuous support to overcome the challenges accompanying any change. They emphasize the importance of allowing teachers to participate in decision-making processes concerning curriculum development and teaching methods, fostering a sense of responsibility and readiness to implement changes. Additionally, they highlighted the necessity of appreciating teachers' efforts to enhance their motivation, suggesting that motivating teachers requires addressing their material, social, and psychological needs through both material and moral incentives.

Opinions also highlighted the need to strengthen teachers' competencies in utilizing modern technologies and innovative teaching strategies. This requires continuous training for the educational staff to acquire the necessary skills to keep up with these developments, whether in

curricula or modern technology, through ongoing training programs and interactive workshops aimed at enhancing their abilities in this area.

Responses also emphasized that the success of any development process requires addressing teachers' concerns and identifying their needs through continuous monitoring and evaluation, clarifying the importance of change, helping teachers overcome difficulties, and developing their professional skills. This involves encouraging teachers to improve their performance through necessary support and training.

Planning begins with identifying tasks and activities needed to achieve goals and ends with tools for assessing achievements. This encompasses tasks such as planning, supervision, and activating communication channels between administrative and educational bodies, including parents and the local community. A key trait for educational leaders is the ability to solve problems and take initiative to improve and develop the situation.

4. Conclusions Related to the Third Research Question on the Human and Material Factors Affecting the Preparedness of Public Schools to Implement Developed Curricula Compared to Private Schools

4.1. Part One of Research Question Three: Human Factors

After surveying principals, supervisors, coordinators, and teachers on the impact of human factors on a school's readiness to implement developed curricula, the data revealed disparities in how these factors affect public schools compared to private ones. Public schools showed a deficiency in **training and technical support for teachers**, especially in peripheral regions such as the North, Akkar, and Baalbek-Hermel, where the categories identifying training and technical support as "in need of development" or "completely inadequate" were the most prevalent. In contrast, private sectors, whether free or non-free, performed significantly better, with high ratings of "good" and "very good," particularly in Beirut and Mount Lebanon (both divisions).

Additionally, public schools struggle with **teachers' proficiency in implementing support programs for struggling students and emotional-social support**, whereas the private sector, especially non-free private schools, shows more positive outcomes in this area.

On the material side, the results indicate that public schools face significant challenges in maintaining and updating electronic devices, with categories "needing development" and "completely inadequate" leading. The private sector, especially in Beirut and Mount Lebanon, demonstrates a clear advantage in this regard. Furthermore, the public sector suffers from a lack of **dedicated technical support teams to handle technology**, widening the gap between public and private schools. Urgent solutions for the public sector include enhancing training, providing

technical support teams, and updating infrastructure to better prepare for implementing developed curricula.

Overall, the results indicate weak readiness in human factors within the public sector, requiring serious intervention to build capacity, whereas the private sector is closer to readiness but still not fully equipped.

To cross-reference with the survey results regarding the third research question about the impact of human factors on schools' readiness to implement developed curricula, two open-ended questions were posed to teachers and supervisors regarding their necessary technological training needs. It was evident that human factors affecting public schools' readiness are primarily linked to teachers' and supervisors' ability to handle technology and meet training requirements. Responses indicated a significant shortage of technological skills among public school teachers, with urgent needs for training in the use of educational devices, applications, digital content development, and modern technologies such as artificial intelligence and data analysis. Peripheral regions, such as Akkar, the North, and Baalbek-Hermel, suffer more from a lack of training and technical support compared to other regions.

Supervisors also highlighted the need for training courses in information technology, use of online platforms, and administrative technologies, such as managing activities and schedules. They requested specialized courses in artificial intelligence and distance learning tools, reflecting a general deficiency in technical and professional preparation.

The results from the open-ended questions indicate that these training needs are not supplementary but foundational, essential for empowering school staff to meet the demands of curricula heavily reliant on technology. Without these trainings, public schools are unable to match the readiness of the private sector, which enjoys a higher level of preparedness.

4.2.   Part Two of Research Question Three: Material Factors

4.2.1. *Conclusions Related to the Availability of Technological Devices in Classrooms (LCD, Active Board, Computer)*

According to the responses from the four surveys, public schools in Lebanon face a significant shortage of **display devices (LCD)**, with only 46.9% of the first cycle being equipped. UNRWA schools face greater challenges, with 66.7% lacking these devices. In contrast, the non-free private sector has a better level of equipment, with rates exceeding 60% in some areas. Geographically, rural areas such as Akkar and Baalbek-Hermel show the lowest rates, reflecting the impact of poverty and geographical remoteness on educational quality. Urban areas like Beirut and Mount Lebanon have a better situation in terms of display devices, highlighting the gap between regions. Additionally, the severe shortage of display devices in UNRWA schools directly affects the quality of education in these schools.

Regarding **interactive boards (Active Boards)**, approximately 88% of public schools either lack them or need them to be equipped. The private free sector faces a similar shortage, while UNRWA schools show a complete absence of this technology. Geographically, major urban areas like Beirut and Mount Lebanon suffer from high shortage rates of 79.7% and 65.8%, respectively. In rural and remote areas like Akkar and Baalbek-Hermel, the absence of interactive boards reaches 72.5% and 63.6%, showing a clear geographical disparity affecting educational quality. Additionally, the lack of training programs for teachers on using interactive boards remains one of the main obstacles, reducing students' benefit from these technologies even when available.

Regarding **computers,** all educational cycles suffer from a noticeable shortage, with variations in availability between different sectors. In the first cycle, the public sector shows lower equipment rates compared to the non-free private sector. In the third cycle and secondary level, the gap remains between sectors. Geographically, the issue is more severe in rural areas like Akkar and Baalbek-Hermel, where there is a severe lack of computers, while Beirut and Mount Lebanon show relatively better rates. This shortage significantly affects teachers' ability to provide effective education, especially in subjects that require practical applications based on technology.

The disparities between sectors are clear in the **shortage of technological devices in the public sector and UNRWA schools**, contributing to a widening educational gap compared to the non-free private sector, which has better equipment levels, although still facing significant challenges in rural and remote areas. On infrastructure and training, schools lack continuous maintenance of technological devices, weakening their effectiveness and leading to rapid deterioration in the quality of these devices. Additionally, schools suffer from a lack of training programs for teachers and administrators on using available devices, reducing the positive impact of these technologies even when they are accessible. These factors collectively contribute to weakening the educational process and limiting students' opportunities for technology-based learning.

4.2.2. *Conclusions Related to the Availability of Facilities (Laboratories, Libraries, Playgrounds, Lecture Halls)*

The results related to **laboratories** in Lebanese schools across various sectors and regions show significant infrastructure challenges and resource availability. In the public sector, there is a clear disparity in the quality and availability of laboratories between regions. Beirut shows that approximately 50% of laboratories need improvements, with 11.1% deemed unusable. In Mount Lebanon (suburbs), half of the schools lack laboratories, while other regions have lower rates. The North and Bekaa face severe shortages, with 42.9% of schools in the North and 38.5% in the Bekaa lacking laboratories. In the private sector, the situation varies between free and non-free schools, with most free private schools entirely lacking laboratories, especially in Beirut. Conversely,

regions such as Mount Lebanon and the North show relatively better rates in non-free private schools.

Regarding **libraries**, there are significant disparities between Lebanese regions. In Beirut, public sector libraries show higher relative rates of equipment at 37.5%, while free private sector rates reach 42.9%. In Mount Lebanon (suburbs), public sector libraries suffer significantly, with 54.5% requiring substantial improvements. Rural areas like Akkar and Baalbek-Hermel experience extremely poor library facilities, with most libraries being inadequately equipped or requiring significant upgrades. In the South, Bekaa, and North, well-equipped libraries do not exceed 31-33%, highlighting a significant need for improvement.

Regarding **playgrounds**, the public sector in Beirut suffers a severe shortage, with only 12.5% of playgrounds being adequately equipped. However, rural areas such as the South and Akkar show better rates, ranging between 46.7% and 50%, respectively. In Mount Lebanon (suburbs), 72.7% of playgrounds require major improvements. In the free private sector, the South has ideal playgrounds at 100%, while Beirut needs significant improvements. For non-free private schools, relatively better equipment levels are seen, especially in Beirut at 66.7% and Mount Lebanon at 60%. UNRWA schools have good playground availability in Mount Lebanon and the North, with some minor improvements needed in the South.

Regarding **lecture halls**, the public sector in the North faces a severe shortage, with 77.1% of schools lacking halls, followed by Akkar at 65% and Bekaa at 61.5%. Beirut shows relatively better rates, with only 25% lacking halls, with 37.5% requiring significant improvements. The South shows a balanced situation, with 40% lacking halls and 33.3% needing minor improvements. In the free private sector, lecture halls are entirely absent in Beirut and the South at 100%, while Akkar and Mount Lebanon (suburbs) show relatively better conditions, with a balance between equipped halls and those needing improvements. In non-free private schools, Baalbek-Hermel leads with a 80% good equipment rate, followed by Mount Lebanon at 60%. In the South, most responses indicate either good equipment or minor improvements needed.

As for **auditoriums**, the public education sector in Akkar, North, and Bekaa faces the lowest rates of auditorium availability, while Beirut has good facilities, and the South shows moderate equipment. In the free private education sector, there is a complete absence of auditoriums in Beirut, while the South and Mount Lebanon show relatively good rates. In the non-free private sector, Baalbek-Hermel has a good rate of 60%, while North Lebanon shows a noticeable lead in UNRWA sector schools, where all auditoriums are fully equipped. At the provincial level, Beirut has the highest equipment rate, while Akkar and North face severe shortages. South, Bekaa, and Nabatieh show significant disparities among schools regarding auditorium facilities, reflecting substantial differences in resources and infrastructure across Lebanese regions.

4.2.3. Conclusions Related to the Availability of Facilities and Services for Students with Special Needs in Schools

The analysis of facilities for students with special needs across different educational sectors highlights significant challenges that vary by region and sector.

Regarding **ramps**, survey results indicate that the public sector faces a severe shortage, with Beirut recording the highest rate of "completely unsuitable" at 62.5%, followed by North Lebanon at 65.7%. Bekaa and South Lebanon show relatively better rates, with some schools rating ramps as "good" or "excellent." In the free private sector, the availability of suitable ramps is almost nonexistent, especially in Beirut and Mount Lebanon, while Bekaa and Akkar show some relative improvements with classifications of "good" or "acceptable." In the non-free private sector, disparities exist depending on regions, with Baalbek-Hermel recording an excellent ramp provision at 33.3%, while Mount Lebanon shows an acceptable rate of 28.6%. North and South Lebanon suffer from noticeable shortages, despite some schools achieving "good" ratings. UNRWA schools show balanced results, where all Mount Lebanon schools classify ramps as "excellent," while facilities in North and South require improvements, with moderate ratings for "acceptable."

Regarding **elevators**, most public and free private schools suffer from significant shortages, especially in rural areas like Nabatieh and Bekaa. The non-free private sector performs better in some regions.

Regarding **classrooms facilities** tailored for students with disabilities, there is a noticeable weakness in the public and free sectors, whereas the non-free private sector shows better performance, especially in Beirut and Mount Lebanon. UNRWA schools demonstrate significant effort in equipping classrooms to meet the needs of disabled students.

For **equipped bathrooms**, the public sector faces a severe shortage in most governorates, particularly in North Lebanon and Bekaa. The free private sector shows some relative improvement compared to the public sector, but still faces significant challenges. The non-free private sector demonstrates better performance, with noticeable improvements in South Lebanon and Mount Lebanon, while UNRWA stands out for its well-equipped designated bathrooms, reflecting sustained efforts to meet the needs of disabled individuals.

4.2.4. Conclusions Related to the Availability of Internet and Digital Connectivity in Schools and Personal Electronic Devices for Learners

Regarding **internet availability**, there is significant variation between different sectors and regions based on survey responses. In the public sector, South Lebanon shows relatively better performance, with 53.3% of respondents rating the internet as good, whereas Beirut, Bekaa, and North Lebanon face severe challenges, with many schools rating the internet as poor. In the free

private sector, positive results were evident, especially in South Lebanon, where 100% of respondents rated internet availability as excellent, though issues are present in other areas such as suburban Mount Lebanon. For the non-free private sector, performance is relatively better, with 60% of respondents in Baalbek-Hermel describing internet availability as very good, with fewer issues in other regions. UNRWA shows significant disparities, with 50% rating the internet as good, while certain regions experience substantial challenges.

Regarding **device availability**, the public sector suffers from severe shortages, with 53% of respondents reporting that schools lack any laptops, showing a noticeable gap in regions like Bekaa and Beirut. In the free private sector, shortages are moderate, with 35.5% of schools lacking devices, while some schools provide one device per five to ten students. In the non-free private sector, performance is relatively better, with 44.4% of schools in Akkar providing one device per student, although 32.5% of schools still suffer from shortages. UNRWA faces a complete lack of electronic devices, posing a significant barrier to digital education.

These conclusions highlight a severe shortage of support across different sectors, with the public sector facing severe shortages, especially in remote regions such as Akkar, North Lebanon, and Bekaa. The free private sector shows slight improvements but still faces significant challenges, whereas the non-free private sector performs relatively better, with improvements in providing psychological and educational support. UNRWA offers comparatively better support services, especially in areas where resources are limited. Regional disparities show significant differences in support levels, with Beirut and North Lebanon having the highest rates of negative assessments. Southern regions and Baalbek-Hermel show slight improvements but require substantial improvements. Regarding targeted groups, administrators, supervisors, and teachers across different sectors agree on the lack of psychological and educational support services. Students with special needs suffer from significant support shortages across all sectors. The public sector faces near-complete absence of psychological support services in most regions, while the non-free private sector shows better performance in providing psychological support, particularly in Mount Lebanon. UNRWA provides relatively better services, with notable improvements in some regions.

5. Conclusions Related to Research Question Four on the Impact of Parental and Community Involvement in Schools on the Implementation of Developed Curricula

Enhancing and developing the role of the school to be effective is a fundamental objective in the context of education. The data and statistics indicate a pressing need for change and rebuilding trust between schools and the community. So, how can we make the school more effective?

One of the primary functions of school leaders is to **manage internal relationships** and activate them between the teaching and administrative staff, as well as between the school, parents, and the wider community. This requires school principals to develop plans and programs to foster the relationship between the school and the external community to enrich and enhance the school environment. **Collaboration between schools, parents, and the community** has become essential for the success and productivity of schools due to the heavy responsibilities they bear. Weak communication between administration and parents is a crucial factor contributing to misunderstandings, negatively impacting parents' involvement in supporting their children and the school.

The fourth research question was answered in this context by principals, supervisors, coordinators, and teachers. The key findings are as follows:

Communication is a critical factor for the success of the relationship between administration and parents. This skill largely depends on the effectiveness of communication, administrative flexibility, and the administration's commitment to achieving parental satisfaction to improve the school's image. All survey responses indicate that the quality of this communication varies between educational sectors and geographic areas, reflecting disparities in the relationship between administration and parents. It is strong in some sectors (e.g., private education and UNRWA) but weak in certain areas (e.g., the public sector in some governorates). This may be due to a lack of effective communication mechanisms or insufficient resources allocated to enhance this relationship. Therefore, decision-makers need to work on developing and strengthening communication mechanisms in schools to prevent the widening gap between administration and parents, which has a negative impact on students, schools, and the community.

Regarding **communication** between administration, teachers, and administration, and students to ensure community support, it is generally good across all sectors. The non-free private sector excels in achieving good and effective communication, followed by the free private sector with noticeable variations between regions. Rural areas like Akkar and Baalbek-Hermel require improved communication mechanisms to ensure equal opportunities. In the UNRWA sector, communication is ideal, reflecting high coordination between schools and donors. Meanwhile, the public sector needs support and training for school leaders to activate communication mechanisms, particularly with support agencies, to ensure the provision of necessary support and resources.

The results show significant variation in communication levels between sectors and governorates. The non-free private and free private sectors achieve the highest levels of effective communication with parents compared to the public sector, which experiences disparities in performance across regions. The non-free private sector has shown notable progress in building effective communication channels, reflecting greater investment in building relationships and its impact on effective management. Therefore, the need to enhance communication competency

among school leaders and make decisions to address the educational reality is imperative, as what we build today will shape the future.

As the demand for **new skills (21st-century skills)** increases, schools are no longer isolated from their surroundings but increasingly interact with the local community and parents to achieve the school's vision, mission, and objectives, and to raise students' academic achievement. Therefore, the results highlight the necessity of enhancing communication channels between schools and parents on one hand, and between schools and community organizations on the other. Training school leaders to build effective communication bridges is essential to support schools and activate their role within the community.

6. Conclusions Related to Research Question Five Regarding Expected Outcomes of Implementing Developed Curricula from Stakeholders' Perspectives in Public and Private Schools (Students and Educators)

6.1. Student Perspective (Secondary Education)

Discussions among students focused on the importance of diverse academic support. They emphasized the need to reduce class sizes to improve the quality of education and enhance communication with teachers. They also highlighted the role of administrative support in meeting students' needs and the importance of peer collaboration to promote understanding and solve problems. Regarding technology, students stressed its use to facilitate the learning process, despite some resource shortages like computer labs. In terms of challenges, students highlighted the need for infrastructure development and improved school facilities, particularly in schools lacking resources such as theaters and specialized laboratories. They also underscored the importance of enhancing technological and social skills, advocating for the acquisition of digital skills and effective communication to prepare for their academic and professional futures.

Changes in individual behaviors result from the interaction between individuals and the environmental system, including its physical and human components. In this context, students expressed their need to acquire social-emotional learning skills, as these play a fundamental role in fostering positive interactions and achieving academic and professional success.

6.2. Educational Leaders' Perspective

The interviews with educational officials highlighted the importance of developing curricula and educational programs that focus on life skills and technological competencies. Officials emphasized the need for continuous teacher training on modern teaching methodologies, including the use of technology and the implementation of interactive and personalized approaches to meet students' needs. They also stressed the significance of improving school infrastructure to provide a conducive learning environment and fostering community partnerships to support the

teaching and learning process. Additionally, they underscored the necessity of sustained investments to equip schools with digital resources and to train educational staff.

The interview findings revealed an urgent need to reconsider the teaching profession and the systems used for teacher preparation and training. Participants emphasized the importance of focusing on cultivating specialized competencies through appropriate educational training, contributing to a societal shift in the perception of the teaching profession. Achieving this requires a fundamental overhaul of teacher preparation and training programs in university colleges of education, whether public or private.

The importance of enhancing communication mechanisms between public and private school principals also emerged, through organizing regular meetings, educational consultations, and implementing joint projects that foster collaboration and the exchange of expertise. In this context, the establishment of an independent committee, separate from the Ministry of Education, was proposed. This committee would consist of experts from both public and private education sectors, tasked with overseeing the journey toward educational quality and excellence, pursuing academic accreditation standards, and ensuring quality assurance. Such measures would elevate the competency levels of both principals and teachers.

The interviews also recommended revisiting the criteria for selecting school principals, emphasizing the enhancement of their preparation and training programs within colleges of education. This aims to equip them with the necessary skills to manage schools effectively. Furthermore, the interviews suggested granting principals and supervisors teaching loads to enable them to gain practical classroom experience and engage directly with students, thereby strengthening their educational and administrative roles.

Finally, the interviews underscored the necessity of changing the central administration's perspective toward schools by activating relationships among schools within the same educational district. This can be achieved through enhanced communication, the exchange of successful experiences, addressing human resource needs, and organizing events such as celebrations and competitions. These initiatives are expected to create an integrated educational environment that supports educational development and improves the overall quality of education.

6.3. Key Findings Related to Research Question Five

- The need for teachers to adopt flexible and engaging teaching methods.
- Emphasis on extracurricular activities such as theater and music.
- Enhancing school support and peer collaboration.
- Improving classroom environments to facilitate teacher-student communication.
- Importance of career guidance and developing technological and social skills.
- Providing technological tools and investing in educational processes.

- Focus on interdisciplinary and skills-based learning.
- Implementing training programs targeting emotional intelligence.
- Adopting an applied, practical approach to education.
- Revising assessment mechanisms to ensure equity between schools.

6.4. Future Perspectives

The outlook for educational management in Lebanon indicates a shift towards developing life and technological skills, with a focus on critical thinking, innovation, and problem-solving. Developed curricula will integrate technological skills such as programming and artificial intelligence, enabling students to adapt to future challenges. This requires a transformation in teaching methods to be more interactive and customized, alongside continuous teacher training and infrastructure technological development. In the future, there will be ongoing investments to provide suitable educational environments, including equipping schools with digital resources and training educational staff.

On a ministerial level, the ministry needs to support schools by improving infrastructure, providing educational resources aligned with developed curricula, and continuously updating curricula. Teacher development through training workshops and digital education strategies, along with partnerships with the public and private sectors, are essential. To ensure sustainable support, it is necessary to improve the school climate, utilize modern technology, and enhance community partnerships.

7. Conclusions Related to Research Question Six on Needs and Requirements for Implementing Developed Curricula from Stakeholders' Perspectives

Based on the results of interviews with educational leaders and summarizing the key points from each section, the overall data reveals:

- **Infrastructure readiness**: Many schools are not adequately prepared to meet the demands of modern curricula, whether in terms of technology, laboratories, or internet connectivity.
- **Challenges in resource availability:** There are difficulties in providing sufficient educational technologies.
- **Equity in resource distribution:** A significant gap exists in resource allocation between schools.
- **Safe and supportive learning environments**: A safe and comfortable educational environment is not available in many schools.
- **Continuous teacher training:** Ongoing training is needed to effectively apply modern curricula.

- **Need for updated training programs**: New, modern training programs are required.
- **Revising assessment mechanisms**: Assessment systems need to be revised.
- **Reevaluating the role of school management**: The role of school principals requires reassessment.
- **Government support:** Active government involvement in supporting education is essential.

Comprehensive table of strategic conclusions regarding the study of school readiness and its effective leadership in light of the developed curricula in Lebanon

To ensure ease of reviewing the results, the strategic conclusions have been organized into a comprehensive and simplified table, as illustrated below.

Topic	Strategic Conclusions	Public Sector	Private Sector	Regional Disparities
1. Infrastructure and Equipment	Weak infrastructure and equipment hinder readiness.	Significant lack of equipment, especially in rural areas.	Relatively better equipment, but varies between free and non-free private schools and regions based on financial resources and management.	Severe gaps in rural and remote areas compared to central regions (Beirut and Mount Lebanon).
2. Technology and Digital Education	Schools lack essential digital infrastructure for implementing developed curricula.	Severe lack of digital infrastructure and insufficient devices or reliable internet.	Technology available but not systematically integrated in all schools.	Rural regions face significant gaps compared to urban areas with better resources.
3. **School Leadership**	Need for developing administrators' competencies to lead change and implement developed curricula.	Limited training and professional development for public school administrators, with outdated criteria for selection.	More organized training programs, but limited to larger schools with strong financial resources.	Effective leadership is concentrated in central regions, while other areas face administrative inefficiency.
4. Community Partnership	Importance of enhancing collaboration between schools and communities to support developed curricula implementation.	Limited partnerships due to lack of awareness or insufficient community resources.	Better partnerships with community institutions, especially in private schools linked to international or local organizations.	Rural regions suffer from weaker community relations compared to urban areas with more active community institutions.
5. Training and Professional Development	Lack of sustainable training programs to equip administrators and teachers with developed curriculum requirements.	Limited and infrequent training programs, relying on individual initiatives or external support.	Greater training opportunities, especially in schools with strong financial and administrative resources.	Peripheral regions face a severe lack of training opportunities compared to capital and neighboring regions.

Topic	Strategic Conclusions	Public Sector	Private Sector	Regional Disparities
6. Evaluation and Quality	Need for comprehensive and periodic evaluation systems to monitor performance and ensure quality.	Lack of clear evaluation systems in public schools and reliance on traditional methods.	More advanced evaluation systems in larger private schools, but not consistent across all schools.	Rural regions experience weak institutional evaluations compared to urban areas with more systematic evaluation methods.
7. Readiness Disparities	Significant disparities in readiness between public and private schools and across regions.	Most public schools are insufficiently prepared for implementing developed curricula.	Private schools are relatively more prepared, but disparities exist based on resources and management.	Large gap between Beirut and Mount Lebanon compared to remote areas like Akkar and Bekaa.
8. Educational Equity	Inequities in educational opportunities between students in public and private schools, and between central and remote regions.	Lack of educational equity due to resource and capacity shortages in public schools.	Better opportunities for students in private schools, but with variation based on strong and weak resource schools.	Remote regions like Akkar and Hermel face significant disparities compared to central regions in educational services and quality.

Summary:

• The table highlights significant gaps between public and private schools as well as among different regions in Lebanon.
• There is a need for strategic plans that address these gaps, promote educational equity, ensure equal opportunities, and guarantee the readiness of all schools to implement the developed curricula equally.

Section Two: Recommendations

1. Recommendations Related to Demographic Data

Continuous Professional Development Programs:

Given the lack of organized professional preparation for a large number of school leaders and teachers, particularly in the public sector, it is recommended to offer specialized training programs tailored to meet the needs of school leaders and teachers, aligned with modern educational requirements.

Development of Programs for Young Teachers and Leaders:

Considering the noticeable absence of young leaders in the public sector, it is recommended to develop programs aimed at attracting young individuals into school leadership, along with providing mechanisms for support and guidance during their professional journey.

Encouraging Diversity in Management Experience:

There is a need to enhance diversity in experiences among school leaders across all sectors, including promoting the involvement of both experienced and less-experienced leaders in decision-making processes to achieve a balanced approach between different levels of expertise.

Focusing on Advanced Certifications for Leaders:

Efforts should be intensified to support higher education for school leaders and educational staff to ensure the development of professional competencies in this field and provide better educational quality.

Adjustments in Recruitment Structure in the Public Sector:

Steps should be taken to improve the employment status of school leaders and teachers in the public sector through the establishment of mechanisms to regulate hiring and contracting, ensuring academic and professional competence in school leadership.

2. Recommendations Related to Human Resources

Enhancing Psychological and Social Support:

- Employing psychologists and social specialists in public schools to meet students' needs.
- Providing temporary training for school staff in offering psychological and social support.

Improving School Administration:

- Increasing the number of supervisors and coordinators, along with comprehensive training and development plans for them.
- Strengthening the roles of laboratory supervisors and librarians through their employment in public schools and developing specific training programs for them.

Supporting Remote Areas:

- Focusing on rural regions (such as Akkar and Bekaa) to improve the distribution of human resources and ensure administrative and educational support.

Developing Comprehensive Policies:

- Establishing national plans to support human resources, including clear policies for recruitment and role diversity.

Enhancing Safety and Security:

- Employing adequate numbers of guards to ensure student safety and protection of school property.

Building Partnerships with the Private Sector:

- Strengthening collaboration with the private sector to leverage its successes in managing human resources and implementing innovative strategies to improve school performance.

Investment in Professional Development:

- Implementing continuous training programs for all categories of school personnel to keep up with educational advancements.
- Supporting local training centers (teacher hubs in districts) to provide sustainable training opportunities for remote regions.

Updating Recruitment Policies:

- Developing clear policies to promote specialization and role diversity in schools.
- Creating comprehensive national plans to support human resources in the educational sector.

Improving Distribution of Human Resources:

- Conducting periodic studies to identify gaps in worker distribution between regions and schools.
- Redistributing staff based on school size, student numbers, and specific needs.

Reducing Reliance on Temporary Contracts:

- Developing a comprehensive plan to resolve the issue of temporary contracts in education or providing permanent contracts for teachers and staff to ensure professional stability and improve educational quality.

Enhancing Technology Utilization:

- Strengthening the integration of automated technologies in education and school administration through training staff and providing necessary equipment.

3. Recommendations Related to Areas Needing Development in Administration

Strengthening Educational Leadership:

- Training school leaders and supervisors to improve leadership skills and problem-solving abilities.
- Enhancing communication channels between administration, teachers, and the local community.

Developing Strategic Planning:

- Establishing unified national standards for strategic planning.
- Supporting schools in peripheral areas with resources and training.

Improving Human Resource Efficiency:

- Assessing schools' needs for educational staff.
- Offering regular training courses for teachers and staff.

Promoting Self-Assessment Culture:

- Strengthening self-assessment for school leaders, teachers, and learners.
- Utilizing assessment results to enhance performance and foster innovation.

Supporting the Official Sector:

- Addressing disparities between governorates to ensure equal opportunities.
- Providing necessary financial and technical support.

Leveraging Successful Experiences:

- Transferring successful practices from the private non-free sector to other sectors.

Involving Local Communities:

- Activating the role of local communities to support schools.
- Raising awareness on the importance of planning and evaluation to achieve development.

Improving Resource Management Plans:

- Encouraging participatory management in low-performing governorates, especially in Akkar and Bekaa.
- Developing comprehensive and sustainable planning mechanisms to enhance effective participation.
- Adopting models from distinguished sectors like UNRWA and the private non-free sector to apply best practices.
- Supporting principals in peripheral governorates with training programs to enhance their abilities in planning and effective community engagement.

Strengthening Leadership Models:

- Promoting participatory and distributed leadership through intensive training programs and support for leadership teams within schools.
- Investigating reasons for weak participatory leadership in certain areas and developing local strategies to address them.
- Utilizing experiences from high-performing schools to disseminate best practices.
- Encouraging cooperation between public and private sectors to unify participatory leadership models.

Encouraging and Supporting Innovative Teaching:

- Fostering innovation in public education through administrative training programs and promoting innovative initiatives.
- Implementing unified administrative plans to support innovation across all governorates.
- Strengthening partnerships between educational sectors through creating collaborations between public and private schools to exchange innovative practices.

Involving Teams in Major Decision-Making at Schools:

- Promoting participatory management through intensive training programs and establishing mechanisms for evaluating team involvement.

Enhancing Change Management Skills:

- Organizing training sessions to strengthen leaders' change management skills, especially in rural areas.

Developing Effective Communication Skills:

- Establishing organized communication mechanisms between school administrations, teachers, and parents to enhance transparency and trust.

Improving Problem-Solving Skills:

- Conducting ongoing workshops to analyze issues and develop innovative solutions.
- Integrating critical and analytical thinking approaches into training plans.

Supporting Motivational and Educational Development:

- Designing programs to motivate teachers and foster collaboration between administrations.
- Enhancing reward systems and recognizing efforts, particularly in schools facing significant challenges.

Strengthening Planning and Organization Skills:

- Developing training programs aimed at improving planning and organizational skills among school leaders.
- Encouraging the use of advanced management systems to facilitate planning and organization in schools.

Improving Performance Equity Across Governorates:

- Supporting schools in rural areas to enhance leadership competencies.
- Promoting collaboration between urban and rural schools to exchange successful experiences.
- Ensuring equitable resource distribution among all governorates to support comprehensive and effective education.

Fostering Leadership Culture in Education:

- Preparing training programs to prepare teachers and coordinators as future leaders in schools.

4. Recommendations for Areas Needing Development in School Administration

Developing Decision-Making Competencies

- Designing specialized training programs to enhance decision-making skills among school leaders, focusing on the public sector in regions like Mount Lebanon, Akkar, and Baalbek-Hermel.

Promoting Innovation in Educational Practices

- Organizing workshops and training sessions for leaders and supervisors in the public sector, with a focus on fostering innovation in educational practices in Beirut and the North.

Implementing Strategic Planning

- Providing comprehensive training for all leaders in both the public and private sectors, prioritizing governorates with the greatest need such as Akkar and Bekaa.

Strengthening Communication with Stakeholders

- Conducting workshops on effective communication strategies, targeting leaders in both the public and private sectors.

Building Partnerships

- Strengthening community partnerships through collaborative initiatives with local and civil communities.

Emphasizing Innovation

- Developing programs to support innovation in education, providing necessary tools and skills for leaders and teachers to foster creative thinking.

Geographic Distribution of Interventions

- Allocating resources and training based on the geographic needs of each governorate to ensure balanced school development.

5. Recommendations Related to Follow-Up and Evaluation by School Administration

Strengthening Commitment of Leaders

- Establishing regular classroom visitation schedules, particularly in rural areas like Akkar and Baalbek-Hermel. Training leaders on the importance of regular evaluations.

Improving the Public Sector

- Providing additional resources and motivating leaders to consistently monitor educational performance, especially in rural areas.

Supporting Rural Areas

- Launching initiatives for low-performing governorates to enhance administrative capacities, addressing performance gaps.

Developing Evaluation Systems

- Implementing flexible and technological systems to track teacher and staff performance, offering timely feedback.

Building Teachers' Capacities

- Organizing continuous training sessions based on classroom visit outcomes and teachers' needs across various schools.

Regular Assessment

- Conducting periodic reviews of classroom visitation systems to improve efficiency and address challenges encountered during evaluations.

Knowledge Sharing

- Utilizing successful models from the non-free private sector to transfer best practices to the Public sector, enhancing work methods and evaluation techniques.

Adopting Technology

- Employing digital platforms to systematically document evaluations and feedback, promoting transparency and effective follow-up.

Enhancing Feedback Culture

- Raising awareness about the importance of continuous feedback to improve educational performance, fostering an interactive learning environment through continuous learning and reliance on evaluations.

6. **Implementing Support Programs for Struggling Students**
   - Strengthening support programs for struggling students in the public sector, with a focus on underperforming areas such as Akkar and Mount Lebanon (suburbs).
   - Improving coordination between schools and local educational authorities to ensure the continuity of programs across all governorates, achieving equal opportunities.
   - Benefiting from the experience of the non-free private sector and UNRWA schools, which have demonstrated a high commitment in this field, applying similar models in public schools.

- Conducting regular follow-ups to measure the effectiveness of programs and ensure equal opportunities for all students.

Comprehensive Table of Strategic Recommendations and Mechanisms Regarding the Study of School readiness and its Effective Leadership in Light of the Developed Curricula in Lebanon

Strategic Recommendation	Mechanism	Timeline Priority	Responsible Parties	Performance Indicators
1. Enhancing Leadership Competencies for School Principals and Administrators	• Completion of principal preparation programs at the Faculty of Education, Lebanese University. • Organization of specialized training programs in educational leadership and modern school management. • Continuous training for principals on modern educational technologies. • Updating criteria for selecting principals to align with the updated curriculum.	Short-term	Ministry of Education and Higher Education (MEHE), Center for Educational Research and Development (CERD), Lebanese University Faculty of Education, private universities	Number of implemented training programs, percentage of principals trained, post-training performance evaluation, percentage of principals completing preparation courses at the Faculty of Education.
2. Upgrading School Infrastructure and Learning Environment	• Upgrading classrooms with suitable technological tools (e.g., smart boards) and internet connectivity. • Enhancing school facilities to create a central and safe learning environment. • Improving school safety and providing mechanisms to protect students and staff.	Medium-term	MEHE, municipalities, private sector partnerships, international organizations	Percentage of schools equipped with technology, improved satisfaction rates among students and teachers, enhanced safety.
3. Strengthening Community Partnership	• Conducting workshops with parents to explain the updated curriculum and new teaching methods. • Developing partnerships with community institutions to support school activities. • Forming school councils to encourage local community participation in school development.	Short- and medium-term	MEHE, school administrations, civil society, local institutions and communities	Number of workshops and councils formed, percentage of community participation in school activities.

Strategic Recommendation	Mechanism	Timeline Priority	Responsible Parties	Performance Indicators
4. Promoting Digital Education and Technology	• Training teachers on educational technologies, such as e-learning platforms. • Enhancing the use of information technology in school management. • Developing digital training materials supporting the updated curriculum. • Creating programs to develop digital skills for teachers and students.	Short-term	MEHE, CERD, EdTech companies, specialized educational institutions	Percentage of schools connected to the internet, number of teachers using educational technology, number of platforms used.
5. Developing Continuous Professional Development (CPD) Programs for Teachers	• Reviewing teacher preparation programs. • Providing continuous training programs on the updated curriculum for teachers. • Encouraging teachers to participate in CPD workshops. • Building professional teams among teachers to share experiences regarding curriculum implementation.	Ongoing	MEHE, CERD, universities, online platforms	Percentage of teachers participating in CPD, improvement in teaching and educational performance post-training, effectiveness evaluation of workshops.
6. Strengthening Evaluation and Continuous Monitoring Mechanisms	• Adopting comprehensive evaluation mechanisms, including continuous assessments of all school staff.	Long-term	MEHE, CERD, educational inspection, State Council, Civil Service Council, school administrations	Annual evaluation reports, improvement in performance post-evaluation, implementation of recommendations from reports.
7. Institutional Evaluation Activation	• Conducting periodic assessments of school performance using standardized performance indicators. • Ensuring annual self-assessment by schools to evaluate readiness for curriculum implementation. • Ensuring the effectiveness of recommendations derived from reports.	Medium- to long-term	MEHE, CERD, educational inspection, State Council, Civil Service Council, school administrations	Annual evaluation reports, institutional development post-evaluation, implementation of report-derived recommendations.

Strategic Recommendation	Mechanism	Timeline Priority	Responsible Parties	Performance Indicators
8. Restructuring School Administrative Frameworks	• Clearly defining roles and responsibilities within the administrative structure. • Restructuring school administration to ensure effective task distribution.	Short- to medium-term	MEHE, CERD, State Council, Civil Service Council, specialized and relevant entities	Number of schools restructured, clarity of roles within administrative structures, functional distribution efficiency.
9. Developing the Legislative and Administrative Framework	• Enacting supportive and updated legislation to provide resources, support, and facilitate the implementation of updated curricula. • Utilizing the administrative flexibility adopted by private schools and activating regulatory legislation. • Enforcing legislation that supports administrative and educational innovation.	Medium-term	MEHE, CERD, State Council, Civil Service Council, all relevant legislative entities	Implementation of new legislation, assessment of improvements in school support, implementation of legislation in remote areas.
10. Achieving Participatory and Transparent School Leadership	• Encouraging principals to adopt participatory leadership styles involving teachers, students, and parents. • Ensuring transparency in administrative and educational decisions through periodic publication.	Short-term	MEHE, CERD, school administrations, school councils	Stakeholder participation in decision-making, transparency evaluation levels in schools.
11. Formulating Strategies for Sustainable Educational Change	• Steering updated curricula towards inclusive education that meets the needs of all students. • Supporting research and development in education through projects aimed at improving curriculum implementation. • Ensuring sustainability of curriculum implementation through comprehensive monitoring mechanisms.	Long-term	MEHE, CERD, universities, educational research institutions, monitoring bodies	Number of implemented research projects, curriculum development to meet student needs, interaction between research and educational practices.

Strategic Recommendation	Mechanism	Timeline Priority	Responsible Parties	Performance Indicators
12. Enhancing Communication within Schools	• Strengthening communication between administration and teachers using technological systems to exchange information. • Creating communication channels between teachers and parents for continuous feedback.	Short-term	MEHE, CERD, school administrations, parents, technology companies	Number of adopted technological systems, communication levels among stakeholders.
13. Reforming Teacher Employment Policies	• Developing a plan to address the various forms of teacher contracting issues. • Organizing preparatory courses for teachers to reduce contract-related burdens. • Organizing continuous training for teachers. • Improving contractual conditions to ensure teacher stability in schools. • Implementing incentive programs for contracted teachers.	Medium-term	MEHE, CERD, Faculty of Education at Lebanese University, State Council, Civil Service Council, monitoring bodies, school administrations, educational unions, training institutions	Percentage of contracted teachers, level of satisfaction among contracted teachers regarding training programs, teaching performance improvement post-training.

Summary

Achieving school readiness in Lebanon for implementing the updated curriculum necessitates a set of integrated strategies focusing on enhancing school leadership, modernizing infrastructure, supporting digital education, and advancing teacher professional competencies. These recommendations aim to create a flexible school environment capable of adapting to rapid curriculum changes and evolving educational needs.

List of Appendices

Appendices (Arranged According to References in the Text)

1. Appendix 1: Curriculum Development in Ireland

The study by Datnow, et al., (2022) focused on the progress made within the Irish education system to redevelop the national curriculum for primary schools. While the redevelopment process focuses on all aspects of curriculum, teaching and assessment, particular emphasis is placed on elements related to the holistic development of the learner. This is centered around exploring ways to enhance the role of the learner and teacher in relation to curriculum and teaching methods in classrooms and schools. Key issues in the transition from a detailed and prescriptive curriculum to a curricular framework are explored. Also, the interaction with policies that prioritize literacy and numeracy while maintaining a focus on the holistic development of the learner are explored.

Three key themes emerged from the case study analysis. Firstly, system-wide stakeholder engagement was central to the redevelopment process. Secondly, the redevelopment process positioned the entire education system as a 'learning system', envisioning all stakeholders as contributors and learners in the development journey. Thirdly, there is a shift in the understanding of what a curriculum is by moving from a traditional detailed, objectives-based format to a curricular framework based on learning outcomes. Collectively, the redevelopment process proposes to decentralize many elements of curriculum design and implementation, highlighting the importance of teacher and child agency.

The curriculum redevelopment process in Ireland has been characterized by several key elements:

- **System-wide engagement:** The redevelopment involved broad engagement with a range of stakeholders, including teachers, parents and education professionals, who were seen as contributors and learners in the development journey.
- **Research development:** The National Council for Curriculum and Assessment (NCCA) commissioned a number of national and international research papers on critical issues such as assessment and pedagogy to inform the redevelopment process. These findings were discussed at national curriculum seminars.
- **Consultations:** Since 2011, the NCCA has conducted consultations with a range of stakeholders, including learners and teachers, to gather feedback on curriculum principles and specific provisions. This has included participatory approaches to engaging young children.
- **Iterative learning:** The development process has been based on iterative learning from research, consultations and seminars, promoting ownership of decisions among teachers and engaging a wide range of stakeholders to ensure a comprehensive review of curriculum design and implementation.
- **Draft Framework:** A significant turning point was the publication of the Draft Primary Curriculum Framework for Consultation in February 2020, which proposed a shift from a detailed curriculum to a more flexible framework, with an emphasis on outcomes for pupils and the importance of the role of teachers and learners in the learning process.

Capacity Building and Infrastructure for Change

The Capacity Building and Infrastructure for Change section of the Curriculum Reform process highlights the complexity and importance of transforming the National Curriculum in Ireland. It emphasizes the need for all stakeholders across the system to engage from the outset to support capacity building at different levels. Key activities included seminars and events designed to promote understanding and collaboration between stakeholders, ensuring they are aware of their

roles in the change process. There was a particular focus on alignment and creating coherence within the education system, in addition to identifying the interconnections between different actors. This collaborative approach is essential to facilitate effective contributions to curriculum change and ensure that all stakeholders understand their importance in the overall educational development landscape.

Lessons for the Policy

- **Inclusive Development:** Policies should prioritize the holistic development of learners, integrating academic quality with social, emotional and physical wellbeing.
- **Stakeholder engagement**: Effective policy development requires the engagement of a wide range of stakeholders, including teachers, parents, and learners, to ensure that curricula are informed by diverse perspectives.
- **Flexibility and adaptability:** Policies should allow for flexibility in curriculum implementation, enabling teachers to adapt their approach based on the unique needs of their students and local contexts.
- **Professional development:** Continuous professional learning opportunities for teachers are essential to equip them with the skills and knowledge needed to implement the new curriculum effectively.
- **Support systems:** Establishing support systems is critical to facilitate communication and collaboration among stakeholders, ensuring that policy changes are understood and implemented effectively at all levels of the educational system.
- **Iterative process:** Policy development should be iterative, allowing for ongoing feedback and adjustments based on experiences and insights gained.

2. Appendix 2: The Development of Education in Singapore

Singapore

The government centrally controls policies and infrastructure to create an effective system, with high-quality public education available to all under the Compulsory Education Act 2000. At the same time, the decentralization of the system allows schools to develop continuously as learning organizations with minimal government intervention. In line with the increased autonomy of schools, there has been a shift from a centralized external assessment system conducted by a team of inspectors to self-evaluation of schools using formative, standards-based performance measures.

Education in Singapore has evolved from a focus on meeting economic needs and supporting learners' academic development to an increasing focus on learners' holistic development, including character formation, community engagement and self-fulfillment. The focus on inclusive education also aims to expand the standards of education beyond cognitive abilities and academic performance to other areas of growth such as physical, social-emotional and artistic achievement.

In the transition from economic imperatives to comprehensive motivations, there has been a gradual move across five policy phases (1965 to 2022 and beyond) towards diversifying curricula and schools to meet the needs of different learners, while giving schools more autonomy to innovate teaching methods and improve the quality of education to meet the unique needs of their students.

The comprehensive development of the curriculum has included the provision of multiple pathways to academic success, along with increased personalization of the curriculum that recognizes the different abilities and strengths of learners. By 2024, the branch system in all secondary schools will be replaced by a full subject-based grouping system to support the different abilities and interests of learners in specific subjects.

A series of developments have also been implemented to address learners' well-being needs, including the 2005 Social Emotional Learning Framework, the 2007 Comprehensive Health Framework to encourage learners to lead healthy lifestyles. It also included a comprehensive curriculum for character and citizenship education with knowledge, skills, values and attitudes explicitly taught.

In summary, the five phases of education policy reforms have seen gradual systemic shifts in four key areas:

- From top-down government control towards more bottom-up initiatives and increased school autonomy in curriculum, teaching methods and assessment.
- From centralized direction to increasingly system-wide innovations.
- From teacher-cent red teaching strategies to increasingly learner-centered teaching methods.
- From encouraging enrolment to focusing on quality education.

Education laws and policies have been put in place to move the system in these desired directions. In the final phase, 'Learning for Life' (2020 onwards), the shift continues away from an overemphasis on academic achievement, with a focus on preparing Singapore students to communicate, collaborate, be creative and be flexible in the face of changing circumstances.

In order to shift teaching methods from being primarily didactic in nature – with a focus on preparing learners for national examinations – the Singapore government has recognized the need to focus on building the capacity of school leaders and teachers to keep pace with the new curriculum. School clusters were established in 1997 to enable collaboration and learning among school leaders, key staff and teachers. Collaborative learning opportunities are provided for teachers at different ecological levels: professional learning communities within schools and networked learning communities across schools. Outside the education system, the Singapore government works with other ministries and community-based organizations, such as ethnic self-help organizations to address issues of educational equity.

Political shifts and infrastructures for change in Singapore

The key ideas in the section 'Political shifts and infrastructures for change' refer to systemic changes in Singapore's education reforms. Here are the key points:

1) Top-down initiatives: There has been a move towards greater school autonomy in areas such as curriculum, teaching methods and assessment, giving schools more control over their teaching practices.
2) Eco-innovations: Development has moved from centralized direction to a more ecosystem-based approach, promoting innovations that span the entire education system.
3) Learner-centered teaching methods: The focus has shifted from teacher-centered teaching strategies to learner-centered strategies, highlighting the importance of engaging learners in the learning process.
4) Focus on quality of teaching: The development has moved from simply providing education to prioritizing quality of teaching, ensuring that teaching methods are effective and conducive to learning.

5) Accumulation of change architectures: Education policies have seen the development of infrastructures that support both the holistic development of learners and academic achievement, indicating a holistic approach to educational reform.

6) Complex conditions: The development also addresses challenges arising from circumstances such as parental involvement and the recent impacts of the COVID-19 pandemic, which have impacted educational practices and policies.

Ecology of Educational Development in Singapore

Ecology of Education Development in Singapore refers to systems and frameworks that support and enhance school improvement efforts through collaboration and shared learning. The key aspects of these infrastructures are as follows:

1) **School Clusters:** Initiated by the Ministry of Education in 1997, schools are grouped into clusters overseen by a cluster leader. This structure enables collaboration among school leaders, allowing them to share ideas, resources, and best practices, and foster a culture of continuous improvement.

2) **Professional Learning Communities (PLCs):** Within schools, these communities provide a platform for teachers to engage in collaborative learning. These communities focus on sharing teaching strategies, discussing learner outcomes, and collectively addressing challenges, which enhances professional development and quality of teaching.

3) **Networked Learning Communities (NLCs)**: These communities expand collaboration across schools, allowing teachers from different institutions to connect and learn from each other. These broader networks support the sharing of innovative practices and resources across the education system.

4) **Curricula Design Support:** The ecosystem encourages teachers to move from implementing ready-made curricula to designing their own and exploring new teaching practices. This shift allows teachers to adapt their approaches to meet the needs of diverse learners.

5) **Collaboration with External Organizations:** The Ministry of Education collaborates with other ministries and community organizations, including ethnic advocacy groups, to address issues of educational equity. This collaborative approach helps create a more inclusive learning environment.

6) **Adapting to Challenges:** This ecology has proven useful in adapting to challenges such as the COVID-19 pandemic. The ability to quickly shift to distance and blended learning models has demonstrated the resilience of the educational system.

Parallel education in Singapore

Parallel education refers to informal and unstructured education systems that exist alongside the formal education system. In Singapore, this phenomenon is characterized by several key aspects:

1. **Parental pressure and expectations:** There is a strong social emphasis on academic achievement, largely driven by parental expectations that prioritize exam results and the pursuit of places in elite schools for their children, which can lead to a culture of competition and pressure.

2. **Tutoring and additional education:** Parallel education often takes the form of private tutoring, remedial classes and extra-curricular programs. Parents use these services to enhance their children's academic performance, particularly to prepare for national examinations.

3. **Informal rating systems:** Despite formal policies that aim to reduce competition-such as the abolition of school ratings- parents and private education providers have created informal rating systems based on publicly available information. This reflects the continued desire for comparative performance measures across schools.

4**. Impact on educational equity:** The presence of parallel education can exacerbate inequalities within the education system. Families with greater resources can afford private tutoring and additional educational opportunities, widening the gap between learners from different socio-economic backgrounds.

5. **Resistance to reform efforts**: The parallel education infrastructure can undermine formal educational reforms that aim to enhance overall outcomes. Parents' focus on narrow academic achievement can create resistance to changes that prioritize broader educational goals such as creativity and critical thinking.

6. **Cultural values and norms:** The parallel education system reinforces cultural values that equate educational success with high exam scores and admission to prestigious schools. This cultural context complicates efforts to change perceptions of the purpose and value of education.

Policy lessons learnt from Singapore's educational reform

1. **Broadening the definition of success:** Policymakers should broaden their definition of educational success beyond academic achievement to include holistic outcomes such as social and emotional skills, creativity, and resilience.

2. **Engaging parents in development efforts:** To counter the impact of parallel education, it is essential to engage parents in the educational development process. Educating parents about the benefits of inclusive education and providing alternatives to support their children's development can help shift their focus away from narrow academic outcomes.

3. **Addressing socio-economic disparities:** Policies should consider the impact of parallel education on educational equity. Providing support and resources to disadvantaged families can help achieve equity and ensure that all learners have access to high-quality educational opportunities.

4. **Fostering collaboration among stakeholders:** Building strong partnerships between schools, parents, and community organizations can create a supportive learning environment. Collaborative efforts can enhance the effectiveness of developments and ensure that they are responsive to the needs of learners and families.

5. **Monitoring and evaluating the impact of developments:** Continuous monitoring and evaluation of education reforms is essential to understand their effectiveness and to make necessary adjustments. Longitudinal research can provide insights into how policy changes impact learners' well-being and academic outcomes over time.

6. **Promoting a culture of lifelong learning:** Encouraging a mindset that values lifelong learning and personal growth can help shift the focus away from critical exams. Policies that promote continuing professional development for teachers and provide lifelong learning opportunities for learners can support this cultural change.

7. **Balancing academic and holistic goals:** Policymakers must balance academic goals with holistic development. Achieving this balance is essential to create an integrated educational system that meets the diverse needs of learners.

3. Appendix 3: Implementation of the Happiness Curriculum in Delhi

An Overview of the Happiness Curriculum

The Happiness Curriculum was introduced by the Delhi government in July 2018 in all 1,024 government schools. The curriculum consists of daily 45-minute lessons that aim to develop mindfulness, critical thinking, reflection, and social and emotional skills in learners from kindergarten to grade 8. It includes three main modules that focus on exploring happiness, experiencing happiness in relationships, and actively engaging in enjoyable activities.

Key features of implementation

1) **Widespread rollout:** The curriculum was rolled out in all schools simultaneously without pilot studies, making it a mandatory subject.
2) **Flexible design:** The structure of the curriculum allows for easy integration into the school day without requiring major changes to existing schedules or systems.
3) **Teacher training:** Extensive training was provided to teachers through a cascade model, which ensured overcoming initial resistance and ensuring ongoing support.
4) **Focus on well-being:** The curriculum focuses on well-being as a core learning objective, alongside academics, promoting a balanced approach to student development.
5) **Engagement with stakeholders:** Implementation involved collaboration between government officials, NGO partners, and teachers to create a supportive environment for development.
6) **Feedback mechanisms:** Clear feedback loops were established to iteratively improve the curriculum based on teacher and learner experiences.
7) **Cultural adaptation:** Efforts are underway to adapt the curriculum to other Indian states, taking into account geographical and cultural differences.
8) **International interest:** The curriculum has attracted the attention of other Indian states and countries interested in similar developments, indicating its broader appeal and potential for replication.

Challenges faced

- **Teacher resistance:** Initial resistance from teachers was a major barrier, necessitating continued engagement and reassurance about the benefits of the curriculum.
- **Balancing academic and well-being focus:** The balance between remedial academic instruction and the need for comprehensive well-being interventions was highlighted.
- **Resource disparities:** Implementation of the curriculum in less privileged areas of India presents unique challenges, underscoring the need for an adaptive approach.

Lessons learned from the Delhi Happiness Curriculum for policy

1) **Starting at a wide scale:** The happiness curriculum was implemented in all 1,024 government schools in Delhi simultaneously rather than in pilot programs. This approach ensured that no student was left out and allowed for rapid adoption across the educational system. Partners later agreed that starting at a wide scale was the right choice because a large pool of teachers was quickly identified who had become proficient in the curriculum and could share best practices.

2) **Modular design:** The curriculum was designed to fit easily into the existing school schedule, allowing for easy integration without the need for additional changes to school operations. This organization helped schools adopt the curriculum efficiently, even in the absence of large-scale infrastructure changes.

3) **Ecological approach:** Successful implementation involved collaboration between government officials, NGOs, and school staff. This multifaceted approach helped create a supportive environment for the curriculum and allowed for the sharing of expertise and resources, enhancing the overall quality of the program.

4) **High levels of specifications:** The curriculum included detailed specifications for lesson activities, ensuring consistency across different schools. This clarity facilitated more uniform implementation and allowed teachers to focus on delivering high-quality instruction.

5) **Trust and communication:** Building trust among stakeholders through transparent communication and face-to-face interactions was critical. Engagement with teachers, parents, and learners helped gain acceptance and support for the curriculum.

6) **Focus on process, not outcomes**: The Happiness Curriculum focuses on qualitative assessments of student development rather than solely quantitative measures. This approach acknowledges that the benefits of the curriculum may take time to emerge, encouraging a more patient and reflective assessment of its impact.

7) **Capacity building:** Prior investments in educational infrastructure and teacher training were essential to preparing the system for such large-scale development. These key elements supported the successful expansion of the Happiness Curriculum.

8) **Adaptability and iteration:** The curriculum is designed to be iterative, allowing for continuous improvement based on feedback from its implementation. This flexibility can help maintain its relevance and effectiveness over time, even in changing political climates.

9) **Community engagement:** Engaging the community, including parents and local organizations, creates a supportive network that reinforces the curriculum's objectives and helps sustain its impact.

10) **Long-term vision:** Development should be seen as part of a broader strategy to shift educational priorities from competition to coexistence, with a focus on holistic development alongside academic achievement.

4. Appendix 4: Overview of the International Baccalaureate (IB) Program

The IB Primary Years Program (PYP) requires full implementation of its framework throughout the school, affecting all learners and staff. Unlike programs where participation is optional, the PYP requires comprehensive changes to the school, including teaching, organization and culture, to enhance overall learner outcomes. This commitment requires a lengthy accreditation process that involves the involvement and support of a diverse range of stakeholders in the school community.

Changes in teaching and curriculum

1) **Holistic approach:** The PYP focuses on a holistic approach to education that encourages learners to connect learning to the wider world and understand important global issues.
2) **Inquiry-based learning:** Teachers are trained to adopt interdisciplinary, inquiry-based teaching methods to help learners connect different subjects.
3) **Adapting teaching methods:** Teachers are encouraged to adapt content and teaching methods, moving away from traditional rote learning to more dynamic and interactive classroom experiences.
4) **Professional development:** Continuous professional development is emphasized for teachers to ensure that they are able to implement the PYP effectively, adapting to local contexts while maintaining the integrity of the program.
5) **Global perspective:** The curriculum promotes international thinking, helping learners appreciate diverse perspectives and cultures.
6) **The role of learners:** Strong emphasis is placed on enhancing the role of learners in the learning process, allowing them to actively participate in their own learning.
7) **Interdisciplinary themes:** Teaching is organized around six interdisciplinary themes of global relevance to facilitate a comprehensive understanding of complex topics.
8) **Cultural change in schools:** Implementation of the PYP brings about a cultural shift in schools towards continuous assessment, reflection and commitment to international thinking.

School community and stakeholder engagement
1) **Stakeholder engagement:** The accreditation process requires the involvement of a diverse range of stakeholders, ensuring that the entire school community is invested in the changes.
2) **Transformative impact:** The PYP aims to transform the entire school environment, impacting not only academically but also the social and emotional development of learners.
3) **Supporting Infrastructure:** The IB system provides a strong educational infrastructure to support schools in adapting to the PYP while allowing for local customization.
4) **Community Connections:** Schools are encouraged to connect with their communities, fostering relationships that extend beyond the classroom.

Challenges and Considerations
1) **Balancing Curriculum Rigor and Equal Opportunity**: Schools must address the challenge of maintaining academic rigor while ensuring equal opportunities for all learners.
2) **Flexibility:** The PYP allows for flexibility in implementation, recognizing the unique contexts of different schools and communities.
3) **Commitment to IB Principles:** Schools seek to maintain commitment to IB principles while adapting to local educational standards and practices.

Lessons from IB Policies
Key Insights for Policymakers
Policymakers seeking to reform education systems can benefit from lessons from the IB system. Key lessons:

1) **Managing commitment and flexibility:** The IB system emphasizes the importance of maintaining the core principles of the program while allowing for local adaptation to meet community needs.
2) **Equity and rigor:** There is a need to balance rigorous educational standards with providing equitable access to high-quality education for all learners.
3) **Supporting comprehensive outcomes:** Educational developments must leave space for traditional academic achievement, while nurturing more holistic learning outcomes that include social and emotional development.
4) **A strong curricular framework:** Developing a strong and flexible educational framework is essential. The IB system provides specific educational frameworks and learning outcomes that teachers can adapt using local standards.
5) **Continuous professional development**: Supporting teachers through continuing professional development opportunities is essential for effective program delivery.
6) **Collaboration and reflection:** The IB system encourages a collaborative environment among teachers, which promotes consistency and communication in learners' learning.
7) **Focus on inquiry-based learning:** The shift from traditional teaching roles to more directive roles allows teachers to guide learners through inquiry, which promotes critical thinking and self-reflection.
8) **Systematic improvement:** The IB system aims for continuous improvement, ensuring that schools do not just meet standards but also improve their teaching practices.
9) **Exchange of ideas:** Facilitating the exchange of ideas between IB schools can lead to innovative practices and solutions that enhance the learning environment.
10) **Global perspectives:** Exposure to diverse perspectives and global issues is integral, helping learners connect their learning to the wider world and develop respect for different perspectives.

Capacity Building in the IB system

Capacity building in the IB system involves developing the skills, knowledge and resources that enhance teaching practices in schools. The IB system achieves this through several key mechanisms:

1) Professional development: Ongoing training and workshops for teachers to improve teaching strategies.
2) IB Teacher Network (IBEN): A network of IB-trained teachers who support each other through mentoring, consultation and coaching.
3) Standards and practices: Clear guidelines that ensure quality and consistency across IB programs.
4) Adaptability: A less prescriptive educational framework that allows for local adaptation while maintaining IB objectives.
5) Collaboration and feedback: Regular interactions between IB schools and systemic hubs to foster the exchange of ideas and improvement.
6) Validation visits: Processes to assess and ensure compliance with IB standards, fostering a culture of accountability.
7) Flexibility: The ability of schools to adapt educational frameworks to suit local contexts without losing sight of IB objectives.
8) Resources and tools: Providing syllabuses and learning frameworks that teachers can personalize.

5. Appendix 5. Conceptual Framework: Factors Affecting School Readiness

Macro-Level Factors
Political Context
- Political Stability: The impact of political instability on education policies, funding, and implementation of new curricula.
- Government Commitment: The level of government commitment to education, budget allocations, and public statements.
- Funding Allocation: Impacts infrastructure, teacher salaries, and learning materials.
- War and Post-War Situations: Disruption of education systems and infrastructure.

Economic Context
- Poverty and Inequality: The relationship between poverty and educational outcomes, including access to education, completion rates, and educational achievements.
- Cost of Education: It examines the costs associated with education, including school fees, transportation, and textbooks. It analyzes the impact of these costs on learners' ability to access and complete education.
- Education Financing: Examines sources of education financing, including government budgets, donor agencies, and private sources.
- Infrastructure and Resources: Lack of facilities, classrooms, and learning materials.
- Child labor: Child labor can prevent children from attending school and hinder their academic progress.

Socio-Cultural context
- **Cultural beliefs and values:** How cultural beliefs and values regarding education, gender, and social status affect educational outcomes.
- **Language barriers**: Challenges faced by learners learning in a second or third language and the need for language support programs.
- **Immigrants:** Challenges and opportunities presented by immigrants.
- **School availability:** Distribution of schools across regions and learners' access to them. Geographic and transport factors affecting access to education.

Micro-level factors
Educational infrastructure
- Classrooms and facilities: Assess the quality and adequacy of classrooms, laboratories, libraries, and other educational facilities. Analyze the impact of infrastructure on teaching and learning.
- Resources: Lack of textbooks and digital resources.
- Teacher training: The quality and relevance of teacher training programmes.
- Activating professional learning communities (PLCs):
- Encouraging collaboration between teachers and sharing experiences
- Providing a platform for continuous professional development
- Teacher qualifications

Technological infrastructure
Availability of technology in schools, including computers, internet access and digital resources.
Curricula
- Relevance and alignment: Curricula are aligned with national development goals and international standards.
- Pedagogical methods: Teaching and learning methods used in curricula. Balance between teacher-centered and learner-centered education. Use of active learning, inquiry-based learning and collaborative learning methods.
- Technology integration: The extent to which technology is integrated into curricula. Promoting a comprehensive curriculum that integrates humanities with STEM.
- Assessment practices: Assessment methods used to assess learners' learning.

School Leadership and Management
Leadership capacity: The ability of school leaders to implement and manage reforms:
- Establish a clear vision for reform
- Identify priorities aligned with reform goals
- Motivate staff, learners and the community
- Engage stakeholders
- Communicate with teachers, parents and the community
- Build a collaborative culture:
    - Foster an environment for sharing best practices
    - Support collective action towards improvement
- School culture: Including factors such as safety, discipline and collaboration
- Community engagement and support: Engage parents and the community in education
- Communication strategies: Effectively communicate reform goals and processes
- Adaptability to change: Flexibility in implementing new curricula and teaching methods
- Monitoring and evaluation mechanisms: Assess the effectiveness of reforms

Learner-centered considerations
- Learning needs and styles: Addressing diverse learning needs
- Special educational needs: Accommodating learners with disabilities
- Implementing strategies to reduce achievement gaps

External influences
- International aid and partnerships: Support from global organizations and donors
- Global educational trends and standards: Impact of international best practices
- Technological advances: Impact of digital tools on education delivery

6. Appendix 6: Selected Sample

Sample Schools in the "Study of School Readiness and Its Effective Leadership in Light of the Developed Curricula in Lebanon"

School name	School number	Educationalsector	Governate
Future Public Mixed School	15	public	Beirut
Al-Mufti Al-Shaheed Hassan Khaled Mixed Secondary Public School - (Hawd Al-Wilaya)	19	public	Beirut
Al Irshad Mixed Public School	26	public	Beirut
Al-Basta Second Mixed Intermediate School	29	public	Beirut
	47	public	Beirut
President Rene Moawad Mixed Public High School	56	public	Beirut
St. Mansour-Sisters of Charity	5008	private -no tuition	Beirut
Ashrafieh– AL Hikmah	7003	private with tuition	Beirut
Saint Charles Sisters of Charity	7012	private with tuition	Beirut
Sisters of St. Joseph the Apparition	7035	private with tuition	Beirut
Mar Elias Batina Secondary School	7051	private with tuition	Beirut
La Fontaine	7057	private with tuition	Beirut
AL Iqbal Kindergarten	7058	private with tuition	Beirut
Islamic Culture Secondary School	7070	private with tuition	Beirut
Margaret Mary of Franciscan Sisters	7094	private with tuition	Beirut
Khalid Bin Al Waleed Secondary School	7097	private with tuition	Beirut
Modern International High School	7127	private with tuition	Beirut
Beirut High School	8126	private with tuition	Beirut
Educator Edward Dou Ghadir Public School	133	public	Mount Lebanon (suburbs)
St. Rita 's -Morning School	7367	private with tuition	Mount Lebanon (suburbs)
Our Lady of Louaize	7380	private with tuition	Mount Lebanon (suburbs)

School name	School number	Educationalsector	Governate
Smart Ville	8845	private with tuition	Mount Lebanon (suburbs)
Sin El Fil Secondary School - English Branch	67	public	Mount Lebanon (suburbs)
Al-Akhtal Al-Sagheer Secondary Public School for Boys	93	public	Mount Lebanon (suburbs)
Al-Dekwaneh Mixed Intermediate Public School	98	public	Mount Lebanon (suburbs)
Antelias Secondary Public School	142	public	Mount Lebanon (suburbs)
Aqabat Beyakut Mixed Public School	150	public	Mount Lebanon (suburbs)
Mesrobian For Armenian Catholics	5028	private -no tuition	Mount Lebanon (suburbs)
Wahan Tekayan	7144	private with tuition	Mount Lebanon (suburbs)
Modern Science Palace for Education	7148	private with tuition	Mount Lebanon (suburbs)
Citizen's School	7151	private with tuition	Mount Lebanon (suburbs)
Charity	7239	private with tuition	Mount Lebanon (suburbs)
Modern Lebanese Institution	7246	private with tuition	Mount Lebanon (suburbs)
Eastwood International School	7258	private with tuition	Mount Lebanon (suburbs)
Sisters of the Cross	7395	private with tuition	Mount Lebanon (suburbs)
National Science House	8524	private with tuition	Mount Lebanon (suburbs)
Larissa Kindergarten School	8623	private with tuition	Mount Lebanon (suburbs)
EPI	8674	private with tuition	Mount Lebanon (suburbs)

School name	School number	Educationalsector	Governate
Armenian Central School	8750	private with tuition	Mount Lebanon (suburbs)
Martyr Abdul Karim Al Khalil Intermediate Public School	90	public	Mount Lebanon (suburbs)
Burj Al-Barajneh Secondary Public School for Girls	112	public	Mount Lebanon (suburbs)
Burj Al-Barajneh First Public School for Boys	117	public	Mount Lebanon (suburbs)
Ghobeiry Secondary Public School for Girls	1536	public	Mount Lebanon (suburbs)
Ibn Khaldoun Elementary School	5051	private -no tuition	Mount Lebanon (suburbs)
Saint Maximus Catholic School	5070	private -no tuition	Mount Lebanon (suburbs)
National Success School	5085	private -no tuition	Mount Lebanon (suburbs)
Union School	5450	private -no tuition	Mount Lebanon (suburbs)
Al Hadi	5517	private -no tuition	Mount Lebanon (suburbs)
Al Watan Al Mukadass - Holy Homeland	7191	private no tuition	Mount Lebanon (suburbs)
New Scientific - Al-Ghobeiry	7202	private with tuition	Mount Lebanon (suburbs)
Al Nasser	7220	private with tuition	Mount Lebanon (suburbs)
Our Lady of Salvation for the Salvationist Nuns	7288	private with tuition	Mount Lebanon (suburbs)
Green Land High School	7307	private with tuition	Mount Lebanon (suburbs)
Lebanese International	7321	private with tuition	Mount Lebanon (suburbs)
Rawdat Al Iman	7325	private with tuition	Mount Lebanon (suburbs)

School name	School number	Educationalsector	Governate
Hassan Kamel Al Sabbah	7335	private with tuition	Mount Lebanon (suburbs)
Al-Mustafa Secondary morning schedule	7343	private with tuition	Mount Lebanon (suburbs)
Al-Najah National High School	8262	private with tuition	Mount Lebanon (suburbs)
Beirut National	8284	private with tuition	Mount Lebanon (suburbs)
Al Ameer High School	8324	private with tuition	Mount Lebanon (suburbs)
Lycée Planet	8348	private with tuition	Mount Lebanon (suburbs)
High School for the Deaf	8407	private with tuition	Mount Lebanon (suburbs)
Phoenix International School	8552	private with tuition	Mount Lebanon (suburbs)
Our Lady High School - Antonine Sisters Kfarshima	8590	private with tuition	Mount Lebanon (suburbs)
Beirut International School	8761	private with tuition	Mount Lebanon (suburbs)
Al Abbas International High School	8829	private with tuition	Mount Lebanon (suburbs)
Al Karama Elementary School	5580	private -no tuition	Mount Lebanon (suburbs)
Qasr Al-Sanobar Modern Secondary School	7358	private with tuition	Mount Lebanon (suburbs)

School Name	School Number	Educational Sector	Governate
Al Bayan	7362	private with tuition	Mount Lebanon (suburbs)
Mabarat Al - Imam Al-Khoei Secondary School	7407	private with tuition	Mount Lebanon (suburbs)

School Name	School Number	Educational Sector	Governate
Al Ghazali High School	7417	private with tuition	Mount Lebanon (suburbs)
New Century	8054	private with tuition	Mount Lebanon (suburbs)
Issa School	8134	private with tuition	Mount Lebanon (suburbs)
Bayader Aramoun	8136	private with tuition	Mount Lebanon (suburbs)
Panda Play School	8399	private with tuition	Mount Lebanon (suburbs)
Harat Al Nehme Mixed Public School	163	public	Mount Lebanon (suburbs)
Al Karama Mixed Intermediate School	9512	UNRWA private	Mount Lebanon (suburbs)
Jubail Fourth Mixed Public School	169	public	Mount Lebanon (except suburbs)
Stephan Joan Assi Mixed Public School	180	public	Mount Lebanon (except suburbs)
Ehmej Secondary Public School	1464	public	Mount Lebanon (except suburbs)
Lebanon's Girls' High School	7437	private with tuition	Mount Lebanon (except suburbs)
Rasoul Al Mahaba Secondary School	8589	private with tuition	Mount Lebanon (except suburbs)
Ghazir Mixed Secondary Public School	209	public	Mount Lebanon (except suburbs)
Al Kfour Mixed Public School	212	public	Mount Lebanon (except suburbs)
Sayidat al Sukhur for Sisters of Charity Ajaltoun	5111	private -no tuition	Mount Lebanon (except suburbs)
Sisters of the Sacred Hearts High School	7448	private with tuition	Mount Lebanon (except suburbs)

School Name	School Number	Educational Sector	Governate
Sisters of the Cross	**7449**	private with tuition	Mount Lebanon (except suburbs)
Btighreen Mixed Intermediate Public school	**222**	public	Mount Lebanon (except suburbs)
Alliwa Jamil Lahoud Public School	**235**	public	Mount Lebanon (except suburbs)
Mar Mansour for the Sisters of Besancon	**5125**	private -no tuition	Mount Lebanon (except suburbs)
Jesus and Mary School	**7385**	private with tuition	Mount Lebanon (except suburbs)
Wardiyyeh Sisters High School	**7470**	private with tuition	Mount Lebanon (except suburbs)
Intermediate Sacred Hearts	**7481**	private with tuition	Mount Lebanon (except suburbs)
Social Guidance of Antonine Fathers	**7483**	private with tuition	Mount Lebanon (except suburbs)
Btekhnay Mixed Intermediate Public school	**246**	public	Mount Lebanon (except suburbs)
Hilaliyyeh Mixed Public School	**251**	public	Mount Lebanon (except suburbs)
Hammana Public Mixed School	**1396**	public	Mount Lebanon (except suburbs)
Maroun Abboud Secondary Public School - Aley Previously	**255**	public	Mount Lebanon (except suburbs)
Beysour Mixed Intermediate Public School	**263**	public	Mount Lebanon (except suburbs)
Mishqitee Mixed Intermediate Public school	**281**	public	Mount Lebanon (except suburbs)
Irfan - Ruwaisat Sofar	**5140**	private -no tuition	Mount Lebanon (except suburbs)
West Hill College	**7518**	private with tuition	Mount Lebanon (except suburbs)

School Name	School Number	Educational Sector	Governate
Al-Hidaya High School	8230	private with tuition	Mount Lebanon (except suburbs)
Barja Mixed Public School	291	public	Mount Lebanon (except suburbs)
Kafr Faqoud Mixed Intermediate Public School	302	public	Mount Lebanon (except suburbs)
Al Mukhtara Secondary Public School	313	public	Mount Lebanon (except suburbs)
Mazraat Shouf Intermediate Mixed Public School	316	public	Mount Lebanon (except suburbs)
Hasrout Mixed Intermediate Public School	342	public	Mount Lebanon (except suburbs)
Rumaili Mixed Intermediate Public School	352	public	Mount Lebanon (except suburbs)
Our Lady of Joy -Sisters of Charity - Rumaili	5421	private -no tuition	Mount Lebanon (except suburbs)
Mar Abda - Deir El Qamar	7528	private with tuition	Mount Lebanon (except suburbs)
St. Joseph Sisters of Apparition	7529	private -no tuition	Mount Lebanon (except suburbs)
Universal	7548	private with tuition	Mount Lebanon (except suburbs)
Al Sharq High School	8113	private with tuition	Mount Lebanon (except suburbs)
Hara International College	8173	private with tuition	Mount Lebanon (except suburbs)
Dawud Al Ali New High School	8314	private with tuition	Mount Lebanon (except suburbs)
Al Ataa Model High School	8454	private with tuition	Mount Lebanon (except suburbs)
Bayt Al Arz School	8673	private with tuition	Mount Lebanon (except suburbs)

School Name	School Number	Educational Sector	Governate
Novel Asprey College	8698	private with tuition	Mount Lebanon (except suburbs)
Rmeili High School	8783	private with tuition	Mount Lebanon (except suburbs)
Al Salam School	8820	private with tuition	Mount Lebanon (except suburbs)
Al-Namouzaj Public School for Girls	359	public	North
Farah Antoun Public School for Boys	375	public	North
Rawdat Al Tel - Al Zahrieh Mixed Public School	377	public	North
Andre Nahas Secondary Public School for Girls- El Mina	383	public	North
Al Tahzibiyya Public School for Girls	386	public	North
Rawdat Al Najma Mixed School	398	public	North
Al-Fayhaa Public School for Boys	403	public	North
Educational Training Public School for Girls	407	public	North
Al-Farabi Public School for Boys	429	public	North
Tripoli Al Qibba First Mixed Secondary Public School	433	public	North
Al Qibba Second Intermediate Mixed Public School	1398	public	North
Al Qibba Second Intermediate Public School for Girls	1375	public	North
Al-Tenshiya Al-Wataniyyah	5149	private -no tuition	North
Dohat Al - Adab	5167	private -no tuition	North
Al-Inaya Al- Ahliyyah	7580	private with tuition	North
Jenat al-Atfal School	8535	private with tuition	North
Al Abrar	8724	private with tuition	North
Minieh Al Maqaleh Mixed Public School	436	public	North
Minieh Mixed Public Kindergarten	437	public	North

School Name	School Number	Educational Sector	Governate
Behneen Mixed Public	453	public	North
Harf Siad Mixed Public	463	public	North
Ibn Al-Haytham Intermediate Public	473	public	North
Sir Danniyeh Secondary Public School	490	public	North
Bekaasfrin Mixed Public School	497	public	North
Harf Beit Hasna Intermediate Mixed Public School	507	public	North
Beddawi Primary Mixed Public School	1419	public	North
Bashtayel Public	1544	public	North
Taran Public Secondary School	1548	public	North
Al- Irshad Al Wataniyya Alnamuzajiyah	5408	private -no tuition	North
El Sheikh School	5706	private -no tuition	North
Al- Fajr	7600	private with tuition	North
Great Islamic Council	8229	private with tuition	North
El Farouk Intermediate School	8526	private with tuition	North
Lebanese Cedars School	8651	private with tuition	North
Megiddo Intermediate for Boys	9525	UNRWAprivate	North
Madam Badra Public for girls	675	public	North
Zgharta Public Mixed Kindergarten School	676	public	North
The Holy Family of the Sisters of Charity	5213	Private no tuition	North
Saint Joseph of the Sisters of Charity	7664	private with tuition	North
Our Lady of the Maronite Sisters of the Holy Family	7668	private with tuition	North
Fraire De La Salle	7670	private with tuition	North
Betty Nini	8157	private with tuition	North
Ras Masqa Mixed Public School	699	Public	North
Kfarhazir Public School - English	715	Public	North

School Name	School Number	Educational Sector	Governate
Kousba Public School for Boys	721	Public	North
Kefraya Mixed Public School	736	Public	North
Saint Peter's Orthodox Lycée	7683	private with tuition	North
Saint Daniel of the Maronite Sisters of the Holy Family	7691	private with tuition	North
Chekka New Mixed Public School	750	public	North
Batroun Secondary Public School - Douma Branch	780	public	North
Kalima School - St. Anthony - Chekka	7694	private with tuition	North
Ave Maria	8159	private with tuition	North
Zahle First Mixed Intermediate Public School	792	public	Bekaa
Al Moallaqa Intermediate Public School for Girls	802	public	Bekaa
Firzol Mixed Public School	808	public	Bekaa
Ablah Mixed Intermediate Public	817	public	Bekaa
Ali Al Nahri Primary Mixed Public School	820	public	Bekaa
Massa Mixed Intermediate Public	824	public	Bekaa
Majdal Anjar Public Secondary School	833	public	Bekaa
Maksi Mixed Public	838	public	Bekaa
Al Mushrifah Public School	1362	public	Bekaa
Dar Al Huda	5238	private -no tuition	Bekaa
Catholic Episcopate	5246	private -no tuition	Bekaa
St. Joseph Catholic Savior	7714	private with tuition	Bekaa
Mar Rokoz of the Antonine Fathers	7725	private with tuition	Bekaa
Saydat Al Niah Secondary School for the Sisters of the Saviors	7731	private with tuition	Bekaa
Qab Elias National	7756	private with tuition	Bekaa
American International - Riyaq	8216	private with tuition	Bekaa

School Name	School Number	Educational Sector	Governate
Modern Hope	8472	private with tuition	Bekaa
Lycée Ideal Riyaq	8572	private with tuition	Bekaa
Energetic Minds	8735	private with tuition	Bekaa
Ray of Hope School	8777	private with tuition	Bekaa
Genius Kids School	8870	private with tuition	Bekaa
Al Marj Intermediate Public	984	public	Bekaa
Lighthouse First Intermediate Public	998	public	Bekaa
Suhmor Secondary Public School	1011	public	Bekaa
Al-Suwairi Secondary Public School	1497	public	Bekaa
Makassed Islamic Charity - Mohammerah	5194	private -no tuition	Bekaa
Saint John	5325	private -no tuition	Bekaa
Al Bireh Intermediate Public School	1021	public	Bekaa
Free Canadian	5556	private -no tuition	Bekaa
Al Irfan Intermediate	7834	private with tuition	Bekaa
Al-Bayan and Al-Bunyan School	8667	private with tuition	Bekaa
Reform Mixed Intermediate Public	1047	public	South
Mieh wa Mieh Intermediate Public	1061	public	South
Maghdouche Secondary Public School	1070	public	South
Maghdouche Intermediate Public School	1071	public	South
Maghdouche Primary Public School	1072	public	South
Marwaniya Intermediate Mixed Public- English Branch	1084	public	South
Qaqaiyat al Sanawbar Intermediate Public	1096	public	South
Arab Orphan Home	5330	private -no tuition	South
Al-Nahda Educational Preparatory School	5344	private -no tuition	South
Flower Science Intermediate	7864	private with tuition	South

School Name	School Number	Educational Sector	Governate
Imam Ali High School for Education	7872	private with tuition	South
Karama School	7878	private with tuition	South
El Mahdi Schools	7980	private with tuition	South
Lycée Celestan Frené	8830	private with tuition	South
Nablus Middle School for Girls	9554	UNRWAprivate	South
Deir Al-Qasi Primary and Intermediate	9557	UNRWAprivate	South
Al Zahiriyah Mixed Primary	9558	UNRWA private	South
Hittin Primary & Intermediate for Boys	9564	UNRWA private	South
Lebaa Intermediate Public	1109	public	South
Jezzine Public Secondary School	1117	public	South
Sidon National -morning schedule	7852	private with tuition	South
Tyre Second Mixed Public	1223	public	South
Tora Intermediate Public	1232	public	South
Shehabiya Primary Public	1243	public	South
Juwaya First Intermediate Public	1248	public	South
Qana Intermediate Public	1265	public	South
Zebqin Intermediate Public	1271	public	South
Al Qulayla Public	1282	public	South
Bazouria Public Secondary School	1411	public	South
Tyre Mixed Secondary Public School-Marwaheen Branch	1540	public	South
El Mahdi Model Free School - Photos	5544	private -no tuition	South
Global Horizon High School	7929	private -no tuition	South
Jabal Amel	7930	private -no tuition	South
El Mahdi School – Tyre	8110	private -no tuition	South

School Name	School Number	Educational Sector	Governate
Al Mayadeen International School	8306	private -no tuition	South
Al Sarraj High School Siddiqin	8627	private -no tuition	South
Qaysaria Mixed Elementary	9571	UNRWAprivate	South
Deir Yassin Mixed Secondary School	9573	UNRWAprivate	South
Houmeen Al-Fawqa Intermediate Mixed	1128	public	Nabatieh
Jbaa Primary Public Mixed	1132	public	Nabatieh
Wajih Darwish Intermediate Public School (Zefta)	1141	public	Nabatieh
Al Sharqia Intermediate Public School	1159	public	Nabatieh
Mayfadoun Intermediate Public	1170	public	Nabatieh
Imam Musa al- Sadr Zutar Western Public	1595	public	Nabatieh
Al Zahra Mixed Primary School	5360	private -no tuition	Nabatieh
Model Counseling	5371	private -no tuition	Nabatieh
Imam Zain Al Abidin	5413	private no-tuition	Nabatieh
Imam Mahdi-Sharqia	7896	private with tuition	Nabatieh
Lycée Lebanese French	7988	private with tuition	Nabatieh
Al Kawthar Model	8081	private with tuition	Nabatieh
Ajyal School	8308	private with tuition	Nabatieh
Al-Sarraj High School - Al-Qusaiba	8781	private with tuition	Nabatieh
International High School	8802	private with tuition	Nabatieh
Khirbet Selm First Mixed Public School	1295	public	Nabatieh
Qalawiya Intermediate Public Tower	1299	public	Nabatieh
Bint Jbeil Public Second Mixed Intermediate	1315	public	Nabatieh
Aita El Shaab Public High School	1329	public	Nabatieh
Kafra Public High School	1449	public	Nabatieh
Al Baraem Model School	5573	private -no tuition	Nabatieh

School Name	School Number	Educational Sector	Governate
Al-Hidaya High School	7959	private with tuition	Nabatieh
Hasbaya Secondary Public School	1176	public	Nabatieh
Shuwaya Intermediate Mixed School	1179	public	Nabatieh
Al-Iman School -Arqoub	8481	private with tuition	Nabatieh
New Marjayoun Intermediate Public	1196	public	Nabatieh
Kafr Kila Public School	1506	public	Nabatieh
Isa bin Maryam (peace be upon him) free	5486	private- no tuition	Nabatieh
Orthodox Intermediate	7911	Private with tuition	Nabatieh
Issa bin Maryam (peace be upon him) Secondary School	8335	private with tuition	Nabatieh
Klayaat Mixed Public	519	public	Akkar
Educator Suleiman Aziz Al Ali Public School - Haker Al Daheri	525	public	Akkar
Halba Public Mixed Kindergarten	531	public	Akkar
Sheikh Mohammed Mixed Public	534	public	Akkar
Dr. Yaqoub Al Sarraf Public School	541	public	Akkar
Wadi Jamus Mixed Public	561	public	Akkar
Al-Fadel Public intermediate - Ramah	572	public	Akkar
Bireh Mixed Public	589	public	Akkar
Al-Bireh Public High School	590	public	Akkar
Akkar al-Atiqa Mixed Public	615	public	Akkar
Funaideq Mixed Public	620	public	Akkar
Oyoun el Samak Mixed Public	631	public	Akkar
Kobayat Public Kindergarten	637	public	Akkar
Al Kanisa Mixed Public	655	public	Akkar
Kafroun Mixed Public	1332	public	Akkar
Harar Public High School	1390	public	Akkar

School Name	School Number	Educational Sector	Governate
Talhamira Intermediate Public Mixed School	1409	public	Akkar
Nabeh Al Awada Public	1551	public	Akkar
Al Kawashra Public High School	1585	public	Akkar
Berqail II Public English Branch	1610	public	Akkar
Wata Meshmish II Public	1618	public	Akkar
Fenaideq Public High School - Qurna Branch	1622	public	Akkar
Eastern Wisdom	5185	private -no tuition	Akkar
Makassed Islamic Charity - Beit Ayoub	5204	private -no tuition	Akkar
Al Fares Al Saghir School (formerly Imam Musa Al-Sadr School)	5447	private -no tuition	Akkar
Al Farouq Free	5505	private -no tuition	Akkar
Islamic faith	7629	private with tuition	Akkar
Al-Urwa Al-Wathqa High School	7643	private with tuition	Akkar
Private Oasis	7653	private -no tuition	Akkar
AL Aman Islamic	8153	private with tuition	Akkar
Science and Faith High School	8186	private with tuition	Akkar
Islamic Jewel	8223	private with tuition	Akkar
Medium Jewel	8358	private with tuition	Akkar
Al Anwar High School - Mohammerah	8497	private with tuition	Akkar
Kids Spring	8508	private with tuition	Akkar
Tomorrow's Model Generations	8732	private with tuition	Akkar
Bahr Al Uloom High School	8733	private with tuition	Akkar
Sahlat el Ma Intermediate Public	842	public	Baalbek-Hermel
Al Sherbin Intermediate Public	851	public	Baalbek-Hermel
Bait Al Tashm Public	866	public	Baalbek-Hermel
Hermel Model Secondary Public School	1473	public	Baalbek-Hermel

School Name	School Number	Educational Sector	Governate
Labwe Intermediate Public	869	public	Baalbek-Hermel
Arsal First Mixed Intermediate	875	public	Baalbek-Hermel
Arsal Third Public Intermediate	878	public	Baalbek-Hermel
Al Ain Intermediate Public	880	public	Baalbek-Hermel
New Intermediate Mixed Public	884	public	Baalbek-Hermel
Ras Baalbek Public Secondary School	887	public	Baalbek-Hermel
Zaytoun Intermediate Public	894	public	Baalbek-Hermel
Flawi Mixed Intermediate Public	917	public	Baalbek-Hermel
Nabil Adeeb Suleiman Mixed High School	967	public	Baalbek-Hermel
Al Amjad	5110	private -no tuition	Baalbek-Hermel
Lebanese Al Tajhiz	5265	private -no tuition	Baalbek-Hermel
Modern Education	5274	private -no tuition	Baalbek-Hermel
Saydit el Burj of the Maronite Sisters of the Holy Family	5285	private -no tuition	Baalbek-Hermel
Al-Mahdi Model Currently (formerly New Generation)	5425	private -no tuition	Baalbek-Hermel
Mahdi Model Free - Shmistar (formerly Tawjih)	5460	private -no tuition	Baalbek-Hermel
Al Tajhiz Lebanese Intermediate	7764	private with tuition	Baalbek-Hermel
Sheikh Mohammed Yaqoub High School	8065	private with tuition	Baalbek-Hermel
Doha Al Adab	8401	private with tuition	Baalbek-Hermel
Al-Qaim High School	8475	private with tuition	Baalbek-Hermel
Al Ghadeer High School	8583	private with tuition	Baalbek-Hermel
Saydit el Burj - of the Sisters of the Holy Family Dayr Al Ahmar	8611	private with tuition	Baalbek-Hermel
Al Maram High School	8660	private with tuition	Baalbek-Hermel
Peaks High School	8743	private with tuition	Baalbek-Hermel
New Dar Al Hanan	8831	private with tuition	Baalbek-Hermel

School Name	School Number	Educational Sector	Governate
Jeel Salam Schools	**8867**	private with tuition	Baalbek-Hermel

Distribution of Schools Participating in the Study on School Readiness and Effective Leadership in Lebanon in the Light of the Developed Curricula in Lebanon

Education Sector	Beirut	Mount Lebanon (Suburbs)	Mount Lebanon (Excluding Suburbs)	North	Bekaa	South	Nabatieh	Akkar	Baalbek-Hermel	Total
Public	8	11	18	35	13	15	16	20	11	147
Private Free	1	4	4	6	3	1	6	2	3	30
Private Paid	9	33	9	13	9	7	7	6	5	98
Private UNRWA	0	1	0	1	0	2	0	0	0	4
Total	18	49	31	55	25	25	29	28	19	279

7. Appendix 7: Participating Schools-Actual Sample

Schools participating in the "Study of School Readiness and Its Effective Leadership in the Light of the Developed Curricula in Lebanon "

School name	School number	Educational sector	Governate
Future Public Mixed School	15	public	Beirut
Al-Mufti Al-Shaheed Hassan Khaled Mixed Secondary Public School - (Hawd Al-Wilaya)	19	public	Beirut
Al Irshad Mixed Public School	26	public	Beirut
Al-Basta Second Mixed Intermediate School	29	public	Beirut
	47	public	Beirut
President Rene Moawad Mixed Public High School	56	public	Beirut
St. Mansour-Sisters of Charity	5008	private -no tuition	Beirut
Ashrafieh– AL Hikmah	7003	private with tuition	Beirut
Saint Charles Sisters of Charity	7012	private with tuition	Beirut
Sisters of St. Joseph the Apparition	7035	private with tuition	Beirut
Mar Elias Batina Secondary School	7051	private with tuition	Beirut
La Fontaine	7057	private with tuition	Beirut
Margaret Mary of Franciscan Sisters	7094	private with tuition	Beirut
Khalid Bin Al Waleed Secondary School	7097	private with tuition	Beirut
Modern International High School	7127	private with tuition	Beirut
Beirut High School	8126	private with tuition	Beirut
St. Rita 's -Morning School	7367	private with tuition	Mount Lebanon (suburbs)
Our Lady of Louaize	7380	private with tuition	Mount Lebanon (suburbs)
Sin El Fil Secondary School - English Branch	67	public	Mount Lebanon (suburbs)
Al-Akhtal Al-Sagheer Secondary Public School for Boys	93	public	Mount Lebanon (suburbs)
Al-Dekwaneh Mixed Intermediate Public School	98	public	Mount Lebanon (suburbs)
Antelias Secondary Public School	142	public	Mount Lebanon (suburbs)

School name	School number	Educational sector	Governate
Aqabat Beyakut Mixed Public School	150	public	Mount Lebanon (suburbs)
Wahan Tekayan	7144	private with tuition	Mount Lebanon (suburbs)
Modern Science Palace for Education	7148	private with tuition	Mount Lebanon (suburbs)
Citizen's School	7151	private with tuition	Mount Lebanon (suburbs)
Charity	7239	private with tuition	Mount Lebanon (suburbs)
Modern Lebanese Institution	7246	private with tuition	Mount Lebanon (suburbs)
Eastwood International School	7258	private with tuition	Mount Lebanon (suburbs)
Sisters of the Cross	7395	private with tuition	Mount Lebanon (suburbs)
EPI	8674	private with tuition	Mount Lebanon (suburbs)
Armenian Central School	8750	private with tuition	Mount Lebanon (suburbs)
Martyr Abdul Karim Al Khalil IntermediatePublic School	90	public	Mount Lebanon (suburbs)
Burj Al-Barajneh Secondary Public School for Girls	112	public	Mount Lebanon (suburbs)
Burj Al-Barajneh First Public School for Boys	117	public	Mount Lebanon (suburbs)
Ghobeiry Secondary Public School for Girls	1536	public	Mount Lebanon (suburbs)
Ibn Khaldoun Elementary School	5051	private -no tuition	Mount Lebanon (suburbs)
National Success School	5085	private -no tuition	Mount Lebanon (suburbs)
Al Hadi	5517	private -no tuition	Mount Lebanon (suburbs)
Al Watan Al Mukadass - Holy Homeland	7191	private no tuition	Mount Lebanon (suburbs)
Al Nasser	7220	private with tuition	Mount Lebanon (suburbs)
Our Lady of Salvation for the Salvationist Nuns	7288	private with tuition	Mount Lebanon (suburbs)
Rawdat Al Iman	7325	private with tuition	Mount Lebanon (suburbs)
Al-Mustafa Secondary morning schedule	7343	private with tuition	Mount Lebanon (suburbs)
Al-Najah National High School	8262	private with tuition	Mount Lebanon (suburbs)
Al Ameer High School	8324	private with tuition	Mount Lebanon (suburbs)

School name	School number	Educational sector	Governate
Lycée Planet	8348	private with tuition	Mount Lebanon (suburbs)
High School for the Deaf	8407	private with tuition	Mount Lebanon (suburbs)
Phoenix International School	8552	private with tuition	Mount Lebanon (suburbs)
Our Lady High School - Antonine Sisters Kfarshima	8590	private with tuition	Mount Lebanon (suburbs)
Beirut International School	8761	private with tuition	Mount Lebanon (suburbs)
Al Abbas International High School	8829	private with tuition	Mount Lebanon (suburbs)
Al Karama Elementary School	5580	private -no tuition	Mount Lebanon (suburbs)
Qasr Al-Sanobar Modern Secondary School	7358	private with tuition	Mount Lebanon (suburbs)

School name	School number	Educational sector	Governate
Mabarat Al -Imam Al-Khoei Secondary School	7407	private with tuition	Mount Lebanon (suburbs)
Bayader Aramoun	8136	private with tuition	Mount Lebanon (suburbs)
Panda Play School	8399	private with tuition	Mount Lebanon (suburbs)
Harat Al Nehme Mixed Public School	163	public	Mount Lebanon (suburbs)
Al Karama Mixed Intermediate School	9512	UNRWA private	Mount Lebanon (suburbs)
Jubail Fourth Mixed Public School	169	public	Mount Lebanon (except suburbs)
Stephan Joan Assi Mixed Public School	180	public	Mount Lebanon (except suburbs)
Ehmej Secondary Public School	1464	public	Mount Lebanon (except suburbs)
Ghazir Mixed Secondary Public School	209	public	Mount Lebanon (except suburbs)
Al Kfour Mixed Public School	212	public	Mount Lebanon (except suburbs)
Sayidat al Sukhur for Sisters of Charity Ajaltoun	5111	private -no tuition	Mount Lebanon (except suburbs)
Sisters of the Sacred Hearts High School	7448	private with tuition	Mount Lebanon (except suburbs)
Btighreen Mixed Intermediate Public school	222	public	Mount Lebanon (except suburbs)
Alliwa Jamil Lahoud Public School	235	public	Mount Lebanon (except suburbs)

School name	School number	Educational sector	Governate
Mar Mansour of the Sisters of Besancon	5125	private -no tuition	Mount Lebanon (except suburbs)
Jesus and Mary School	7385	private with tuition	Mount Lebanon (except suburbs)
Wardiyyeh Sisters High School	7470	private with tuition	Mount Lebanon (except suburbs)
Intermediate Sacred Hearts	7481	private with tuition	Mount Lebanon (except suburbs)
Social Guidance of Antonine Fathers	7483	private with tuition	Mount Lebanon (except suburbs)
Btekhnay Mixed Intermediate Public school	246	public	Mount Lebanon (except suburbs)
Hilaliyyeh Mixed Public School	251	public	Mount Lebanon (except suburbs)
Hammana Public Mixed School	1396	public	Mount Lebanon (except suburbs)
Maroun Abboud Secondary Public School - Aley Previously	255	public	Mount Lebanon (except suburbs)
Beysour Mixed Intermediate Public School	263	public	Mount Lebanon (except suburbs)
Mishqitee Mixed Intermediate Public school	281	public	Mount Lebanon (except suburbs)
Irfan - Ruwaisat Sofar	5140	private -no tuition	Mount Lebanon (except suburbs)
West Hill College	7518	private with tuition	Mount Lebanon (except suburbs)
Barja Mixed Public School	291	public	Mount Lebanon (except suburbs)
Kafr Faqoud Mixed Intermediate Public School	302	public	Mount Lebanon (except suburbs)
Al Mukhtara Secondary Public School	313	public	Mount Lebanon (except suburbs)
Mazraat Shouf Intermediate Mixed Public School	316	public	Mount Lebanon (except suburbs)
Hasrout Mixed Intermediate Public School	342	public	Mount Lebanon (except suburbs)
Our Lady of Joy -Sisters of Charity - Rumaili	5421	private -no tuition	Mount Lebanon (except suburbs)
Hara International College	8173	private with tuition	Mount Lebanon (except suburbs)
Bayt Al Arz School	8673	private with tuition	Mount Lebanon (except suburbs)
Rmeili High School	8783	private with tuition	Mount Lebanon (except suburbs)
Al-Namouzaj Public School for Girls	359	public	North
Farah Antoun Public School for Boys	375	public	North
Rawdat Al Tel - Al Zahrieh Mixed Public School	377	public	North

School name	School number	Educational sector	Governate
Andre Nahas Secondary Public School for Girls- El Mina	383	public	North
Al Tahzibiyya Public School for Girls	386	public	North
Rawdat Al Najma Mixed School	398	public	North
Al-Fayhaa Public School for Boys	403	public	North
Educational Training Public School for Girls	407	public	North
Al-Farabi Public School for Boys	429	public	North
Tripoli Al Qibba First Mixed Secondary Public School	433	public	North
Al Qibba Second Intermediate Mixed Public School	1398	public	North
Al Qibba Second Intermediate Public School for Girls	1375	public	North
Al-Tenshiya Al-Wataniyyah	5149	private -no tuition	North
Dohat Al - Adab	5167	private -no tuition	North
Al-Inaya Al- Ahliyyah	7580	private with tuition	North
Jenat al-Atfal School	8535	private with tuition	North
Al Abrar	8724	private with tuition	North
Minieh Al Maqaleh Mixed Public School	436	public	North
Minieh Mixed Public Kindergarten	437	public	North
Behneen Mixed Public	453	public	North
Harf Siad Mixed Public	463	public	North
Ibn Al-Haytham Intermediate Public	473	public	North
Sir Danniyeh Secondary Public School	490	public	North
Bekaasfrin Mixed Public School	497	public	North
Harf Beit Hasna Intermediate Mixed Public School	507	public	North
Beddawi Primary Mixed Public School	1419	public	North
Bashtayel Public	1544	public	North
Taran Public Secondary School	1548	public	North
Al- Irshad Al Wataniyya Alnamuzajiyah	5408	private -no tuition	North
El Sheikh School	5706	private -no tuition	North
El Farouk Intermediate School	8526	private with tuition	North
Lebanese Cedars School	8651	private with tuition	North
Megiddo Intermediate for Boys	9525	UNRWA private	North
Madam Badra Public for girls	675	public	North
Zgharta Public Mixed Kindergarten School	676	public	North

School name	School number	Educational sector	Governate
The Holy Family of the Sisters of Charity	5213	Private no tuition	North
Saint Joseph of the Sisters of Charity	7664	private with tuition	North
Our Lady of the Maronite Sisters of the Holy Family	7668	private with tuition	North
Fraire De La Salle	7670	private with tuition	North
Ras Masqa Mixed Public School	699	Public	North
Kfarhazir Public School - English	715	Public	North
Kousba Public School for Boys	721	Public	North
Kefraya Mixed Public School	736	Public	North
Saint Peter's Orthodox Lycée	7683	private with tuition	North
Saint Daniel of the Maronite Sisters of the Holy Family	7691	private with tuition	North
Chekka New Mixed Public School	750	public	North
Batroun Secondary Public School - Douma Branch	780	public	North
Kalima School - St. Anthony - Chekka	7694	private with tuition	North
Ave Maria	8159	private with tuition	North
Zahle First Mixed Intermediate Public School	792	public	Bekaa
Al Moallaqa Intermediate Public School for Girls	802	public	Bekaa
Firzol Mixed Public School	808	public	Bekaa
Ali Al Nahri Primary Mixed Public School	820	public	Bekaa
Massa Mixed Intermediate Public	824	public	Bekaa
Majdal Anjar Public Secondary School	833	public	Bekaa
Maksi Mixed Public	838	public	Bekaa
Al Mushrifah Public School	1362	public	Bekaa
Catholic Episcopate	5246	private -no tuition	Bekaa
St. Joseph Catholic Savior	7714	private with tuition	Bekaa
Mar Rokoz of the Antonine Fathers	7725	private with tuition	Bekaa
Qab Elias National	7756	private with tuition	Bekaa
Modern Hope	8472	private with tuition	Bekaa
Lycée Ideal Riyaq	8572	private with tuition	Bekaa
Energetic Minds	8735	private with tuition	Bekaa
Ray of Hope School	8777	private with tuition	Bekaa

School name	School number	Educational sector	Governate
Al Marj Intermediate Public	984	public	Bekaa
Lighthouse First Intermediate Public	998	public	Bekaa
Suhmor Secondary Public School	1011	public	Bekaa
Al-Suwairi Secondary Public School	1497	public	Bekaa
Saint John	5325	private -no tuition	Bekaa
Al Bireh Intermediate Public School	1021	public	Bekaa
Free Canadian	5556	private -no tuition	Bekaa
Al Irfan Intermediate	7834	private with tuition	Bekaa
Al-Bayan and Al-Bunyan School	8667	private with tuition	Bekaa
Reform Mixed Intermediate Public	1047	public	South
Mieh wa Mieh Intermediate Public	1061	public	South
Maghdouche Secondary Public School	1070	public	South
Maghdouche Intermediate Public School	1071	public	South
Maghdouche Primary Public School	1072	public	South
Marwaniya Intermediate Mixed Public- English Branch	1084	public	South
Arab Orphan Home	5330	private -no tuition	South
Flower Science Intermediate	7864	private with tuition	South
Karama School	7878	private with tuition	South
Nablus Middle School for Girls	9554	UNRWA private	South
Hittin Primary & Intermediate for Boys	9564	UNRWA private	South
Lebaa Intermediate Public	1109	public	South
Jezzine Public Secondary School	1117	public	South
Sidon National -morning schedule	7852	private with tuition	South
Tyre Second Mixed Public	1223	public	South
Shehabiya Primary Public	1243	public	South
Juwaya First Intermediate Public	1248	public	South
Qana Intermediate Public	1265	public	South
Zebqin Intermediate Public	1271	public	South
Bazouria Public Secondary School	1411	public	South
Tyre Mixed Secondary Public School- Marwaheen Branch	1540	public	South
El Mahdi Model Free School - Photos	5544	private -no tuition	South

School name	School number	Educational sector	Governate
Global Horizon High School	7929	private -no tuition	South
Jabal Amel	7930	private -no tuition	South
Al Mayadeen International School	8306	private -no tuition	South
Al Sarraj High School Siddiqin	8627	private -no tuition	South
Houmeen Al-Fawqa Intermediate Mixed	1128	public	Nabatieh
Jbaa Primary Public Mixed Public	1132	public	Nabatieh
Wajih Darwish Intermediate Public School (Zefta)	1141	public	Nabatieh
Al Sharqia Intermediate Public School	1159	public	Nabatieh
Mayfadoun Intermediate Public	1170	public	Nabatieh
Imam Musa al- Sadr Zutar Western Public	1595	public	Nabatieh
Al Zahra Mixed Primary School	5360	private -no tuition	Nabatieh
Model Counseling	5371	private -no tuition	Nabatieh
Imam Zain Al Abidin	5413	private no- tuition	Nabatieh
Al Kawthar Model	8081	private with tuition	Nabatieh
Ajyal School	8308	private with tuition	Nabatieh
Al-Sarraj High School - Al-Qusaiba	8781	private with tuition	Nabatieh
International High School	8802	private with tuition	Nabatieh
Khirbet Selm First Mixed Public School	1295	public	Nabatieh
Qalawiya Intermediate Public Tower	1299	public	Nabatieh
Bint Jbeil Public Second Mixed Intermediate	1315	public	Nabatieh
Aita El Shaab Public High School	1329	public	Nabatieh
Kafra Public High School	1449	public	Nabatieh
Al Baraem Model School	5573	private -no tuition	Nabatieh
Al-Hidaya High School	7959	private with tuition	Nabatieh
Hasbaya Secondary Public School	1176	public	Nabatieh
Shuwaya Intermediate Mixed School	1179	public	Nabatieh
Al-Iman School -Arqoub	8481	private with tuition	Nabatieh
New Marjayoun Intermediate Public	1196	Public	Nabatieh
Kafr Kila Public School	1506	public	Nabatieh
Isa bin Maryam (peace be upon him) free	5486	private no tuition	Nabatieh

School name	School number	Educational sector	Governate
Orthodox Intermediate	7911	Private with tuition	Nabatieh
Klayaat Mixed Public	519	public	Akkar
Educator Suleiman Aziz Al Ali Public School - Haker Al Daheri	525	public	Akkar
Halba Public Mixed Kindergarten	531	public	Akkar
Sheikh Mohammed Mixed Public	534	public	Akkar
Wadi Jamus Mixed Public	561	public	Akkar
Al-Fadel Public intermediate - Ramah	572	public	Akkar
Bireh Mixed Public	589	public	Akkar
Al-Bireh Public High School	590	public	Akkar
Akkar al-Atiqa Mixed Public	615	public	Akkar
Funaideq Mixed Public	620	public	Akkar
Oyoun el Samak Mixed Public	631	public	Akkar
Kobayat Public Kindergarten	637	public	Akkar
Al Kanisa Mixed Public	655	public	Akkar
Kafroun Mixed Public	1332	public	Akkar
Harar Public High School	1390	public	Akkar
Nabeh Al Awada Public	1551	public	Akkar
Al Kawashra Public High School	1585	public	Akkar
Berqail II Public English Branch	1610	public	Akkar
Wata Meshmish II Public	1618	public	Akkar
Fenaideq Public High School - Qurna Branch	1622	public	Akkar
Makassed Islamic Charity - Beit Ayoub	5204	private -no tuition	Akkar
Al Fares Al Saghir School (formerly Aman Musa Al-Sadr School)	5447	private -no tuition	Akkar
Islamic Faith	7629	private with tuition	Akkar
Private Oasis	7653	private -no tuition	Akkar
AL Aman Islamic	8153	private with tuition	Akkar
Islamic Jewel	8223	private with tuition	Akkar
Al Anwar High School - Mohammerah	8497	private with tuition	Akkar
Bahr Al Uloom High School	8733	private with tuition	Akkar
Sahlat el Ma Intermediate Public	842	public	Baalbek-Hermel
El Sherbin Intermediate Public	851	public	Baalbek-Hermel
Bait Al Tashm Public	866	public	Baalbek-Hermel
Hermel Model Secondary Public School	1473	public	Baalbek-Hermel
Labwe Intermediate Public	869	public	Baalbek-Hermel

School name	School number	Educational sector	Governate
Arsal First Mixed Intermediate	875	public	Baalbek-Hermel
Al Ain Intermediate Public	880	public	Baalbek-Hermel
New Intermediate Mixed Public	884	public	Baalbek-Hermel
Ras Baalbek Public Secondary School	887	public	Baalbek-Hermel
Zaytoun Intermediate Public	894	public	Baalbek-Hermel
Flawi Mixed Intermediate Public	917	public	Baalbek-Hermel
Modern Education	5274	private -no tuition	Baalbek-Hermel
Saydit el Burj of the Maronite Sisters of the Holy Family	5285	private -no tuition	Baalbek-Hermel
Mahdi Model Free - Shmistar (formerly Tawjih)	5460	private -no tuition	Baalbek-Hermel
Sheikh Mohammed Yaqoub High School	8065	private with tuition	Baalbek-Hermel
Al-Qaim High School	8475	private with tuition	Baalbek-Hermel
Al Maram High School	8660	private with tuition	Baalbek-Hermel
Peaks High School	8743	private with tuition	Baalbek-Hermel
Jeel Salam Schools	8867	private with tuition	Baalbek-Hermel

Distribution of participating schools in the study of school readiness and its effective leadership in the Light of Developed Curricula in Lebanon

Educational Sector	Beirut	Mount Lebanon (suburbs)	Mount Lebanon (except suburbs	North	Bekaa	South	Nabatiyeh	Akkar	Baalbek Hermel	Total
Public	8	11	18	35	13	15	16	20	11	147
Private no tuition	1	4	4	6	3	1	6	2	3	30
Private with tuition	9	33	9	13	9	7	7	6	5	98
UNRWA Private		1		1		2				4
Total	18	49	31	55	25	25	29	28	19	279

الجمهورية اللبنانية

المركز التربوي للبحوث والإنماء

رئيس المركز
١٩٨٨
١١ تشرين ثاني ٢٤

جانب المدير العام للتربية

٢٠١٠ ١٢

الموضوع: إعداد دراسة بعنوان "جهوزية المدرسة وقيادتها الفعالة في ضوء المناهج المطوّرة".

تحية طيبة وبعد،

يقوم المركز التربوي للبحوث والإنماء بإعداد دراسة بعنوان "جهوزية المدرسة وقيادتها الفعالة في ضوء المناهج المطوّرة"، والتي تهدف إلى تقييم جهوزية المدارس الرسمية والخاصة لتطبيق المناهج المطوّرة التي نحن بصددها، مع التركيز على دور القيادة المدرسية في تسهيل هذه العملية وضمان نجاحها.

وإزاء أهمية الاعتماد على المعطيات الميدانية، تم إعداد أربعة استبانات إلكترونية Google form موجهة لمديري المدارس، النظار، المنسقين، والمعلمين.

لذا نرفع إلى سعادتكم هذا الكتاب لطلب الموافقة على إرسال الاستبانات إلى ٢٥٠ مدرسة تم اختيارها ضمن العيّنة الممثلة للمدارس الرسميّة والخاصّة التي تم تحديدها بالتنسيق مع مديريتكم، وذلك خلال الفترة الممتدة من ١٢ إلى ٢٥ تشرين الثاني ٢٠٢٤.

كما سيقوم الخبراء المسؤولون عن الدراسة بإجراء مقابلات مع سعادتكم ومع مديري المديريات وجهاز الإرشاد والتوجيه، في الفترة بين ١١ و٢٩ تشرين الثاني ٢٠٢٤، للتفضّل بتحديد موعد المقابلة.

كذلك الأمر، سيقوم الخبراء بتنفيذ مجموعة بؤرية Focus Group مع عينة من المتعلمين والمنسقين في الفترة ذاتها.

نشكركم على تعاونكم الدائم والمميّز.

١١ تشرين ثاني ٢٠٢٤

رئيسة المركز التربوي للبحوث والإنماء
بالتكليف

البروفسور هيام اسحق

9. Appendix 9: Approval from the Director General of Education to Implement the Tools

الجمهوريّة اللبنانيّة

المركز التربويّ للبحوث والإنماء

وزارة التربية والتعليم العالي
ديوان التربية
رقم التسجيل: ١٠٥٤٤

رئيس المركز
١٩٨٨/
١١ تشرين الثاني ٢٠٢٤

جانب المدير العام للتربية

١٢ تمّوز ٢٠٢٤

الموضوع: إعداد دراسة بعنوان "جهوزيّة المدرسة وقيادتها الفعّالة في ضوء المناهج المطوّرة".

تحيّة طيّبة وبعد،

يقوم المركز التربويّ للبحوث والإنماء بإعداد دراسة بعنوان "جهوزيّة المدرسة وقيادتها الفعّالة في ضوء المناهج المطوّرة"، والتي تهدف إلى تقييم جهوزيّة المدارس الرسميّة والخاصّة لتطبيق المناهج المطوّرة التي نحن بصددها، مع التركيز على دور القيادة المدرسيّة في تسهيل هذه العمليّة وضمان نجاحها.

وإزاء أهميّة الاعتماد على المعطيات الميدانيّة، تم إعداد أربعة استبانات إلكترونيّة Google form موجّهة لمديري المدارس، النظّار، المنسّقين، والمعلّمين.

لذا نرفع إلى سعادتكم هذا الكتاب لطلب الموافقة على إرسال الاستبانات إلى ٢٥٠ مدرسة تم اختيارها ضمن العيّنة الممثّلة للمدارس الرسميّة والخاصّة التي تم تحديدها بالتنسيق مع مديريّتكم، وذلك خلال الفترة الممتدّة من ١٢ إلى ٢٥ تشرين الثاني ٢٠٢٤.

كما سيقوم الخبراء المسؤولون عن الدراسة بإجراء مقابلات مع سعادتكم ومع مديري المديريّات وجهاز الإرشاد والتوجيه، في الفترة بين ١١ و٢٩ تشرين الثاني ٢٠٢٤، للتفضّل بتحديد موعد المقابلة.

كذلك الأمر، سيقوم الخبراء بتنفيذ مجموعة بؤريّة Focus Group مع عيّنة من المتعلّمين والمنسّقين في الفترة ذاتها.

نشكركم على تعاونكم الدائم والمميّز.

١١ تشرين الثاني ٢٠٢٤

رئيسة المركز التربويّ للبحوث والإنماء
بالتكليف

البروفسور هيام اسحق

Itrp-178

المدير العام للتربية بالإنابة

عماد الأشقر

صندوق البريد: ٥٥٢٦٤ سن الفيل – لبنان
الموقع الالكتروني: www.crdp.org
هاتف: ٦٨٣٠٨٨ – ٦٨٣٠٨٩–١–٩٦١ – ٦٨٣٠٩٠–١–٩٦١
البريد الالكتروني: president@crdp.org
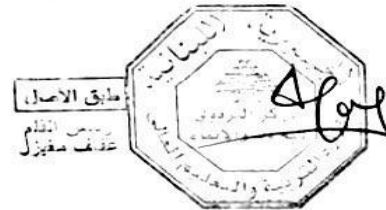
10. Appendix 10: The Four Questionnaires (Principal – Supervisor – Coordinator – Teacher)

First: The Questionnaire Directed to the School Principal

Title: A Questionnaire on "School Readiness and Effective Leadership in Light of the Developed Curricula in Lebanon"

Target Group: Principal

Dear Principal,

The Center for Educational Research and Development is conducting a study on the human and material needs of schools in Lebanon identifying the level of readiness to implement the developed curricula with a focus on the role of school leadership in facilitating this process and ensuring quality education. This questionnaire constitutes an essential part of this study.

We kindly ask for your cooperation in filling out the questionnaire accurately and objectively in alignment with your qualifications, experiences, and professional needs. Please note that the findings of this questionnaire will only be used for scientific research purposes and are confidential and official.

Personal Information:

1. **Name (optional):**
2. **Age (exact age must be specified):**
3. **Gender: Male ☐ Female ☐**

4.What is your job status?

a. In Public sector

Duly appointed (Official Principal)	Principal by interim interviewed by the school management eligibility testing committee	Principal by interim not interviewed by the school management eligibility committee yet

b. In Private sector

Duly appointed (Official Principal)	Principal by interim

5.What is the highest (academic or technical degree) obtained?

 Please clarify its classification (Teacher Pre and In-service Training College /Baccalaureate/ Technical Baccalaureate / B.A/ B.A (pedagogical degree) Master's Degree / Doctorate.

Specify …………………………………………………………………………………….

6.Years of experience in the educational field:

0-5 years	6-10 years	11-15 years	16-20years	21-25 years	More than 25 years

7.Years of experience in administrative work

0 -5 years	6-10 years	11-15 years	16-20 years	21-25 years	More than 25 years

8. School type:

Public	Private: Tuition free	Private: Tuition is not free	UNRWA

9.Stages of education in school:

Kindergarten	Basic Education			Secondary Education
	Elementary	Intermediate		
	Cycle 1	Cycle 2	Cycle 3	

10. Region:

Beirut	Mount Lebanon Suburbs	Mount Lebanon (excluding Suburbs)	North	Bekaa	South	Nabatieh	Akkar	Baalbek-Hermel

Section One: Human Resources in School

Please answer the following questions (from "1" to "9" inclusive) using the exact numbers for each job title, and carefully read the entire sentence to avoid calculation errors, if possible. Additionally, ensure that the number in box "1" (the total number of staff in the school) equals the sum of the numbers in boxes "2," "3," "4," and "8," avoiding counting employees with multiple roles more than once. Categorize them under the role most closely aligned with their primary function, as specified in the related questions.

Question number	Job Title	Number (starts from zero)
1	What is the total number of staff in the school (including all job categories/everyone working in the school ?	...
2	Number of teaching staff in the school	...
2.1	Principal	١
2.2	General Supervisor	(0 or 1 or 2)
2.3	Supervisors (who do not teach)	...
2.4	Teachers of all job statuses (full-time, contract, etc.) including those who teach and perform other tasks ,such as supervision, coordination librarianship, or (everyone who teaches at school)	...
2.5	Coordinators (who do not teach at school and only perform coordination tasks	
2.6	School Laboratory Technicians)who(do not teach in school	...
2.7	Librarians (who do not teach at school	...
3	Number of employees in the administration (exclude those included in Question No. ١ and its subdivisions)	
3.1	Data entry employee (who does not teach in school)	
3.2	Other administrative staff (who do not teach at school)	
4	Number of technical workers (e.g. psychologists, social workers) who do not teach at school(check it all through)	
4.1	Psychotherapists	...
4.2	Social workers	...
4.3	Educational counselor	...
4.4	Otherwise, specify the number	...
5	Those working in education (including supervisors, coordinators, technicians and data entry employees (who also work in education)	...
5.1	Teachers only	
5.2	Supervisors who also teach at school	...
5.3	Coordinators who also teach at school	...
5.4	Technicians who also teach at school	...
5.5	Librarians who also teach at school	...
5.6	Data entry employees who also teach at school	
5.7	School laboratory technicians who also teach at school	
5.8	Other administrators who also teach at school	
6	How many are officially appointed (within the cadre) ? This includes the) ? principal, (supervisors and other job titles)	...
7	What is the number of contractual teachers with all their respective titles?	...
8	Support staff (other school staff)	
8.1	guards	...
8.2	Office boys	...

8.3	Other support staff	...
9	How many students are enrolled in the school?	...

Section Two : Overall School Readiness
1. Availability of educational tools in classrooms

a. Are white boards available in the classrooms?

	Available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education)			
Cycle1- Basic Education			
Cycle 2- Basic Education			
Cycle 3- Basic Education			
Secondary Stage			

b. Are LCD projectors available in the classrooms?

	Available in all grades	Partially available in classes moved) from class to class)	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1- Basic Education				
Cycle 2- Basic Education				
Cycle 3- Basic Education				
Secondary stage				

c. Do the classrooms have active boards ?

	Available	Partially available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1-Basic Education				
Cycle2- Basic Education				
Cycle3- Basic Education				
Secondary stage				

d. Are computers available in the school?

	Fully available (in all grades)	Partially available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1-Basic Education				
Cycle 2- Basic Education				
Cycle 3- Basic Education				
Secondary stage				

2. **How comfortable and durable are the chairs and tables in the classroom for everyday use?**
   ▪ Very suitable for comfort and durability
   ▪ Generally suitable withsome minor improvements
   ▪ Need improvement in some classes
   ▪ Not suitable for general **use**

3. **Are digital educational tools (websites, online applications, etc.) used by teachers to support the educational process?**
   ▪ Never
   ▪ Sometimes
   ▪ Often
   ▪ Always

4. **What is the condition of the following items in the classroom?**

	Very good	Good	Acceptable	Poor
Lighting				
Air conditioning				
Ventilation				
Heating				
Maintenance work				

5. **Are these facilities available at school, and in what condition?**

	Available and good	Available but needs improvement	Available but not usable	Not available
Laboratories				
Library				
Playgrounds				
School club				
Lecture halls				
Meeting room				
Theater				

6. **How would you describe the readiness of the school health facilities?**

	Excellent	Good	Acceptable	Poor
cleanliness level of sanitary facilities				
The number of bathrooms is proportional to the number of students				
Accessible for people with special needs				
Full time cleaners are available				
Regular bathroom cleaning				

7. **How would you describe the availability of health and safety support facilities and services at school ?**

	Excellent	Good	Acceptable	Poor
Available first aid room				

Available medical clinic				
Regular visit of a doctor to school				
First aid training for teachers				

8. **How would you describe the facilities and services provided for learners with special needs at school?**

	Excellent	Good	Average	Poor
Ramps				
Elevators				
Equipped classes to meet their needs				
Special bathrooms				
Employee support service				
psychological or counselling support services				

9. **How would you describe the availability of safedrinking water and sanitation systems in the school?**
- Very well available
- Well available
- Insufficient
- Not available

10. **How would you describe the availability of safe parking and schooltransport facilities for learners and teachers?**
- Very well available
- Well available
- Insufficient
- Not available

11. **How would you describe the availability of green spaces and natural environment around the school (parks trees, open spaces)?**
- Very well available
- Well available
- Insufficient
- Not available

Section Three: Technology and Digital Infrastructure

1. **How would you describe the availability of Internet and digital connectivity at school?(Internet speed and quality)**
- Very well available
- Well available
- Insufficient
- Not available

2. **How often do teachers use technology and digital tools in dailyclassroom teaching?**
- They use it regularly.
- They use it sometimes.
- They rarely use it.
- They don't use it.

3. **How proficient are the current cadre teachers in technological skills ?**
   - Experts
   - Highly proficient
   - Need improvement
   - Not proficient

4. **What technology-related training needs do you consider essential to develop your skills as a principal ?**

....
…………………………………………………………………………………………….

5. **How would you describe the availability of training and technicalsupport for teachers when they use educationaltechnology ?**
   - Very well available
   - Somewhat available
   - Insufficient
   - Not available

6. **How would you describe the availability of maintenance and updating electronic and technical devices along with their programs and applications in the school?**
   - Very well available
   - Well available
   - Insufficient
   - Not available

7. **How would you describe the availability of specialized technical support teams or a person specialized in dealing with technology problems in the school?**
   - Very well available
   - Well available
   - Insufficient
   - Not available

8. **How would you describe the availability of digital policies and cybersecurity to protect data and information in the school?**
   - Very well available
   - Well available
   - insufficient
   - Not available

9. **How would you describe the availability ofpersonal electronic devices to learners ?**

	None	One for each learner	One for every five learners	One for every ten learners	One for every 15 learners and above
Laptops					
Tablets					

10. **Do teachers use e-learning materials?**

	Always	Often	Sometimes	Never
National e-book				

Other e -Books				
Educational videos				
Interactive materials such as online interactive activities)				

11. **What support does the school administration provide for the use of technology? (More than one answer may be selected).**
    ▪ Motivating teachers to use technology
    ▪ Providing training for teachers on the use of technology
    ▪ Allocatingtime for teachers to use technology during the classroom teaching process
    ▪ Technical support is available to solve technical problems
    ▪ Providing electronic educational resources

Section Four: Leadership and Administrative Competencies

Category1: Strategic Planning and Decision Making

1. **Are strategic plans designed during the school year to achieve the school's educational goals?**
   ▪ Always
   ▪ Often
   ▪ Sometimes
   ▪ Never

2. **To what extent are the administrative and educational bodies involved in the process of developing strategic plans in the school?**

   ▪ Always
   ▪ Often
   ▪ Sometimes
   ▪ Never

3. **How do you plan, manage resources, assign tasks and set priorities in your school?**

   ▪ All parties participate effectively
   ▪ Some parties participate
   ▪ They are made based on the principal's personal decision
   ▪ There are no specific plans

4. **What are the main areas covered by school plans? (You can choose several answers)**

   ▪ Resource Management (Human and Material)
   ▪ Distribution of tasks and responsibilities
   ▪ Determining educational priorities
   ▪ Performance Evaluation and Development
   ▪ Enhancing the competencies of the educational team

5. **Does the school have contingency plans for dealing with emergencies and crises?**
   ▪ Always

- Often
- Sometimes
- Never

Category Two: Leadership and Administrative Competencies of the Principal

6. **What leadership model do you use in school?**

- Participatory leadership
- Individualized leadership
- Distributed leadership
- Other models (please specify) : ……………

7. **Are school members encouraged to innovate and use modern teaching practices in your school?**
- Always and in an effective manner
- Often
- Sometimes
- Rarely

8. **What is the level of involvement of the educational team in making important decisions in your school?**
- They are always actively and effectively involved
- They are often involved
- Sometimes they are involved
- They are often not involved

9. **How are change processes handled in the school, and what is the role of the administration in guiding and supporting the teaching staff and encouraging innovation and modern practices?**
- The administration actively encourages, directs and supports innovation on a regular basis
- The administration provides good guidance and support, withsome innovation
- Management provides limited support for change and innovation processes
- There is not much focus on change and innovation

10. **How committed are you to professional development programs to improve your leadership and management competencies?**
- Always
- Often
- Sometimes
- I don't care about professional development

11. **What are the key leadership skills that you have in your school? (You may choose more than one option)**
- Problem solving skills
- Effective communication
- Motivating and supporting the teaching staff
- Planning and organizing
- Change Management
- Other..

12. What areas do you need to develop to improve your managerial and leadership performance? (You can choose more than one option)
- Decision making
- Communication with stakeholders
- Strategic planning
- Building partnerships
- Innovation in educational practices
- Other.....

Category3: Monitoring and Evaluation Operations

13. How do you evaluate the performance of teachers and administrative staff at school?
- Through regular classroom visits
- Through periodic meetings
- Through specific assessment tools
- There is no evaluation mechanism

14. Do you provide feedback and recommendations based on your evaluation of teachers?
- Always
- Often
- Sometimes
- Never

15. How does communication take place between the school administration and all concerned parties to ensure integrated efforts and achieve community support for the school?

	Communication is regular and effective	Communication is often and effective	Communication is sometimes limited	Communication is ineffective
Teachers				
Learners				
Parents				
Local community				
Supporting bodies				

16. What mechanisms are used to identify and solve potential problems in innovative ways?
- Relying on the participation of all parties
- Relying on data analysis and problems
- Interacting with them only when necessary
- There are no specific mechanisms

17. Do you make regular classroom visits to monitor the progress of the educational process in the classes and support teachers?
- Always
- Often
- Sometimes

■ Never

18. **How effective are you in guiding and supporting faculty to achieve educational goals?**
■ Very effective
■ Somewhat effective
■ Needs improvement
■ Ineffective

19. **Do you follow up on improvements or recommendations resulting from evaluations?**
■ Always
■ Often
■ Sometimes
■ Rarely

20. **How does the school build relationships with the local community and supporters to secure the necessary resources and support?**

	It is done very efficiently	It goes well	It is done in a limited way	Not enough relationships are being built
Local community				
Supporting bodies				

21. **Are support programs for struggling students implemented in your school?**
■ Always
■ Often
■ Sometimes
■ Never

Category5: Future needs and expectations

22. **What training needs do you think you need to enhance your leadership and management skills? (You can choose more than one option)**
■ Educational Leadership training
■ Strategic Planning training
■ Change Management Workshops
■ Community Partnership Building training
■ Crisis Management training
■ I have no training needs

23. **What are your school's needs in managing any change or keeping up with any curriculumdevelopment in the near future (You can choose more than one option)**

• Financial support to secure and upgrade equipment
• Principal training
• Training for administrators
• Training for teachers
• Infrastructure development
• Strengthening partnership with the local community
• Providing modern technology

- Preparing sustainability plans
- Providing support for struggling students
- Filling in vacancies of the administrative body
- Filling in vacancies of teaching staff
- Health guidance
- Psychosocial support

24. **In your opinion, what are your school's needs in terms of human and material resources in the current situation? (Open question)**

....

....

25. **What challenges do you think you might face in implementing any change or ?development in the school? And how do you see the possibility of overcoming them (Open question)**

....

....

Thank you for sharing.
Your answers will contribute to making recommendations to improve education in Lebanon and ensure the successful implementation of the developed curricula.

Second : Questionnaire directed to the supervisor
Title: Questionnaire on "School Readiness and Its Effective Leadership in the Light of the Developed Curricula in Lebanon''
Target group: Supervisor

Dear Sir/Madam
The Center for Educational Research and Development is conducting a study on the human and material needs of schools in Lebanon identifying the level of readiness to implement the developed curricula with a focus on the role of school leadership in facilitating this process and ensuring quality education. This questionnaire constitutes an essential part of this study.
We kindly ask for your cooperation in filling out the questionnaire accurately and objectively in alignment with your qualifications, experiences, and professional needs. Please note that the results of this questionnaire will only be used for scientific research purposes and are confidential and official.

Personal data:
1. **Age: (Exact age must be specified)**

2. **Gender: Male** ☐ **Female** ☐

3. **What is your job status?**

Duly appointed (Officially)	Hired by contract	Outsourced	Parents Council	Paid by invoice	Donation	Otherwise specify)

4. **What is the highest (academic or technical degree) obtained?**
Please clarify its classification (Teacher Pre and In-service Training College /Baccalaureate/ Technical Baccalaureate / B.A /B.A (pedagogical degree) Master's Degree / Doctorate.
Specify**……………………………………………………………………………**

5. **Years of teaching experience :**

0-5 years	6-10 years	11-15 years	16-20years	21-25 years	More than 25 years

6. **Years of experience in supervision :**

0-5 years	6-10 years	11-15 years	16-20years	21-25 years	More than 25 years

7. **School type:**

Public	Private: Tuition free	Private: Tuition is not free	UNRWA

8. **Region:**

Beirut	Mount Lebanon Suburbs	Mount Lebanon (excluding Suburbs)	North	Bekaa	South	Nabatieh	Akkar	Baalbek-Hermel

Section One : Overall School Readiness
   1. **Availability of educational tools in classrooms**

a. **Are white boards available in the classrooms?**

	Available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education)			
Cycle1- Basic Education			
Cycle 2- Basic Education			
Cycle 3- Basic Education			
Secondary Stage			

b. **Are LCD projectors available in the classrooms?**

	Available in all grades	Partially available in classes moved) from class to class)	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1- Basic Education				
Cycle 2- Basic Education				
Cycle 3- Basic Education				
Secondary stage				

c. **Do the classrooms have active boards ?**

	Available	Partially available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1-Basic Education				
Cycle2- Basic Education				
Cycle3- Basic Education				
Secondary stage				

d. Are computers available in the school?

	Fully available (in all grades)	Partially available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1-Basic Education				
Cycle 2- Basic Education				
Cycle 3- Basic Education				
Secondary stage				

2. **How comfortable and durable are the chairs and tables in the classroom for everyday use?**
   ▪ Very suitable for comfort and durability
   ▪ Generally suitable with some minor improvements
   ▪ Need improvement in some classes
   ▪ Not suitable for general use

3. **Are digital educational tools (websites, online applications, etc.) used by teachers to support the educational process?**
   ▪ Never
   ▪ Sometimes
   ▪ Often
   ▪ Always

4. **What is the condition of the following items in the classroom?**

	Very good	Good	Acceptable	Poor
Lighting				
Air conditioning				
Ventilation				
Heating				
Maintenance work				

5. **Are these facilities available at school, and in what condition?**

	Available and good	Available but needs improvement	Available but not usable	Not available
Laboratories				
Library				
Playgrounds				
School club				
Lecture halls				
Meeting room				
Theater				

6. **How would you describe the readiness of the school health facilities?**

	Excellent	Good	Acceptable	Poor
cleanliness level of sanitary facilities				
The number of bathrooms is proportional to the number of students				
Accessible for people with special needs				
Full time cleaners are available				
Regular bathroom cleaning				

7. **How would you describe the availability of health and safety support facilities and services at school ?**

	Excellent	Good	Acceptable	Poor
Available first aid room				
Available medical clinic				
Regular visit of a doctor to school				
First aid training for teachers				

8. **How would you describe the facilities and services provided for learners with special needs at school?**

	Excellent	Good	Average	Poor
Ramps				
Elevators				
Equipped classes to meet their needs				
Special bathrooms				
Employee support service				
psychological or counselling support services				

9. **How would you describe the availability of safedrinking water and sanitation systems in the school?**
   - Very well available
   - Well available
   - Insufficient
   - Not available

10. **How would you describe the availability of safe parking and schooltransport facilities for learners and teachers?**
    - Very well available
    - Well available
    - Insufficient
    - Not available

11. **How would you describe the availability of green spaces and natural environment around the school (parks trees, open spaces)?**
    - Very well available
    - Well available
    - Insufficient
    - Not available

Section Two:Technology and Digital Infrastructure :

1. **How would you describe the availability of Internet and digital connectivity at school? (Internet speed and quality)**
   - Very well available
   - Well available
   - Insufficient
   - Not available

2. **How often do teachers use technology and digital tools in dailyclassroom teaching?**
   - They use it regularly.
   - They use it sometimes.
   - They rarely use it.
   - They don't use it.

-

3. **How would you describe the availability of training and technical supportfor teachers when they use educational technology?**
   - Very well available
   - Somewhat available
   - Insufficient
   - Not available

4. **How would you describe the availability of maintenance and updating electronic and technical devices along with their programs and applications in the school?**
   - Very well available
   - Well available
   - Insufficient
   - Not available

5. **How would you describe the availability of specialized technical support teams or a person specialized in dealing with technology problems in theschool?**
   - Very well available
   - Well available
   - insufficient
   - Not available

6. **Do teachers use e-learning materials?**

	Always	Often	Sometimes	Never
National e-book				
Other e -Books				
Educational videos				
Interactive materials such as online interactive activities)				

7. **What support does the school administration provide for the use of technology? (More than one answer may be selected).**
   - Motivating teachers to use technology
   - Providing training for teachers on the use of technology
   - Allocatingtime for teachers to use technology during the classroom teaching process
   - Technical support is available to solve technical problems
   - Providing electronic educational resources

SectionThree:Leadership and Administrative Competencies :

Category1: Strategic Planning and Decision Making

1. **Are strategic plans designed during the school year to achieve the school's educational goals?**
   - Always
   - Often
   - Sometimes
   - Never

7.1. **To what extent are the administrative and educational bodies involved in the process of developing strategic plans in the school?**

   - Always
   - Often
   - Sometimes
   - Never

7.2. **How do you plan, manage resources, assign tasks and set priorities in your school?**

   - All parties participate effectively
   - Some parties participate
   - They are made based on the principal's personal decision
   - There are no specific plans

4. **What are the main areas covered by school plans? (You can choose several answers)**

   - Resource Management (Human and Material)
   - Distribution of tasks and responsibilities
   - Determining educational priorities
   - Performance Evaluation and Development
   - Enhancing the competencies of the educational team

5. **Does the school have contingency plans for dealing with emergencies and crises?**
   - Always
   - Often
   - Sometimes
   - Never

Category Two: Leadership and Administrative Competencies of the Principal

6. **What leadership model does the principal use in school ?**
   - Participatory leadership
   - Individualized leadership
   - Distributed leadership
   - Other models (please specify) : ……………

7. **Are school members encouraged to innovate and use modern teaching practices in your school?**
   - Always and in an effective manner

- Often
- Sometimes
- Rarely

8. **What is the level of involvement of the educational team in making important decisions in your school?**
   - They are always actively and effectively involved
   - They are often involved
   - Sometimes they are involved
   - They are often not involved

9. **How are change processes handled in the school, and what is the role of the administration in guiding and supporting the teaching staff and encouraging innovation and modern practices?**
   - The administration actively encourages, directs and supports innovation on a regular basis
   - The administration provides good guidance and support, withsome innovation
   - Management provides limited support for change and innovation processes
   - There is not much focus on change and innovation

10. **What are the key leadership skills that you have in your school? (You may choose more than one option)**
    - Problem solving skills
    - Effective communication
    - Motivating and supporting the teaching staff
    - Planning and organizing
    - Change Management
    - Other**...**

11. **What areas does the administration need to develop to improve its managerial and leadership performance? (You can choose more than one option)**
    - Decision making
    - Communication with stakeholders
    - Strategic planning
    - Building partnerships
    - Innovation in educational practices
    - Other.....

Category3: Monitoring and Evaluation Operations

12. **How does the principal evaluate the performance of teachers and administrative staff at school?**
    - Through regular classroom visits
    - Through periodic meetings
    - Through specific assessment tools
    - There is no evaluation mechanism

13. **Does the administration provide feedback and recommendations based on its evaluation of teachers?**
    - Always
    - Often
    - Sometimes
    - Never

14. **How does communication take place between the school administration and all concerned parties to ensure integrated efforts and achieve community support for the school?**

	Communication is regular and effective	Communication is often and effective	Communication is sometimes limited	Communication is ineffective
Teachers				
Learners				
Parents				
Local community				
Supporting bodies				

15. **What mechanisms are used to identify and solvepotential problems in innovative ways ?**
   - Relying on the participation of all parties
   - Relying on data analysis and problems
   - Interacting with them only when necessary
   - There are no specific mechanisms

16. **Does the administration make regular classroom visits to monitor the progress of the educational process in the classes and support teachers?**
   - Always
   - Often
   - Sometimes
   - Never

17. **How effective is the administration in guiding and supporting faculty to achieve educational goals?**
   - Very effective
   - Somewhat effective
   - Needs improvement
   - Ineffective

18. **Does the administration follow up on improvements or recommendations resulting from evaluations?**
   - Always
   - Often
   - Sometimes
   - Rarely

19. **How does the school build relationships with the local community and supporters to secure the necessary resources and support?**

	It is done very efficiently	It goes well	It is done in a limited way	Not enough relationships are being built
Local community				
Supporting bodies				

20. **Are support programs for struggling students implemented in your school?**
   - Always
   - Often
   - Sometimes
   - Never

Category4: Future needs and expectations

21. **What are your school's needs to be able to manage any change or keep up with any development process in the educational curriculum in the near future? (You can choose (more than one option**
    - Financial support to secure and upgrade equipment
    - Training courses for the principal
    - Training courses for administrators
    - Training courses for teachers
    - Infrastructure development
    - Strengthening partnership with the local community
    - Providing modern technology
    - Preparing sustainability plans
    - Providing support for struggling students
    - Filling in vacancies in the administrative body
    - Filling in vacancies of teaching staff
    - Health guidance
    - Psychosocial support
    - Otherwise, specify.....

Thank you very much for participating.

Your answers will help provide recommendations to improve education in Lebanon and ensure the successful implementation of the developed curricula.

Third: Q uestionnaire directed to the coordinator
Title: Questionnaire on "School Readiness and Its Effective Leadership in the   Light of the Developed Curricula in Lebanon"
 Target group: Coordinators

Dear Sir/Madam
The Center for Educational Research and Development is conducting a study on the human and material needs of schools in Lebanon identifying the level of readiness to implement the developed curricula with a focus on the role of school leadership in facilitating this process and ensuring quality education. This questionnaire constitutes an essential part of this study.
We kindly ask for your cooperation in filling out the questionnaire accurately and objectively in alignment with your qualifications, experiences, and professional needs. Please note that the results of this questionnaire will only be used for scientific research purposes and are confidential and official.

 Personal data:
1. **Age: (Exact age must be specified)**

2. **Gender: Male** ☐   **Female** ☐

3. **What is your job status?**

Duly appointed (Officially)	Hired by contract	Outsourced	Parents Council	Paid by invoice	Donation	Otherwise specify)

4. **What is the highest (academic or technical degree) obtained?**
Please clarify its classification (Teacher Pre and In-service Training College /Baccalaureate/ Technical Baccalaureate / B.A /B.A (pedagogical degree) Master's Degree / Doctorate.
Specify**……………………………………………………………………………**

5. **Years of teaching experience :**

0-5 years	6-10 years	11-15 years	16-20years	21-25 years	More than 25 years

6. **Years of experience in coordination:**

0-5 years	6-10 years	11-15 years	16-20years	21-25 years	More than 25 years

7. **School type:**

Public	Private: Tuition free	Private: Tuition is not free	UNRWA

8. **Region:**

Beirut	Mount Lebanon Suburbs	Mount Lebanon (excluding Suburbs)	North	Bekaa	South	Nabatieh	Akkar	Baalbek-Hermel

Section One : Overall School Readiness
1. Availability of educational tools in classrooms

a. Are white boards available in the classrooms?

	Available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education)			
Cycle1- Basic Education			
Cycle 2- Basic Education			
Cycle 3- Basic Education			
Secondary Stage			

b. Are LCD projectors available in the classrooms?

	Available in all grades	Partially available in classes moved) from class to class)	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1- Basic Education				
Cycle 2- Basic Education				
Cycle 3- Basic Education				
Secondary stage				

c. Do the classrooms have active boards ?

	Available	Partially available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1-Basic Education				
Cycle2- Basic Education				
Cycle3- Basic Education				
Secondary stage				

d. Are computers available in the school?

	Fully available (in all grades)	Partially available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1-Basic Education				
Cycle 2- Basic Education				
Cycle 3- Basic Education				
Secondary stage				

2. **How comfortable and durable are the chairs and tables in the classroom for everyday use?**
   ▪ Very suitable for comfort and durability
   ▪ Generally suitable with some minor improvements
   ▪ Need improvement in some classes
   ▪ Not suitable for general use

3. **Are digital educational tools (websites, online applications, etc.) used by teachers to support the educational process?**
   ▪ Never
   ▪ Sometimes
   ▪ Often
   ▪ Always

4. **What is the condition of the following items in the classroom?**

	Very good	Good	Acceptable	Poor
Lighting				
Air conditioning				
Ventilation				
Heating				
Maintenance work				

5. **Are these facilities available at school, and in what condition?**

	Available and good	Available but needs improvement	Available but not usable	Not available
Laboratories				
Library				
Playgrounds				
School club				
Lecture halls				
Meeting room				
Theater				

6. **How would you describe the readiness of the school health facilities?**

	Excellent	Good	Acceptable	Poor
cleanliness level of sanitary facilities				
The number of bathrooms is proportional to the number of students				
Accessible for people with special needs				
Full time cleaners are available				
Regular bathroom cleaning				

7. **How would you describe the availability of health and safety support facilities and services at school ?**

	Excellent	Good	Acceptable	Poor
Available first aid room				
Available medical clinic				
Regular visit of a doctor to school				
First aid training for teachers				

8. **How would you describe the facilities and services provided for learners with special needs at school?**

	Excellent	Good	Average	Poor
Ramps				
Elevators				
Equipped classes to meet their needs				
Special bathrooms				
Employee support service				
psychological or counselling support services				

9. **How would you describe the availability of safedrinking water and sanitation systems in the school?**
   - Very well available
   - Well available
   - Insufficient
   - Not available

10. **How would you describe the availability of safe parking and schooltransport facilities for learners and teachers?**
   - Very well available
   - Well available
   - Insufficient
   - Not available

11. **How would you describe the availability of green spaces and natural environment around the school (parks trees, open spaces)?**
   - Very well available
   - Well available
   - Insufficient
   - Not available

Section Two: Technology and Digital Infrastructure :
1. **How would you describe the availability of Internet and digital connectivity at school? (Internet speed and quality)**
   - Very well available
   - Well available
   - Insufficient
   - Not available
2. **How often do teachers use technology and digital tools in dailyclassroom teaching?**
   - They use it regularly.
   - They use it sometimes.
   - They rarely use it.
   - They don't use it.
3. **How proficient are the current cadre teachers in technological skills?**
   - Experts
   - Highly proficient
   - Need improvement
   - Not proficient
4. **What technological skills are mastered by the current teaching staff?**

   - Effective use of computers
   - Development of electronic educational content
   - Use of remote learning tools
   - Analysis of educational data
   - Educational software applications
   - Communication via digital platforms
   - Integration of multimedia in education
   - Assistive technology for students with special needs
   - Other (please specify): _____
   - Do not master any.

5. **How would you describe the availability of training and technical supportfor teachers when they use educational technology?**
   - Very well available
   - Somewhat available
   - Insufficient
   - Not available
6. **How would you describe the availability of maintenance and updating electronic and technical devices along with their programs and applications in the school?**
   - Very well available
   - Well available
   - Insufficient
   - Not available
7. **How would you describe the availability of specialized technical support teams or a person specialized in dealing with technology problems in the school?**
   - Very well available
   - Well available
   - Insufficient
   - Not available

8. Do teachers use e-learning materials?

	Always	Often	Sometimes	Never
National e-book				
Other e -Books				
Educational videos				
Interactive materials such as online interactive activities)				

9. **To what extent does the school administration support the effective use of technology in classrooms?**
   - Very strong support
   - Moderate support
   - Weak support
   - No support

10. **What support does the school administration provide for the useof technology ? (More than one answer may be selected).**
    - Motivating teachers to use technology
    - Providing training for teachers on the use of technology
    - Allocatingtime for teachers to use technology during the classroom teaching process
    - Technical support is available to solve technical problems
    - Providing electronic educational resources

Section Three :Leadership and Administrative Competencies :

Category1: Strategic Planning and Decision Making

1. **Are strategic plans designed during the school year to achieve the school's educational goals?**
   - Always
   - Often
   - Sometimes
   - Never
2. **To what extent are the administrative and educational bodies involvedin the process of developing strategic plans in the school?**
   - Always
   - Often
   - Sometimes
   - Never
3. **How do you plan, manage resources, assign tasks and set priorities in your school?**
   - All parties participate effectively
   - Some parties participate
   - They are made based on the principal's personal decision
   - There are no specific plans
4. **What are the main areas covered by school plans? (You can choose (several answers)**
   - Resource Management (Human and Material)
   - Distribution of tasks and responsibilities
   - Determining educational priorities

- Performance Evaluation and Development
- Enhancing the competencies of the educational team

5. **Does the school have contingency plans for dealing with emergencies and crises?**
   - Always
   - Often
   - Sometimes
   - Never

Category Two: Leadership and Administrative Competencies of the Principal

6. **What leadership model do you use in school?**
   - Participatory leadership
   - Individualized leadership
   - Distributed leadership
   - Other models (please specify) : ……………

7. **Are school members encouraged to innovate and use modern teaching practices in your school?**
   - Always and in an effective manner
   - Often
   - Sometimes
   - Rarely

8. **What is the level of involvement of the educational team in making important decisions in your school?**
   - They are always actively and effectively involved
   - They are often involved
   - Sometimes they are involved
   - They are often not involved

9. **How are change processes handled in the school, and what is the role of the administration in guiding and supporting the teaching staff and encouraging innovation and modern practices?**
   - The administration actively encourages, directs and supports innovation on a regular basis
   - The administration provides good guidance and support, withsome innovation
   - Management provides limited support for change and innovation processes

10. **What are the key leadership skills that you have in your school? (You may choose more than one option)**
    - Problem solving skills
    - Effective communication
    - Motivating and supporting the teaching staff
    - Planning and organizing
    - Change Management
    - Other..

11. **What areas do you think the administration needs to develop to improve its managerial and leadership performance? (You can choose more than one option)**
    - Decision making
    - Communication with stakeholders
    - Strategic planning
    - Building partnerships
    - Innovation in educational practices
    - Other.....

Category3: Monitoring and Evaluation Operations

12. **How is the performance of teachers and administrative staff   evaluated at school?**
    - Through regular classroom visits
    - Through periodic meetings
    - Through specific assessment tools
    - There is no evaluation mechanism

13. **Does the administration provide feedback and recommendations based on evaluation of teachers?**
    - Always
    - Often
    - Sometimes
    - Never

14. **How does communication take place between the school administration and all concerned parties to ensure integrated efforts and achieve community support for the school?**

	Communication is regular and effective	Communication is often and effective	Communication is sometimes limited	Communication is ineffective
Teachers				
Learners				
Parents				
Local community				
Supporting bodies				

15. **What mechanisms are used to identify and solvepotential problems in innovative ways ?**
    - Relying on the participation of all parties
    - Relying on data analysis and problems
    - Interacting with them only when necessary
    - There are no specific mechanisms

16. **Does the administration make regular classroom visits to monitor the progress of the educational process in the classes and support teachers?**
    - Always
    - Often
    - Sometimes
    - Never

17. **How effective is the administration in guiding and supporting faculty to achieve educational goals?**
    - Very effective
    - Somewhat effective
    - Needs improvement
    - Ineffective

18. **Does the administration follow up on improvements or recommendations resulting from evaluations?**
    - Always
    - Often
    - Sometimes
    - Rarely

19. **How does the school build relationships with the local community and supporters to secure the necessary resources and support?**

	It is done very efficiently	It goes well	It is done in a limited way	Not enough relationships are being built
Local community				
Supporting bodies				

20. **Are support programs for struggling students implemented in your school?**
   ▪ Always
   ▪ Often
   ▪ Sometimes
   ▪ Never

Category4: Future needs and expectations

21. **What are your school's needs to be able to manage any change or keep6 up with any development process in the educational curriculum in the near future? (You can choose more than one option)**
   • Financial support to secure and upgrade equipment
   • Training courses for the principal
   • Training courses for administrators
   • Training courses for teachers
   • Infrastructure development
   • Strengthening partnership with the local community
   • Providing modern technology
   • Preparing sustainability plans
   • Providing support for struggling students
   • Filling in vacancies in the administrative body
   • Filling in vacancies of teaching staff
   • Health guidance
   • Psychosocial support
   • Otherwise, specify.....

Thank you very much for participating!
Your answers will help provide recommendations to improve education in Lebanon and ensure the successful implementation of the developed curricula.

Fourth : Questionnaire directed to the teacher
Title: Questionnaire on "School Readiness and Its Effective Leadership in the Light of the Developed Curricula in Lebanon"
Target group: Teachers

Dear Sir/Madam
The Center for Educational Research and Development is conducting a study on the human and material needs of schools in Lebanon identifying the level of readiness to implement the developed curricula with a focus on the role of school leadership in facilitating this process and ensuring quality education. This questionnaire constitutes an essential part of this study.
We kindly ask for your cooperation in filling out the questionnaire accurately and objectively in alignment with your qualifications, experiences, and professional needs. Please note that the results of this questionnaire will only be used for scientific research purposes and are confidential and official.

Personal data:
1. **Age: (Exact age must be specified)**

2. **Gender: Male** ☐   **Female** ☐

3. **What is your job status?**

Duly appointed (Officially)	Hired by contract	Outsourced	Parents Council	Paid by invoice	Donation	Otherwise specify)

4. **What is the highest (academic or technical degree) obtained?**
Please clarify its classification (Teacher Pre and In-service Training College /Baccalaureate/ Technical Baccalaureate / B.A /B.A (pedagogical degree) Master's Degree / Doctorate.
Specify**…………………………………………………………………………**

5. **Years of teaching experience :**

0-5 years	6-10 years	11-15 years	16-20years	21-25 years	More than 25 years

6. **School type:**

Public	Private: Tuition free	Private: Tuition is not free	UNRWA

7. **Region:**

Beirut	Mount Lebanon Suburbs	Mount Lebanon (excluding Suburbs)	North	Bekaa	South	Nabatieh	Akkar	Baalbek-Hermel

Section One : Overall School Readiness
   1. **Availability of educational tools in classrooms**

a. **Are white boards available in the classrooms?**

	Available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education)			
Cycle1- Basic Education			
Cycle 2- Basic Education			
Cycle 3- Basic Education			
Secondary Stage			

b. **Are LCD projectors available in the classrooms?**

	Available in all grades	Partially available in classes moved) from class to class)	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1- Basic Education				
Cycle 2- Basic Education				
Cycle 3- Basic Education				
Secondary stage				

c. **Do the classrooms have active boards ?**

	Available	Partially available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1-Basic Education				
Cycle2- Basic Education				
Cycle3- Basic Education				
Secondary stage				

d. **Are computers available in the school?**

	Fully available (in all grades)	Partially available	Unavailable (on request)	Unavailable
Kindergarten (Pre-Basic Education				
Cycle1-Basic Education				
Cycle 2- Basic Education				

Cycle 3- Basic Education				
Secondary stage				

2. **How comfortable and durable are the chairs and tables in the classroom for everyday use?**
- Very suitable for comfort and durability
- Generally suitable with some minor improvements
- Need improvement in some classes
- Not suitable for general use

3. **Are digital educational tools (websites, online applications, etc.) used by teachers to support the educational process?**
   - Never
   - Sometimes
   - Often
   - Always

4. **What is thecondition of the following items in the classroom?**

	Very good	Good	Acceptable	Poor
Lighting				
Air conditioning				
Ventilation				
Heating				
Maintenance work				

5. **Are these facilities available at school, and in what condition?**

	Available and good	Available but needs improvement	Available but not usable	Not available
Laboratories				
Library				
Playgrounds				
School club				
Lecture halls				
Meeting room				
Theater				

6. **How would you describe the readiness of the school health facilities?**

	Excellent	Good	Acceptable	Poor
cleanliness level of sanitary facilities				
The number of bathrooms is proportional to the number of students				
Accessible for people with special needs				
Full time cleaners are available				
Regular bathroom cleaning				

7. **How would you describe the availability of health and safety support facilities and services at school ?**

	Excellent	Good	Acceptable	Poor
Available first aid room				
Available medical clinic				
Regular visit of a doctor to school				
First aid training for teachers				

8. **How would you describe the facilities and services provided for learners with special needs at school?**

	Excellent	Good	Average	Poor
Ramps				
Elevators				
Equipped classes to meet their needs				
Special bathrooms				
Employee support service				
psychological or counselling support services				

9. **How would you describe the availability of safedrinking water and sanitation systems in the school?**
   - Very well available
   - Well available
   - Insufficient
   - Not available

10. **How would you describe the availability of safe parking and schooltransport facilities for learners and teachers?**
    - Very well available
    - Well available
    - Insufficient
    - Not available

11. **How would you describe the availability of green spaces and natural environment around the school (parks trees, open spaces)?**
    - Very well available
    - Well available
    - Insufficient
    - Not available

Section Two:Technology and Digital Infrastructure :
1. **How would you describe the availability of Internet and digital connectivity at school?(Internet speed and quality)**
   - Very well available
   - Well available
   - Insufficient
   - Not available
2. **How often do you use technology and digital tools in daily classroom teaching?**

- I use it regularly .
- I use it sometimes.
- I rarely use it .
- I don't use it .

3. **What technological skills do you master?**

- I use computers effectively
- I develop electronic educational content
- I use remote learning tools
- I analyze educational data
- I apply educational software
- I communicate via digital platforms
- I integrate multimedia in education
- I use assistive educational technology for students with special needs
- Other skills (please specify): _____
- I do not master any of these skills…

4. **What technology-related training needs do you consider necessary to develop your skills as a teacher? (Open-ended question)**

....
....

5. **How would you describe the availability of training and technical support for teachers when they use educational technology?**

- Very well available
- Somewhat available
- Insufficient
- Not available

6. **How would you describe the availability of maintenance and updating electronic and technical devices along with their programs and applications in the school?**

- Very well available
- Well available
- Insufficient
- Not available

7. **How would you describe the availability of specialized technical support teams or a person specialized in dealing with technology problems in the school?**

- Very well available
- Well available
- Insufficient
- Not available

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DE DÉVELOPPEMENT

8. **Do you use e-learning materials ?**

	Always	Often	Sometimes	Never
National e-book				
Other e -Books				
Educational videos				
Interactive materials such as online interactive activities)				

9. **To what extent does the school administration support the effective use of technology in classrooms?**
    - Very strong support
    - Moderate support
    - Weak support
    - No support

10. **What support does the school administration provide for the use of technology? (More than one answer may be selected).**
    - Motivating teachers to use technology
    - Providing training for teachers on the use of technology
    - Allocatingtime for teachers to use technology during the classroom teaching process
    - Technical support is available to solve technical problems
    - Providing electronic educational resources

Section Three:Leadership and Administrative Competencies :
Category1: Strategic Planning and Decision Making

1. **Are strategic plans designed during the school year to achieve the school's educational goals?**
    - Always
    - Often
    - Sometimes
    - Never
2. **To what extent are the administrative and educational bodies involved in the process of developing strategic plans in the school?**
    - Always
    - Often
    - Sometimes
    - Never
3. **How does the administration plan, manage resources, assign tasks and set priorities   in your school?**
    - All parties participate effectively
    - Some parties participate
    - They are doneby based on the principal's personal decision
    - There are no specific plans
4. **What are the main areas covered by school plans? (You can choose several answers)**
    - Resource Management (Human and Material)

- Distribution of tasks and responsibilities
- Determining educational priorities
- Performance Evaluation and Development
- Enhancing the competencies of the educational team

5. **Does the school have contingency plans for dealing with emergencies and crises?**
   - Always
   - Often
   - Sometimes
   - Never

Category Two: Leadership and Administrative Competencies of the Principal

6. **What leadership model does the principal use in school ?**
   - Participatory leadership
   - Individualized leadership
   - Distributed/ leadership
   - Other models (please specify) : ....

7. **Are school members encouraged to innovate and use modern teaching practices in your school?**
   - Always and in an effective manner
   - Often
   - Sometimes
   - Rarely

8. **What is the level of involvement of the educational team in making important decisions in your school?**
   - They are always actively and effectively involved
   - They are often involved
   - Sometimes they are involved
   - They are often not involved

9. **How are change processes handled in the school, and what is the role of the administration in guiding and supporting the teaching staff and encouraging innovation and modern practices?**
   - The administration actively encourages, directs and supports innovation on a regular basis
   - The administration provides good guidance and support, withsome innovation
   - Management provides limited support for change and innovation processes
   - There is not much focus on change and innovation

10. **What are the key leadership skills that you have in your school? (You may choose more than one option)**
    - Problem solving skills
    - Effective communication
    - Motivating and supporting the teaching staff
    - Planning and organizing
    - Change Management

11. **In your opinion ,what areas do you think the administration need to develop to improve its managerial and leadership performance? (You can choose more than one option)**
    - Decision making
    - Communication with stakeholders
    - Strategic planning
    - Building partnerships

- ▪ Innovation in educational practices

Category 3: Monitoring and Evaluation Operations

12. **How does the administration evaluate the performance of teachers and administrative staff at school?**
    - ▪ Through regular classroom visits
    - ▪ Through periodic meetings
    - ▪ Through specific assessment tools
    - ▪ There is no evaluation mechanism

13. **Does the administration provide feedback and recommendations based on evaluation of teachers?**
    - ▪ Always
    - ▪ Often
    - ▪ Sometimes
    - ▪ Never

14. **How does communication take place between the school administration and all concerned parties to ensure integrated efforts and achieve community support for the school?**

	Communication is regular and effective	Communication is often and effective	Communication is sometimes limited	Communication is ineffective
Teachers				
Learners				
Parents				
Local community				
Supporting bodies				

15. **What mechanisms are used to identify and solvepotential problems in innovative ways ?**
    - ▪ Relying on the participation of all parties
    - ▪ Relying on data analysis and problems
    - ▪ Interacting with them only when necessary
    - ▪ There are no specific mechanisms

16. **Does the administration make regular classroom visits to monitor the progress of the educational process in the classes and support teachers?**
    - ▪ Always
    - ▪ Often
    - ▪ Sometimes
    - ▪ Never

17. **How effective is the administration in guiding and supporting faculty to achieve educational goals?**
    - ▪ Very effective
    - ▪ Somewhat effective
    - ▪ Needs improvement
    - ▪ Ineffective

18. **Do you follow up on improvements or recommendations resulting from evaluations?**
    - ▪ Always
    - ▪ Often
    - ▪ Sometimes
    - ▪ Rarely

19. **How does the school build relationships with the local community and supporters to secure the necessary resources and support?**

	It is done very efficiently	It goes well	It is done in a limited way	Not enough relationships are being built
Local community				
Supporting bodies				

20. **Are support programs for struggling students implemented in your school?**
   - Always
   - Often
   - Sometimes
   - Never

Category4: Future needs and expectations

21. **What are your school's needs to be able to manage any change or keep up with any development process in the educational curriculum in the near future? (You can choose more than one option)**
   - Financial support to secure and upgrade equipment
   - Training courses for the principal
   - Training courses for administrators
   - Training courses for teachers
   - Infrastructure development
   - Strengthening partnership with the local community
   - Providing modern technology
   - Preparing sustainability plans
   - Providing support for struggling students
   - Filling in vacancies in the administrative body
   - Filling in vacancies of teaching staff
   - Health guidance
   - Psychosocial support
   - Otherwise, specify.....

Thank you very much for participating!

Your answers will help provide recommendations to improve education in Lebanon and ensure the successful implementation of the developed curricula.

11. Appendix 11: Interview Questions

A. Designated for officials in the Ministry of Education and Higher Education and the Center for Educational Research and Development.

Semi-directed questions addressed to the Director General, the President of the Center for Educational Research and Development and the Directors of the Directorates .The questions are related to the readiness of schools and their effective leadership in light of the developed curricula.

1. **Evaluation of the human and material resources required to implement the developed curricula:**

   - **In your opinion, what are the basic resources (material and human) required to successfully implement the developed curricula in schools?**
     - Do you have any statistical information about the availability of educational equipment and tools in schools?
     - Do you have a plan to provide these tools and equipment?
   - **Regarding thehuman resources needed to implement the developed curricula :**

     - In your opinion, what are the new human resources that schools need to implement the developed curricula?
     - Do you also think that the specialized competencies that support the new curricula are adequately attainable?

2. **The role of school leadership:**
   - How do you perceive the role of school administrationin in the successful implementation of the developed curricula?
   - Do you think school principals have enough skills to sustain the new curricula ?
   - Do you think that theprincipal s powers and duties need to be reviewed in the context of' implementing the developed curricula? Why?
   - What does school leadership require to become effective in this context ?
3. **Challenges in implementing the developed curricula:**
   - In your opinion, what are the challenges that school principals may face when implementing the developed curricula in schools?
   - How can school administration be supported to ensure its ability to overcome difficulties when implementing the developed curricula?
   - Is there a plan to follow up on the application?
   - How can school performance be evaluated?

4. **The role of technology and digital infrastructure:**
   - How important is technology in supporting the developed curricula? How do you evaluate the readiness of schools in this area?
   - How does the Ministry operate to provide the necessary technological tools ?and infrastructure What are the priorities you set in this context?
   - In your opinion, how can the use of technology in schools be improved to support the implementation of the developed curricula?

5. **Student support and learning environment:**
   - What is the Ministry's plan to provide the necessary support for all students in schools including those with special needs?

- What do teachers and students need to ensure a safe and healthy learning environment? And how are these needs currently being met?
- How does the Ministry view its role in promoting health facilities and a safe environment in schools?

6. **The Ministry's vision for future development:**
- What is your vision for the future of education in Lebanon after implementing the developed curricula?
- What are the basic steps that you think the Ministry should take to achieve comprehensive and sustainable development of schools ?
- How do you plan to continuouslysupport schools, school leaders and teachers in an effective way?

B. Designated for private sector officials and curriculum experts
Interview on school readiness and its effective leadership in light of the developed curricula

1. **Evaluation of the human and material resources required to implement the developed curricula:**
- **In your opinion, what are the basic resources (material and human) required to successfully implement the developed curricula in schools?**

    - Do you have any statistical information about the availability of educational equipment and tools in schools ?
    - Do you have a plan to secure these educational tools and equipment ?
- **Regarding   the human resources needed to implement the developed curricula:**
    - In your opinion, what are the new human resources that schools need to implement the developed curricula?
    - Do you also think that the specialized competencies that support the new curricula are adequately attainable?
2. **The role of school leadership:**
- How do you perceive the role of school administration in the success of implementing the developed curricula?
- Do you think school principals have enough skills to sustain the new curricula?
- Do you think that the principal's powers and duties need to be reviewed in the context of implementing the developed curricula? Why?
- What does school leadership require to become effective in this context?

3. **Challenges in implementing the developed curricula:**

- In your opinion, what are the challenges that school principals may face when implementing the developed curricula in schools?
- How can school administration be supported to ensure its ability to overcome difficulties when implementing the developed curricula?
- Is there a plan to follow up on the application?
- How can school performance be evaluated?

4. **The role of technology and digital infrastructure:**

- How important is technology in supporting the developed curricula? How do you evaluate the readiness of schools in this area?
- How does the administration operate to provide the necessary technological tools and infrastructure? What are the priorities you set in this context?
- In your opinion, how can the use of technology in schools be improved to support the implementation of the developed curricula?

5. **Student support and learning environment:**
- What is the administration's plan to provide the necessary support for all students in schools including those with special needs?
- What do teachers and students need to ensure a safe and healthy learning environment? And how are these needs currently being met?
- How does the administration view its role in promoting health facilities and a safe environment in schools?

6. **Administration's vision for future development:**
- What is your vision for the future of education in Lebanon after implementing the developed curricula?
- What are the basic steps that you think the Ministry should take to achieve comprehensive and sustainable development of schools?
- How do you plan to continuously support schools, school leaders and teachers in an effective way?

12. Appendix 12: Focus Group Questions

Questions designated for learners' focus groups in the context of the " Study of School Readiness and Its Effective Leadership in Light of the Developed Curricula" – Lebanon.

School environment:
- Do you feel safe and welcome at school? Why or why not? What makes you feel safe or unsafe at school?
- What are your favorite and least favorite areas at school? And why ? Are there areas where you feel most comfortable during the school day?
- What are your favorite and least favorite times of the day at school ? And why? Are there times during the school day when you feel mostcomfortable?
- What changes would you suggest to improve the school environment for all those concerned?

Academic support:
- What resources or programs that help you succeed academically are available at school?
- What material resources or technical software do you need? (technology, or extra sessions that are not part of formal support).
- Are there any extracurricular programs or activities that you find helpful in your learning journey?

Skills and content:
- In your opinion, which skills are most important to learn for your future ?
- Are there subjects or topics you wish were taught in school but are not currently offered?
- Do you think that the current curriculum prepares you well for life after graduating from the Secondary School ?Why or why not ?
- Are transversal competencies such as communication, teamwork or time management currently developed at school ?
- If not, how do you think they can be developed?
- Are these competencies developed through specific projects?

Future aspirations:
- If you had the opportunity to give your opinion on designing a new course material, what would it be?
- What topics would you suggest to include in this course material and why?
- How important is it to include topics such as psychosocial support career guidance, life skills etc.?

13. Appendix 13: Interview Schedule

Educational Officials and Experts
1-Director General of Education - Mr. Imad Al-Ashqar
2-Head of the Center fo rEducational Research and Development - Professor Hiam Ishaq
3-Director of Primary Education - Mr. George Daoud
4-Director of Secondary Education - Mr. Khaled Al-Fayed
5- Director of Guidance and Counseling - Dr. Hilda Khoury - <u>Unable to conduct an interview with her</u>
6- Father Youssef Nasr - Secretary General of Catholic Schools and Coordinator of the Union of Private Educational Institutions in Lebanon
7- Dr. Fadel Al-Mousawi - Deputy Director General - Islamic Educational, Scientific and Cultural Organization
8-Mr. Ramzi Zein El-Din - Al-Irfan Schools
9-Dr. Ghina Al-Badawi - Director of Educational Affairs - Al-MakasedIslamic Charitable Society
10- Prof. Dr. George Nahhas - Lead Curriculum Expert - National Framework for Pre-University General Education Curriculum - Educational Ladder and Organization of the Academic Year
11- Prof. Dr. Fadia Hattit - Expert in the Early Childhood Committee-basic supporting papers the national curriculum framework

14. Appendix 14: Focus Group Schedule
A.Public Sector

Student's name	Principal's phone number	Principal's name	Governate	High school email	High School Name	CERD number
1. Aya Mohammed Ali Hamoud Hiam Mustafa Yamout Selena Walid Bou Hassan	03/576470	Wasila Yamout	Beirut	shakibirslanss@mehe.school	Prince Shakib Arslan Mixed Public School	1528
2. Jasmine George Saad Hadi Haidar Al-Jammal Aya Hassan Fawaz	03/532784	Joseph George Naim	Beirut	ashrafieh2bss@mehe.school	Gebran Ghassan Tueni Second Public School	6
3. Lucia Ibrahim Saab Yahya Alaa El - Din Serene Badr Alwan	03/125431	Abeer Mohammed Al-Homsi	Beirut	raselnabehss@mehe.school	His Excellency President Riad Al Solh Official Website of Benin	30
4. Jamal Hafez Ghattas Nancy Ihab Saad Rimas Imad Ahmad	70604204	Ali Bou Latif	Bekaa	haramounrachayass@mehe.school	Harmon High School	1476
5. Nour Fadi Nassif Diana Mohammed Dabaja Mohamed Emad Arabi	3244867	Musab Deeb	Bekaa	karaounss@mehe.school		1009
6. Lea Maher Baydoun Maram Mohammed Al-Qaruni Sireen Bilal Ghanum	71/622500	Khaled Hamza	Bekaa	majdelanjarss@mehe.school	Majdal Anjar	833
7.Reina Al Rabis Adam Abu Saad Bassem Gharizi	03/738473	Sanaa Shuhayeb	Mount Lebanon	marounabboudss@mehe.school	Maroun - Abboud Aley	255
8. Aya Maria Tony Abi Younes	70/859527	Nina Adeeb Mansour	Mount Lebanon	ehmejss@mehe.school	official	1464

Student's name	Principal's phone number	Principal's name	Governate	High school email	High School Name	CERD number
Sibal Nazih Matta						
Jason Charbel Matta						
9.Ghina Fadi Kiwan	03/913911	Bassem Hassib Malak	Mount Lebanon	almoukhtarass@mehe.school		
Joyce Nabil Zain El Din						
Khaldoun Fadi Saadeddine						
10.Rawan Abdel Nasser Al-Manih	70148593	Aysha Bazzal	North	Kobbe3ss@mehe.school	New Mixed Dome	1555
Jihad Jamal Agha						
Sahar Abdullah Ahmed						
11. Raneem Khaled Berri	03/572104	Cosette Naim Atallah	North	kafarakkass@mehe.school	Kafr Aqqa	1391
Gina Raymond Bou Saba						
Marilyn Amin Gemayel						
12. Ryan Dakramanji	03/432779	Rawya Al-Shaqiq	North	sirdonniehss@mehe.school	Zgharta	490
Hala Bo Kanj						
Rama Salma						
13. Tia Hassan Al-Hajj Suleiman	3276907	Bilal Al-Hajj Suleiman	Baalbek-Hermel	bidnayelss@mehe.school	Nabil Adeeb - Suleiman Bednayel	967
Safwan Ali Maarbouni						
Hadi Abdul Karim Al Ramh						
14. Maria George Al Lakkis	03/521229	Ziad Ibrahim Nassif	Baalbek-Hermel	rasbaalbeckss@mehe.school	Ras Baalbek	885
Serena Tony Ghanem						
Ghanwa Fleeti						
15. Ghadeer Samer Assi	70935402	Mayad Blaibel	Baalbek-Hermel	hermelnamouzajiass@mehe.school	Hermel Model	1473
Ghadeer Rakan Khair El-Din						
Tharwat Hussein Shamas						
16. Antonio Makhoul	3061855	Carla Khoury	Akkar	Kobayatbss@mehe.school	Qubayat	635
Nour Ibrahim						
Joseph Hakmeh						
17.Huwayda Farouk Saqr	03/739249	Khaled Ismail	Akkar	alkawashirass@mehe.school	The Kwashira	1585

Student's name	Principal's phone number	Principal's name	Governate	High school email	High School Name	CERD number
Aya Mohammed Al-Asaad						
Maya Khaled Mohammed						
18.Jana Hazeem	03/988487	Walid Al Lakkis	Akkar	hrarss@mehe.school		1390
Ahmed Darwish						
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19. Hussein Mohammed Shehab	03/273551	Elham Faraj	South	nbazouriehss@mehe.school	Al-Bazourieh	1411
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20. Serene Bilal Miftah	03/310754	Nahla Mohammed Khair Hunayneh	South	saidagss@mehe.school	Dr. Hekmat Sabbagh Yumna Al" "Eid	1043
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Serene Atef Al-Khumasi						
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B.Private sector

	Joseph Reiady
	George Kareh
Saint Coeur - Batroun	Gaelle Sakr
	Georges Abboud
	Thea Baz
Al -Ofoq Al Jadeed	Lara Basrawi
	Naziha Aiin
	Sadine Sabbagh
Al - Kalaa School	Ranime Ghourabi
	Yousef Nahouli
	Dima_Ghanem
NAS -Beqaa	Jean Michel Daoud
	Charbel Sassine
	Dany Abou Ali
Averroes College Taalbaya	Ali Nabha
	Yara Houshaymi
	Mayssam Hachem
Saint Coeur - Zahle	Racha Sleiman
	Charbel Moutran
	Clea Sarkis
SSCC - Marjeyoun	Chadi Hadwi
	Israa Chitt
	Moufid Said
Ajyal High School -Nabatieh	Fatima Makki
	Kobrosly Farouk
	Lamar Kobrosly

Pilot Schools in the "Study of School Readiness and Its Effective Leadership in Light of the Developed Curricula in Lebanon"

School name	School number	Educational sector	Governate
Martyr Adnan Halbawi Public School – Al–Awzai	1621	public	Beirut
Second Mixed Public School for girls	17	public	Beirut
Antelias Mixed Intermediate Public School	141	public	Mount Lebanon (suburbs)
Jbeil First Mixed Intermediate Public School	167	public	Mount Lebanon (except (suburbs
Kamal Jumblatt Mixed Intermediate Public School	312	public	Mount Lebanon (except (suburbs
Al Hayat Public School for girls	385	public	North
Ka Al–Reem Mixed Intermediate Public School	805	public	Bekaa
Martyr Hassan Qasir Intermediate Public School	1234	public	South
Martyr Muhammad Zaarour MixedPublic School	1514	public	South
Aidmon Mixed Public School	644	public	Akkar

16. Appendix 16: Codes and Categories Extracted from Interviews with Educational Officials

الرموز Codes	الفئات Themes	التفاصيل Details
Availability of Technology	Infrastructure Challenges	Lack of technology and laboratories, unstable and intermittent internet, insufficient technical tools and educational resources.
Inequality Among Schools	Equity in Resource Distribution	Fully equipped schools vs. schools suffering from severe shortages; lack of fairness in resource distribution.
Weak Educational Competencies	Teacher Training Importance	The need for continuous training programs to shift focus towards competencies and quality education objectives.
Logistical Administration	Redefining School Administration	Current focus on organizational aspects instead of educational leadership, emphasizing the role of principals as interactive leaders with updated curricula.
Lack of Educational Leadership	Redefining School Administration	The need to understand curriculum philosophies and balance administrative and educational tasks.
Enhancing Training Programs	Teacher Training Importance	Providing specialized and sustainable training programs for teachers and principals to achieve new curriculum goals.
Educational Technology	Technology as a Key Driver	Utilizing local technologies like intranet, offering affordable technology, and integrating it to support education despite internet weaknesses.
Financial and Policy Support	Government's Role in Education Support	Ensuring clear and direct funding, adopting policies that support educational transformation toward globally aligned quality education.
Limited Spaces	Infrastructure Challenges	Lack of spaces designated for new activities such as sports, theater, and music.

Questions	Codes	Categories
1- Evaluation of the human and material resources required to implement the developed curricula: What are the essential resources (material and human) needed for the successful implementation of the developed curricula in schools?	• Lack of preparation for human resources: The human resources were not prepared in 1997 and were not sufficiently trained. • Recruitment of new teachers: Specialists in new knowledge fields. • Training current teachers: On integrating extended competencies with various subjects. • Training teachers on assessment: Understanding and teaching strategies for assessing complex competencies. • Recruitment of new coordinators: To keep up with new requirements and supervise new specialties. • Training current coordinators: To supervise teachers and ensure efficient curriculum implementation. • Fluctuation between curricula: Conflict between old and new curricula (content-based approach vs. objective-based approach). • Lack of clarity in pedagogical approach: Differences between teacher-centered (magistral) and interactive approaches. • Pressures and circumstances: Impact of war and economic and social conditions on readiness. • Disparity in school resources: Differences between public and private schools in material resources. Private schools are better equipped. Disparities between private schools (e.g., Al-Erfan, Catholic schools). • Cost of equipment: Who bears the cost of the required equipment for the new curricula? • Digital equipment: Private schools have the capacity for distance learning and using computers to facilitate curriculum implementation. • Internet connection: To support digital and interactive learning.	Human Resources Readiness of Material Resources

	• Diverse classroom equipment: Such as interactive screens or modern teaching tools.	
Do you have statistical information about the availability of educational tools and equipment in the school?	• Relative readiness in Al-Maqasid schools. Material resources in schools: Computers, interactive boards, science labs. • Lack of equipment in secondary schools (Al-Erfan). • Additional classrooms: Need for new classrooms in secondary sections. • Specialized modern labs: An essential requirement for meeting the needs of the new curricula. • Lack of accurate statistics: Lack of detailed information on the equipment in each school. • Impact of lack of statistics on effective curriculum implementation planning. • 50% of Catholic schools are ready (disparity among schools within the same institution). • Disparities among schools: Affecting student preparation and increasing the educational gap. • Importance of prior preparation: Includes preparing infrastructure, resources, and educational mindset. • Gradual curriculum implementation: Starting with early stages (pre-school or primary). • Avoiding haste: Focusing on equipment and preparing the groundwork before expanding. • Importance of equipment guide: Preparing a guide by the educational center for the required equipment to implement the new curricula.	Educational Tools and Equipment Challenges in Curriculum Implementation
Institutional Support Do you have a plan to ensure these educational tools and equipment?	• Current plans do not align with the new curricula. • Need for adjustments. • Need for funding. • Tied to the timeline for implementing curricula. • Readiness to implement curricula at the preschool and primary education stages. • Secondary education needs special measures. • Delay in implementing curricula at the secondary stage. • Comparison between Al-Maqasid schools and other schools.	Challenges in Developing a Plan for Ensuring Resources Financial Strategies and Planning (Securing Resources and Equipment, Public-Private Sector Cooperation, Financial Planning for Implementation)

	• New specialties are not ready in other schools. The plan will include ensuring the necessary tools and equipment for implementing the curricula or technological plans, which requires allocating specific budgets and collaborating with partners from both the public and private sectors. Partnerships with both sectors are a key part of the plan to ensure the necessary funding and resources for successful plan implementation. The plan relies on allocated and well-studied budgets to ensure the provision of necessary equipment, indicating the need for financial and logistical aspects to achieve the plan's goals. The plan concerns what the ministry wants (lack of clarity regarding the future, lack of clear answers to questions, problems in the educational ladder, need to understand the direction of the Ministry of Education).	
Regarding the human resources needed for implementing the developed curricula, what new human resources does the school need to implement the developed curricula?	• Preparing the current staff (principals, teachers, educational supervisors). • New mindset and educational approach. • Adaptability. • Specialists in various fields. • Technology in education (advanced use of technology). • Vocational education. • Dealing with students with special needs. • Academic and vocational pathways (balance between academic and vocational focus). • Shift in student assessment (skills and competencies instead of traditional goals). • Training to deal with subjects according to the goals of the new curricula. • Preparing teachers for specialization in the secondary stage according to subjects.	Human Resources Preparation Technology and Vocational Education Specialized Competencies and New Assessment Approaches
Are specialized competencies adequately available to support the new curricula?	• Readiness of Al-Maqasid schools for training and follow-up. • Specialized competencies are not available. • Presence of a training and professional development center. • Presence of a coordinators' council.	Availability of Specialized Competencies Readiness and Training

	• Ongoing monitoring by the educational affairs department. • Specialization in secondary school subjects requires new teachers, who are unavailable. • No teachers for dealing with special needs students. • No specialized competencies for the developed curriculum. • Technological competencies are not available among all teachers (e.g., using artificial intelligence in education).	
2- Role of School Leadership: What is your view on the role of school leadership in ensuring the successful implementation of the developed curricula?	• Developing clear and implementable strategies and plans. • Providing a suitable learning environment. • Supporting teachers in their training and skill development. • Promoting a culture of cooperation among teachers, students, and parents. • Evaluating performance for continuous improvement. • Sustainable development of all school departments. • Addressing challenges during implementation. • Encouraging innovation in teaching methods. • Achieving better educational outcomes. • Providing logistical resources (both digital and non-digital). • Providing specialized human resources. • Offering professional development opportunities for veteran teachers. • Monitoring the use of logistical resources and ensuring their utilization. • Monitoring student assessment processes to ensure the achievement of desired outcomes or competencies.	School Leadership and Curriculum Planning Teacher Support and Development Collaboration and Communication Continuous Evaluation and Improvement Challenges and Innovation Achieving Educational Outcomes Management of Logistical and Human Resources Monitoring and Evaluation
Do you think that school principals have the necessary skills to support the new curricula?	• Some current principals lack the necessary skills to support the new curricula. • Importance of subjecting principals to necessary training. • Training by curriculum developers. • Empowering principals to manage their schools in light of the new curricula.	Training and Professional Development for Principals Empowering School Leadership

| Do you think that the principal's authority and responsibilities need to be reconsidered in the context of implementing the developed curricula? Why? | • The principal's authority needs to be reconsidered.
• Activation of new leadership methods aligned with contemporary learning requirements.
• Greater authority in decision-making related to curricula.
• Allocation of resources.
• Promoting a culture of innovation within the school.
• Managing challenges related to implementing new curricula more effectively.
• Law 2013: The principal must have a specialized school management degree.
• School management degree: The principal should have a specialized degree in school management.
• Curriculum adjustments: Curricula need legal amendments.
• Automatic success: Laws regarding automatic success should be amended.
• Relationship between academic and vocational: Needs amendments.
• Distance learning: Legal adjustments are necessary.
• Principal preparation: Training for principals is crucial for the continued implementation of curricula. | Principal's Authority and Leadership of New Curricula
Promoting Innovation and Managing Challenges
Legislative Amendments
Principal Preparation |
| What does school leadership need to be effective in this context? | • Training on the new curricula.
• Training on change management.
• Training on strategic leadership.
• Professional development programs on modern teaching methods.
• Clear vision and strategy: Aligning educational goals with the developed curricula.
• Effective communication: With teachers, parents, and the community.
• Collaborative work environment: Encouraging innovation within the school.
• Technical and technological support: Providing necessary tools to ensure efficient curriculum implementation.
• Improving the quality of education and the | Enhancing Leadership Skills
Communication and Collaboration
Technical and Technological Support
Vision and Strategy |

	student experience: The ultimate goal of curriculum implementation.	
3- Challenges in Implementing the Developed Curricula: What challenges do you think school principals will face when implementing the new curricula?	Resistance to change by teachers and other stakeholders Psychological or practical resistance due to habituation to the old system, or fear of failure in implementing the new curricula Difficulty in providing adequate and continuous training for teachers to ensure their full understanding of the new curricula Lack of financial and technical resources necessary to support the implementation of these curricula Organizing schedules and academic activities to balance between the developed curricula and traditional requirements, which requires high leadership and administrative skills from school principals Difficulty in finding qualified human resources to implement the new curricula Learning loss that students still suffer from since the COVID-19 pandemic and recurring crises Difficulty for veteran teachers in the school to adapt to the new curricula, despite receiving the necessary training (the fluctuation between the objectives-based approach and the competency-based approach) The school's inability to provide digital technology devices, possibly due to insufficient budget availability amid the economic crisis Challenges related to the students themselves, due to their feeling of difficulty in learning through teaching methods different from those in previous years, and in a different style compared to that in earlier grades Inflexibility of unified evaluation plans: the evaluation plans prepared by the state are not suitable for some contexts, especially in private schools.	Human and Social Challenges Technical and Technological Challenges Material Challenges Administrative and Organizational Challenges Educational Challenges
How will school administration be supported to ensure its	• Periodic workshops • Training on change management • Enhancing collaboration between	Training and professional

ability to overcome difficulties when implementing the developed curricula?	administration and teachers • Lack of funding • Support for technological infrastructure • Providing necessary devices and software • Appointing educational supervisors • Providing direct field support • Building supportive and trusting relationships • Developing clear practical implementation mechanisms • Issuing executive decrees • Flexible and adaptable policies • Holding the Ministry of Education accountable • Collaboration between schools and the ministry • Involving funding agencies • Forming regional educational committees • Sharing experiences and best practices • Strengthening educational forums	development Financial and technological resources Supervision and monitoring Policies and implementation mechanisms Partnership and institutional responsibility Support and collaboration networks
Is there a plan to monitor the implementation?	• Testing the plan before generalizing it • Activating communication between the Educational Center and the administrations of public and private schools in Beirut and the governorates • Private institutions are ready for testing in their schools • Forming evaluation teams • Establishing clear and measurable performance indicators to regularly assess learning outcomes and educational processes • Organizing periodic review sessions to exchange opinions and experiences between teachers and administration • Adapting plans according to changing needs • Mechanisms for documentation and reporting, providing continuous feedback and necessary adjustments, paving the way for achieving the set educational goals • The plan is the responsibility of the Ministry	Experimentation/Piloting Evaluation (by teachers and administrators to Monitor the implementation of the curricula and identify strengths and weaknesses in each school) Review Reference in planning
How will school performance be evaluated?	• Regular workshops for school principals and teachers	Measurement tools Workshops Performance indicators

	• Surveys prepared by the Educational Center for Research and Development on the effectiveness of implementation, challenges, and difficulties • Key performance indicators (student test results, attendance rates) • Regular field visits for evaluation • Interviews with teachers, students, and parents • Performance data analysis • Feedback • Evaluation is the responsibility of the Ministry and the Educational Center • Private schools cooperate in the evaluation	Responsible entity
Digital infrastructure: How important is technology in supporting the developed curricula? And how do you assess the readiness of schools in this area?	• Technology is fundamentally essential to support the developed curricula. • The use of computers, the internet, electronic screens, and artificial intelligence. • Interactive programs enhance creativity and innovation. • Technology is one of the competencies embedded in the new curriculum. • There is a disparity in readiness between public and private schools. • Technology is an integral part of the developed curricula. • Technology contributes to enhancing interactive learning. • Al-Irfan schools are equipped with modern interactive boards, but they lack the necessary infrastructure such as fast internet and advanced laboratories due to the high costs. • There is no new education or educational plan without technology. • Readiness is low in schools in peripheral areas.	Importance of Technology Readiness

How does the administration work to provide the necessary technological tools and infrastructure? What are the priorities you set in this context?	• Providing needs is the responsibility of the Ministry. • The Ministry supports the public sector, not the private sector. • Strategies are developed by the Ministry to assess needs. • Providing assistance to schools to meet their needs. • Reliance on tuition fees in the private sector. • The cost of equipment is the responsibility of the state. • Providing computers, interactive boards, and digital infrastructure.	Sources of funding The responsibility of the Ministry Priorities
How do you think technology use in schools can be improved to support the implementation of the developed curricula?	• Special accreditation certificates • Required training workshops for administrative and educational staff • Measuring the impact of workshops by the Educational Center for Research and Development • Adding STEAM lessons to the curriculum • Adopting Virtual Reality and Artificial Intelligence • Developing digital educational content aligned with the curricula • Focusing on interactivity of materials to enhance educational engagement • Establishing interactive educational platforms • Providing infrastructure	Areas for improving the use of technology
Support for Students and Learning Environment: What is the administration's plan to provide the necessary support for all students in schools, including those with special needs?	• The developed curricula take individual differences into account. • Preparation of special curricula for students with special needs that include different educational stages and pathways, according to their specific abilities. • Assisting both public and private schools in providing assistive tools such as audio books or books in braille. • Providing a healthy, safe, inclusive, and suitable school environment that meets the needs of all students.	Contents of the administration plan Ministry's responsibility Challenges

	• Training teachers on specialized teaching strategies focused on meeting the needs of students with special needs. • Striving towards achieving inclusive schools. • Converting a number of schools into inclusive schools. • The need for specialists. • The need for training courses.	
What do teachers and students need to ensure a safe and healthy learning environment? And how are these needs currently being met?	• Training teachers on inclusive teaching methods and how to work with students with special needs • Providing teachers with appropriate resources and tools • Appointing specialist supervisors to guide and assist teachers • Implementing emotional and social support programs • Securing financial support • Providing clean and suitable study spaces • Implementing effective security measures	Continuous training Providing material resources Providing human resources Providing educational resources
How does the administration view its role in enhancing health facilities and a safe environment in schools?	• A special section for students with special needs. • Providing educational, psychological, and social support. • Individualized plans that consider teaching methods, evaluation, psychological therapy, sensory-motor development, speech therapy, learning difficulties, and more. • Implementing decisions, laws, and decrees related to school organization. • Developing the plan and securing necessary equipment.	The role of the administration
Vision of the Administration for Future Development: What is your vision for the future of education in Lebanon after the	• Building a modern and innovative education system that meets the needs of all segments of society. • Contributing to the development of life skills and digital technological skills that prepare students for the job market. • More interactive and aligned with the needs of	• Skill development • Advanced educational system • Focus on technology • Official support

implementation of the developed curricula?	students and the labor market. • Focusing on enhancing critical thinking and life skills. • Integrating technology in education will improve access to information and educational resources, enhancing the learning experience. • Developing social and practical skills will better prepare students for the changing job market. • Focusing on effective teacher training. • Providing adequate support to schools. • Governmental and community commitment to strengthening education.	
What are the key steps that you believe the ministry should take to achieve comprehensive and sustainable development for schools?	• Achieving comprehensive and sustainable development for schools • Securing funding for free and low-fee private schools • Developing the technological infrastructure in schools • Providing innovative educational resources that support the developed curricula • Focusing on continuous professional development for teachers and administrators • Updating curricula • Providing intensive training programs for teachers and principals	Infrastructure Training Curricula Funding Resources
How do you plan to ensure the continued support of schools, school leadership, and teachers effectively?	Providing training workshops Maintaining a positive climate in schools Creating a learning environment that encourages students to be creative, innovative, think critically, and solve problems Implementing technology and artificial intelligence Writing books and providing educational resources Strengthening local and international community partnerships Implementing a regular evaluation system to gather feedback on the effectiveness of strategies and support, which helps adjust plans according to the needs of schools	Developing the performance of principals, coordinators, and teachers Educational resources Community partnerships

Category	Subcategories	Codes
School Environment & Sense of Safety	Teacher's role in creating a motivating learning environment	Teacher's personality Teaching style Positive interaction
	Topic 2: Interest in Subjects	Preference for scientific subjects Disinterest in literary subjects Relation to future career
	Administrative Interest	
	Extra-curricular activities	
	Favorite places	
	Preferred times	
Academic Support	Official support system	Appropriate class size Available administrative assistance Communication with teachers
	Informal Support	Peer support Communication outside study hours Mutual help Technological Resources Use of technology in education
Challenges & Needs	Need for institutional development	Need for updates Technical challenges,
	School facilities and resources	Institutional responsibility Need for developmental projects
Skill Development	Diversifying skills	Technological skills, Manual & creative skills Social & collaborative skills
	Preparedness for Life After School	Academic and career guidance Community service projects
	Self-awareness and academic decision-making	
	Exploring academic specialties,	

	Teacher's role in guidance	
Current Curriculum Issues	Suggestions for curriculum development	Focus on memorization over critical thinking
		Outdated content
		Insufficient preparation for future careers
		Interdisciplinary learning,
		Skill–based learning
		Technology integration
		Social and emotional learning
	Teaching and Learning Methods	Practical approach
		Interactive learning methods
		Teacher training
		Philosophy and abstract subjects
	Assessment & Exams	Exam formats
		Balanced assessment systems
		Flexible assessment policies
	Equity & Accessibility	Resource distribution,
		Digital divide
	Future Opportunities Preparation	Alignment with university requirements
		Job market readiness
	Extra–curricular Activities & Inclusive Education	Integration into curricula
		Community service
		Talent support
	Cultural & Socioeconomic Relevance	Local history & culture
		Global perspective
	Technology in Education	Digital resources
		Technology–driven education
	Content Updates	Textbook updates
		Practical applications

Personal Demographics

▪ **Age**

First Response: Principal

The total number of principals participating in the study reached **279**, distributed across the educational sectors in the Lebanese governorates. The ages were categorized into groups (each spanning 10 years) to facilitate statistical analysis. The overall results for the principals indicated that the largest proportion belonged to the age group **50–60 years**, constituting **37.3%**, followed closely by the age group **40–50 years**, representing **36.2%** of the total participants. This was followed by the age group **over 60 years**, at **19.0%**, while the younger age groups showed lower proportions, with **5.4%** for those aged **30–40 years** and the lowest percentage of **2.2%** for those under **30 years**.

In the **public sector**, the **40–50 years** age group ranked highest at **48.3%**, followed by the **50–60 years** group at **43.5%**, with a complete absence of younger age groups.

In the **private free sector**, the **over 60 years** age group was the most prominent at **40%**, while the percentage of the **30–40 years** group rose to **10%**, reflecting a higher presence of younger participants.

In the **private paid sector**, the **over 60 years** age group also ranked first at **29.6%**, followed by the **50–60 years** group at **28.6%**, and the **40–50 years** group at **23.5%**. The **30–40 years** group accounted for **12.2%**, while the **under 30 years** group represented **6.1%**.

In the **UNRWA sector**, the **40–50 years** and **50–60 years** age groups dominated, with a notable absence of younger principals.

In Beirut, the public sector demonstrated a concentration of principals in the **40–50 years** age group at **62.5%**, followed by the **over 60 years** group at **25%**. The private paid sector in Beirut showed a significant presence of the **50–60 years** group.

In **Akkar**, the **50–60 years** group accounted for **55.0%** in the public sector, with balanced representation across age groups in other sectors.

In **Baalbek-Hermel**, the **40–60 years** group represented **100%** in the public sector, while the private paid sector recorded a **40%** representation for the **30–40 years** group.

In the **South**, the public sector results showed a balance between the **40–50 years** and **50–60 years** groups at **46.7%** each, while the private sector was dominated by the **over 60 years** group.

In **Nabatieh**, the **40–50 years** age group had the highest representation in the public sector at **62.5%**, while private sector results in the governorate were balanced.

In the **North**, the public sector was dominated by the **40–50 years** group at **51.4%**, while in Mount Lebanon (excluding the suburbs), the **50–60 years** group was the most represented in the public sector.

It is evident that all educational sectors rely heavily on older principals, as the results reflect a weak presence of younger principals.

Second Response: Supervisor (Question #1)

Comparison Across Educational Sectors:
Public Sector:
- The most common age group is 40-50, accounting for 43.8%, followed by 50-60 at 41.9%.

- The younger age group (30-40) is underrepresented at 3.7%, indicating limited entry for younger individuals into administrative positions in public schools.
- Older age groups (over 60) are also underrepresented at 10.6%.
- In Akkar and Beirut, the majority of supervisors fall within the 40-50 age group (55.3% and 54.5%, respectively), with Beirut having 45.5% of supervisors aged 50-60.
- In Akkar, the highest percentage of supervisors is in the 30-40 age group at 10.5%.
- Beqaa and Nabatieh show high representation in the 50-60 age group at 61.1% and 56.5%, respectively. Nabatieh also has the highest percentage in the over 60 age group at 26.1%.

Free Private Sector:
- The sector has a notable presence of younger age groups: under 30 (3.2%) and 30-40 (32.3%), with a significant portion of supervisors aged 50-60 at 25.8%.
- Beirut has 100% of supervisors in the 50-60 age group, reflecting the presence of experienced supervisors in this sector.
- South, Baalbek-Hermel, and Beqaa show 100%, 100%, and 66.7%, respectively, of supervisors in the 30-40 age group, reflecting greater involvement of younger generations compared to other regions.

Non-Free Private Sector:
- The most prevalent age group is 40-50 at 40.2%, followed by 30-40 at 23.1%.
- Beirut and Mount Lebanon (excluding suburbs) exhibit a balanced distribution, but Beirut shows a high percentage (55.6%) of supervisors in the 40-50 age group.
- Akkar demonstrates a significant presence of the under-30 age group at 44.4%, the highest among all sectors, indicating strong inclusion of younger individuals in administrative roles.

UNRWA:
- There is a balanced distribution across the 30-40, 40-50, and 50-60 age groups, with each accounting for 33.3%.
- This indicates a well-balanced approach to hiring supervisors from different age groups, with no representation of individuals under 30.

Comparison Between Sectors:
- The public sector shows a higher concentration of supervisors in the 40-60 age range, with fewer older (over 60) and younger (under 30) supervisors.
- Free private schools have the highest percentage of supervisors aged over 50-60.
- Non-free private schools display a more balanced age distribution, including a substantial portion of younger supervisors (11.1%) under 30.
- UNRWA shows a balanced distribution among middle age groups but lacks representation of younger age groups.

Key Conclusions:
- Beirut stands out as a region with older, more experienced supervisors (over 50 years) in the free private sector compared to other regions.
- Akkar and Baalbek-Hermel exhibit higher involvement of younger supervisors (under 30) in the non-free private sector, suggesting greater opportunities for younger talent.
- South and Baalbek-Hermel stand out with 100% of supervisors in the 30-40 age group in the free private sector.
- Mount Lebanon (suburbs) has a significant portion (34.4%) of supervisors in the 30-40 age group in the non-free private sector, reflecting dynamic administrative management in this region.
- UNRWA presents a balanced approach to age diversity, aligning with inclusive employment policies across various age groups.

Answer 3: Coordinator (Question #1)

In the public sector in Beirut, 55.6% of workers are aged between 30-40 years, while 44.4% are under 30 years, indicating a dominance of younger staff. In Mount Lebanon (suburbs), most workers are aged 40-50 at 47.1%, followed by the 50-60 age group at 35.3%. In Mount Lebanon (excluding suburbs), the majority fall within the 40-50 age group at 46.2%, with a smaller percentage between 30-40 at 15.4% and under 30 at 2.6%. In the north, the largest group is aged 40-50 at 42.4%, followed by 50-60 at 37.3%. In the Beqaa, the majority are aged 30-40 at 70%, reflecting a younger active demographic. In the south, most workers are between 30-40 years at 66.7%, with a lower percentage in the 40-50 age group at 19.0%. In Nabatieh, the majority are aged 40-50 at 68.8%, highlighting a focus on mature staff. In Akkar, the largest group is aged 40-50 at 42.3%, followed by 30-40 at 23.1%. In Baalbek-Hermel, the distribution is evenly split among 30-40, 40-50, and 50-60 at 33.3% each.

In the free private sector in Beirut, all workers are under 30. In Mount Lebanon (suburbs), 60% are aged 30-40, and 40% are under 30. In Mount Lebanon (excluding suburbs), all workers are aged 40-50. In the north, the largest age group is 50-60 at 50%, with the rest distributed evenly between 30-40 and 40-50 at 25% each. In Beqaa, there is an equal distribution between 30-40 and 40-50 at 50% each. In the south, the highest percentage is in the 40-50 age group at 40%, followed by under 30 and 30-40 at 20% each. In Nabatieh, both 30-40 and 50-60 represent 50% each. In Akkar, the distribution is equally split among under 30, 30-40, and 50-60 at 33.3% each. In Baalbek-Hermel, the distribution is balanced between 30-40 and 40-50 at 50% each.

In the non-free private sector in Beirut, most workers are aged 30-40 at 33.3%, with a relative presence across all other age groups. In Mount Lebanon (suburbs), the largest group is 40-50 at 32.6%, followed by 50-60 at 26.1%. In Mount Lebanon (excluding suburbs), the largest age group is 30-40 at 36.8%, with a balanced representation of older age groups. In the north, 50-60 is the largest group at 41.9%, followed by 40-50 at 29%. In Beqaa, the highest percentage is in the 30-40 age group at 43.8%, with a relative presence of older age groups. In the south, the distribution is balanced between 30-40 and 40-50 at 33.3% each, followed by under 30 at 16.7%. In Nabatieh, the majority are aged 30-40 at 54.5%. In Akkar, most workers are aged 30-40 at 38.5%, followed by 40-50 at 30.8%. In Baalbek-Hermel, the majority are aged 30-40 at 45.5%.

In UNRWA in the north, all workers are aged 30-40 at 100%.

Key   **Conclusions**

The analysis highlights significant diversity in age groups among workers across regions and educational sectors. In the public sector, Beirut and Beqaa feature a strong presence of younger staff (30-40), while regions like the north and Nabatieh rely more on mature age groups (40-50). Mount Lebanon, both suburbs and beyond, shows a balanced distribution with a dominant presence in the 40-50 age group. The free private sector showcases a strong presence of younger workers in Beirut and Mount Lebanon, while older age groups dominate in the north and south. In the non-free private sector, the distribution is more diverse, with balanced representation of various age groups in Beirut and Beqaa, while the north leans toward older staff. UNRWA in the north depends entirely on the 30-40 age group. Overall, data suggest that regions relying on younger staff exhibit greater potential for renewal and development, while regions relying on more mature staff show stability in experience.

Answer 4: Teacher (Question #1)

In the public sector, data reveals that the majority of teachers fall within the 31-40 age group, representing 43.6% of all teachers, reflecting the reliance of the education system on this moderately experienced age group. Following this, the 41-50 age group accounts for 28.1%, while teachers over 50 years make up about 21.4%, indicating a significant proportion approaching retirement. Conversely, the youngest age group, 20-30 years, is the least represented at only 6.9%.

In terms of geographic distribution, Beirut focuses heavily on the 30-40 age group at 55.6%, with 44.4% in the 20-30 age group. In Mount Lebanon (suburbs), the largest age group is 40-50, at 47.1%. Similarly, in Mount Lebanon (excluding suburbs), the 40-50 group leads at 46.2%. In the northern, Beqaa, southern, and Nabatieh governorates, the 30-40 age group is the most represented, with a gradual decline in older age groups. In remote areas like Akkar and Baalbek-Hermel, the 40-50 age group is predominant, with limited representation of younger age groups.

In the free private sector, teachers are relatively evenly distributed among age groups. The 31-40 age group leads at 36%, followed by the 20-30 group at 34.4%. Older age groups, 41-50 and over 50, represent smaller percentages of 19.6% and 10%, respectively. Geographically, Beirut focuses entirely on teachers in the 30-40 age group, while Mount Lebanon (suburbs), the north, and Beqaa show a mix of age groups, with a clear dominance of middle-aged teachers.

In the non-free private sector, comprising 663 teachers, the 30-40 age group is most prominent at 30.3%, followed by the 40-50 group at 29.1%. Teachers aged 50-60 account for a notable 26.7%, reflecting a large number of highly experienced staff. The youngest age group, 20-30, represents a smaller share of 7.3%. In Beirut, the 40-50 age group dominates at 35.6%, while in Mount Lebanon (suburbs) and the north, the 50-60 group is the most represented.

In UNRWA schools, which employ 12 teachers, they are distributed across the northern, southern, and Mount Lebanon (suburbs) regions, with no significant indicators of age group distribution.

General   **Conclusions**

The data shows that the Lebanese education system heavily relies on teachers in the middle-aged categories (31-50 years), which represent the largest proportion of the teaching workforce across all sectors and regions. There is a clear decline in the number of younger teachers (20-30 years), who account for less than 7% in the public sector and 34% in the free private sector. Conversely, a notable percentage of older teachers (50 years and above) is observed—21.4% in the public sector and 26.7% in the non-free private sector—indicating that many are nearing retirement, particularly in remote areas like Akkar and Baalbek-Hermel, where older teachers dominate.

This age distribution highlights the need for effective succession planning to ensure the sustainability of the teaching workforce. Geographic differences reveal that middle-aged teachers are concentrated in urban areas such as Beirut and Mount Lebanon, while rural areas rely more heavily on older teachers. These patterns emphasize the importance of addressing regional disparities and fostering opportunities for younger educators to rejuvenate the workforce.

▪ **Gender**

Answer 1: Principal (Question #2)

Public Sector
Females constitute the majority (73.5%) compared to males (26.5%), representing 38.7% of the total females and 14% of the total males.

Free Private Schools

Females represent 46.7% and males 53.3%, equivalent to 5% of the total females and 5.7% of the total males.

Non-Free Private Schools

Females make up 49%, and males 51%, accounting for 17.2% of the total females and 17.9% of the total males.

UNRWA Schools

There are 4 females (100%) and 0 males, representing 1.4% of the total females.

Comparison Between Educational Sectors

Public Sector

In the public sector, females dominate in most governorates, with 73.5% compared to 26.5% for males. Beirut and Mount Lebanon suburbs have the highest percentages of females (100% and 90.9%, respectively), while Akkar shows a gender balance (50% each). Conversely, Beqaa and Nabatieh have the lowest female-to-male ratios (69.2% and 68.8%, respectively).

Free Private Sector

In the free private sector, the gender distribution is more balanced compared to the public sector, with females constituting 46.7% and males 53.3%. Beirut and the South are dominated by females (100%), while Akkar has the highest percentage of males (100%), followed by Nabatieh (83.3%).

Non-Free Private Sector

The non-free private sector shows the most balanced gender distribution among all sectors, with females at 49% and males at 51%. Beirut and Mount Lebanon suburbs have higher percentages of females, while Nabatieh and Baalbek-Hermel are male-dominated (100% and 80%, respectively).

UNRWA Schools

In UNRWA schools, females represent 100% of principals across all covered governorates (Mount Lebanon suburbs, the North, and the South), highlighting complete female dominance in this sector.

Governorate Comparisons

Beirut

Females dominate all educational sectors, particularly in the public and free private sectors, where they account for 100%. In the non-free private sector, females represent a relatively balanced 77.8% compared to 22.2% for males.

Mount Lebanon Suburbs

The public sector has a high percentage of females (90.9%), while the free and non-free private sectors show a better gender balance. UNRWA schools have 100% female representation.

Mount Lebanon (excluding suburbs)

Females dominate the public sector (77.8%), while the non-free private sector is male-dominated (70%).

The North

Females dominate the public sector (82.9%), while the non-free private sector shows better gender balance, with a female tilt of 76.9%.

Beqaa

The public sector has a higher percentage of females (69.2%), while the free and non-free private sectors are more balanced, with a notable male dominance in the non-free private sector.

The South

The public sector shows a high percentage of females (73.3%), while the free private sector is entirely female-dominated (100%). The non-free private sector is relatively balanced.

Nabatieh

The public sector is moderately balanced (68.8% females), while both the free and non-free private sectors are male-dominated.

Akkar

The public sector shows complete gender balance (50% each), while the free private sector is entirely male-dominated (100%).

Baalbek-Hermel

The public sector has a higher percentage of females (54.5%), while the non-free private sector is male-dominated (80%).

Answer 2: Supervisor (Question #2)

Females

Females account for 278 supervisors, representing **75.5%** of the total number of supervisors.

Public Sector: 80.6% of supervisors are female.

Free Private Sector: 71% of supervisors are female.

Non-Free Private Sector: 68.4% of supervisors are female.

UNRWA: 33.3% of supervisors are female.

Males

Males constitute **24.5%** of the total number of supervisors, indicating that the majority of school administrative roles are held by females, particularly in the public sector compared to other sectors.

Analysis of Results

High Percentage of Females in School Administration

This distribution reflects a trend toward favoring females in school administrative roles, especially in the public sector. Possible factors include:

The availability of females in education roles.

Workplace culture in the education sector.

Administrative system policies that may favor females.

Variations Across Sectors

Public Sector: The highest percentage of females, potentially due to public policies or systems that emphasize employing females in education.

Free and Non-Free Private Sectors: Similar percentages with a slight decrease in females, likely due to different hiring priorities across these sectors.

UNRWA: The lowest percentage of females (33.3%), reflecting either a relative gender balance or a preference for males in managing schools for refugees.

Answer 3: Coordinator (Question #2)

The distribution of teachers by gender across various governorates and educational sectors reveals significant disparities between males and females. In Beirut Governorate, females constitute 84.5% of

teachers compared to 15.5% males, with sector-specific distributions as follows: public sector (76.7% females, 23.3% males), free private sector (100% females), and non-free private sector (86.4% females). In Mount Lebanon suburbs, the percentage of female teachers is 88% compared to 12% males. In the public sector, females account for 86.7% compared to 13.3% males. The free private sector has 91.9% females and 8.1% males, while the non-free private sector has 87.4% females and 12.6% males. In UNRWA schools, all teachers are female (100%).

In Mount Lebanon excluding suburbs, females make up 88.6% compared to 11.4% males, with the public sector having 90.2% females and 9.8% males. In the free private sector, females constitute 93.5% compared to 6.5% males, while in the non-free private sector, females account for 83.9% compared to 16.1% males.

In North Lebanon, the overall percentage of female teachers is 88.1%, while males make up 11.9%. In the public sector, females account for 88.1% and males 11.9%. In the free private sector, 97.5% of teachers are female compared to 2.5% males. In the non-free private sector, 86% of teachers are female compared to 14% males. UNRWA schools are exclusively male (100%).

In Bekaa Governorate, females represent 85.6% of teachers compared to 14.4% males. In the public sector, 78.6% are females compared to 21.4% males. The free private sector consists of 97.1% females and 2.9% males, while the non-free private sector has 91.1% females and 8.9% males.

In South Lebanon, the total percentage of female teachers is 87.6%, while males make up 12.4%. In the public sector, females account for 86.1% and males 13.9%. The free private sector is entirely female (100%), while the non-free private sector comprises 87.5% females and 12.5% males. In UNRWA schools, all teachers are female (100%).

In Nabatieh Governorate, females constitute 86.8% of teachers compared to 13.2% males. The public sector has 83.9% females and 16.1% males. The free private sector is entirely female (100%), while the non-free private sector has 87.5% females and 12.5% males.

In Akkar Governorate, females account for 84.1% of teachers compared to 15.9% males. The public sector comprises 84.3% females and 15.7% males. In the free private sector, females represent 81% compared to 19% males, while the non-free private sector has 84.4% females and 15.6% males.

In Baalbek-Hermel Governorate, females make up 78% of teachers compared to 22% males. The public sector has 71.4% females and 28.6% males. The free private sector is entirely female (100%), while the non-free private sector consists of 88.9% females and 11.1% males.

Overall, the data indicates that females dominate the teaching workforce across all governorates and sectors, with an overall representation of 86.4%. Males have relatively higher representation in the public sector in Baalbek-Hermel and Bekaa.

Studies recommend implementing solutions to enhance employment opportunities for male teachers, applying policies that promote gender equality, and improving the work environment to make the teaching profession more appealing to both genders.

General Conclusions

The key data on the gender distribution of teachers across governorates and educational sectors reveals clear disparities, with females representing the majority in all governorates at 86.4% compared to 13.6% males. Female teachers dominate all sectors, with slight variation in areas like the public sector in Baalbek-Hermel and Bekaa, where male representation is relatively higher. The findings highlight the need to enhance male recruitment in education through training and outreach programs, foster policies that ensure balanced gender participation in all educational sectors, and improve working conditions to make teaching more attractive to both genders.

Answer 4: Teacher (Question #2)

The distribution of teachers by gender across various governorates and educational sectors highlights that female teachers dominate in all regions, with an overall female percentage of 86.4%, compared to 13.6% for males.

In Beirut Governorate, females represent 84.5% of teachers, while males account for 15.5%. These percentages vary across sectors: females comprise 76.7% in the public sector, 100% in the free private sector, and 86.4% in the non-free private sector.

In the suburbs of Mount Lebanon, females constitute 88% of teachers, compared to 12% males, with a similar distribution across different sectors. Outside the suburbs of Mount Lebanon, the percentage of females increases to 88.6%, while males represent 11.4%, with females reaching 93.5% in the free private sector.

In North Lebanon, the percentage of female teachers is 88.1% compared to 11.9% males. The free private sector is dominated by females (97.5%), while UNRWA schools exclusively employ male teachers (100%).

In Bekaa Governorate, females represent 85.6% of teachers, compared to 14.4% males, with balanced distribution across sectors. In South Lebanon, females account for 87.6%, while males represent 12.4%. The free private sector and UNRWA schools are entirely staffed by female teachers (100%).

In Nabatieh Governorate, females constitute 86.8% of teachers, while males make up 13.2%. The free private sector is exclusively female (100%). In Akkar Governorate, females represent 84.1%, compared to 15.9% males, with a similar distribution across sectors.

In summary, the data reveals that female teachers are the majority in all governorates and sectors, with slight variations in male representation, which is higher in the public sector of Baalbek-Hermel and Bekaa.

General Conclusions

The data on the gender distribution of teachers across governorates and educational sectors demonstrates that females overwhelmingly dominate, representing 86.4% of the workforce. The distribution varies slightly by sector, with females significantly outnumbering males in most regions, particularly in the free private and public sectors. The non-free private sector shows a smaller gender disparity. Overall, the findings confirm that female teachers form the majority in all areas, with a strong concentration in the free private sector and UNRWA schools, where their representation reaches 100%.

▪ **Job Status**

Answer 1: Principal (Question #3)

The General Status Across Sectors
School principals are distributed across all sectors and governorates according to the following classifications: duly appointed (58.1% of the total workforce), assigned to management in private education (20.1%), assigned to management following an interview in the public sector (12.2%), and assigned to management without an interview in the public sector (9.7%).

Sector-Specific Distribution
- **Public Education**: Representing the largest share (52.7%), the majority of principals in this sector are duly appointed (59.9%). They are followed by those assigned to management with interviews (21.8%) and without interviews (18.4%). For example, in Mount Lebanon (excluding suburbs), duly appointed principals constitute 66.7%, followed by those assigned with interviews

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(22.2%) and without interviews (11.1%). In Beirut, duly appointed principals make up 62.5% of the public sector, compared to 37.5% assigned without interviews. In the North, 57.1% are duly appointed.

- **Private Non-Free Education**: This sector ranks second (35.1%), with a high proportion of principals assigned to management (46.9%). Officially appointed principals represent 52%.
- **Private Free Education**: Comprising 10.8% of the total, duly appointed principals dominate (66.7%), compared to 30% assigned to management. In the North, the distribution is equal between officially appointed principals and those assigned to management (50% each).
- **UNRWA**: Representing 1.4% of the total, the majority of principals (75.0%) are officially appointed.

Distribution Across Governorates

- **Bekaa**: In public education, officially appointed principals account for 84.6% of the total, followed by those assigned with or without interviews (15.4% equally). In private free education, officially appointed principals make up 66.7%, compared to 33.3% assigned to management. In private non-free education, officially appointed principals constitute 55.6%, while those assigned to management represent 44.4%.
- **South Lebanon**: Officially appointed principals account for 60% in public education, followed by those assigned without interviews (26.7%) and with interviews (13.3%). In private free education, officially appointed principals make up 100%. In private non-free education, officially appointed principals represent 71.4%, compared to 28.6% assigned to management. In UNRWA, the distribution is evenly split between officially appointed principals and those assigned to management.
- **Nabatieh**: Officially appointed principals represent 56.3% of the total in public education, followed by those assigned with or without interviews (43.7%), including 25% assigned after an interview. In private free education, officially appointed principals make up 83.3%, compared to 16.7% assigned to management, with similar proportions in private non-free education.
- **Akkar**: Officially appointed principals constitute 60% of the total in the public sector, followed by those assigned with or without interviews (40%). In private free and non-free education, the proportions are equally distributed between officially appointed principals and those assigned to management.
- **Baalbek-Hermel**: This region has the lowest percentage of officially appointed principals in public education (36.4%), while those assigned with or without interviews represent the remaining 63.6%, including 27.3% assigned after an interview. In private free education, officially appointed principals account for 66.7%, compared to 33.3% assigned to management. In private non-free education, all cases (100%) involve principals assigned to management.

Observations and Insights

The results highlight that the public sector employs the largest share of school principals (52.7%), with officially appointed principals dominating (59.9%). The private non-free education sector ranks second (35.1%), with a near balance between officially appointed principals and those assigned to management. The majority of principals in private free education are officially appointed, while most UNRWA principals fall under the officially appointed category.

Regionally, officially appointed principals make up the majority in most governorates, with a notable decline observed in Baalbek-Hermel.

Answer 2: Supervisors (Question No. 3)

Based on the available data from 368 participating supervisors across all sectors, the distribution of employment status is as follows:

Permanent staff: 84.8%

Contracted: 12%

By sponsorship: 0.3%

Parent's Council: 0.5%

Hired on an as-needed basis: 1.1%

Other: 1.5%, distributed as follows: assistant manager (0.3%), administrative roles (0.3%), full-time supervisor (0.3%), employee (0.3%), and supervisor (0.3%).

This indicates that the majority of supervisors (84.8%) are permanent employees.

Provincial Overview

Beirut:

Public education: All supervisors (11) are permanent staff (100%).

Private education (free and non-free):

Free: 1 contracted supervisor (100%).

Non-free: 9 supervisors—8 are permanent staff (88.9%) and 1 is contracted (11.1%).

Mount Lebanon (Suburbs):

Public education: All supervisors (17) are permanent staff (100%).

Private education (free and non-free):

Free: 5 supervisors—2 permanent staff (40%), 2 contracted (40%), and 1 funded by Parent's Council (20%).

Non-free: 32 supervisors—17 permanent staff (53.1%), 10 contracted (31.3%), and 5 in other roles (15.5%).

Mount Lebanon (Excluding Suburbs):

Public education: All supervisors (23) are permanent staff (100%).

Private education (free and non-free):

Free: 4 supervisors—3 permanent staff (75%) and 1 contracted (25%).

Non-free: 12 supervisors—8 permanent staff (66.7%), 3 contracted (25%), and 1 hired on an as-needed basis (8.3%).

North:

Public education: All supervisors (38) are permanent staff (100%).

Private education (free and non-free):

Free: 5 supervisors—4 permanent staff (80%) and 1 contracted (20%).

Non-free: 18 supervisors—13 permanent staff (72.2%) and 5 contracted (27.8%).

Bekaa:

Public education: All supervisors (18) are permanent staff (100%).

Private education (free and non-free):

Free: 3 supervisors—2 permanent staff (66.7%) and 1 contracted (33.3%).

Non-free: 14 supervisors—9 permanent staff (64.3%), 4 contracted (28.6%), and 1 hired on an as-needed basis (7.1%).

South:

Public education: 32 supervisors—30 permanent staff (93.8%), 1 funded by Parent's Council (3.1%), and 1 contracted (3.1%).

Private education (free and non-free):

Free: All supervisors (2) are permanent staff (100%).

Non-free: 7 supervisors—6 permanent staff (85.7%) and 1 contracted (14.3%).

UNRWA: 1 supervisor on a contract (100%).

Nabatiyeh:

Public education: All supervisors (23) are permanent staff (100%).

Private education (free and non-free):

Free: 6 supervisors—4 permanent staff (66.7%) and 2 contracted (33.3%).

Non-free: All supervisors (5) are permanent staff (100%).

Akkar:

Public education: 38 supervisors—34 permanent staff (89.5%), 1 hired on an as-needed basis (2.6%), and 3 contracted (7.9%).

Private education (free and non-free):

Free: 4 supervisors—3 permanent staff (75%) and 1 hired on an as-needed basis (25%).

Non-free: 9 supervisors—3 permanent staff (33.3%) and 6 contracted (66.7%).

Baalbek-Hermel:

Public education: All supervisors (17) are permanent staff (100%).

Private education (free and non-free):

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Free: 1 administrative supervisor (100%).

Non-free: 11 supervisors—10 permanent staff (90.9%) and 1 contracted (9.1%).

General Conclusions:

Public Education: High stability, with 97.2% of supervisors being permanent staff. Exceptions include the South (93.8%) and Akkar (89.5%). Few contracted supervisors exist in these regions, emphasizing administrative stability.

Private Education:

Free: More reliance on contracts across most provinces.

Non-free: Mixed employment modes, with permanent staff percentages ranging from 53.1% (Mount Lebanon - Suburbs) to 100% (Nabatiyeh).

UNRWA: Employment varies by location, with some provinces relying solely on contracts.

Public education demonstrates significant job stability for supervisors, contrasting with variability in the private sector. UNRWA shows a balanced mix, varying by region.

Answer 3: Coordinator (Question No. 3)

General Employment Trends

Full Sample

Permanent Staff:

Represent the largest employment category, comprising 72.4% of the sample.

More prevalent in the public sector with 79.3%.

Contracted Coordinators:

The second-largest employment category, accounting for 22.6% of the sample.

Prominent in the private non-free sector with 32.1%.

Other Categories (Temporary, Part-time, Parent's Council, Hired):

Represent a small portion of the sample, totaling 3.6%, with each individual category contributing less than 2%.

Sector Analysis

Public Sector:

Number: 246 Coordinators (55.7% of the sample).

Heavily reliant on permanent staff (79.3%), indicating high job stability.

Contracted coordinators form the second-largest group (16.7%).

Private Free Sector:

Number: 29 Coordinators (6.6% of the sample).

Like the public sector, permanent staff dominate (72.4%).

Contracted coordinators make up 17.2%, with a notable presence of hired individuals (10.3%).

Private Non-Free Sector:

Number: 165 Coordinators (37.3% of the sample).

Displays a more diverse employment structure compared to public and free private sectors.

Permanent staff comprise 62.4%, while contracted coordinators are significantly higher at 32.1%.

UNRWA:

Number: 2 Coordinators (0.5% of the sample).

Equal distribution between permanent staff (50.0%) and contracted staff (50.0%).

No representation in other employment categories due to the small sample size.

Key Observations

Dominance of Permanent Staff:

Across all sectors, permanent staff dominate, with the highest concentration in the public sector at 79.3%.

Higher Contract Representation in Private Non-Free Sector:

Contracted coordinators represent 32.1% in the private non-free sector, far exceeding the public sector (16.7%) and free private sector (17.2%).

Special Roles in Public Sector:

In the public sector, there are roles filled by Parent's Councils (1.6%) and hired staff (1.6%).

General Conclusions

Dominance of Permanent Staff:

High percentage of permanent staff among coordinators in public education (79.3%) suggests a strong commitment to stability and continuity, likely enhancing educational quality through experienced leadership.

High Contract Representation in Private Non-Free Sector:

The 32.1% of contracted coordinators in the private non-free sector indicates a more flexible employment model, which can address financial limitations but raises concerns regarding job security and employee retention compared to the public sector.

Special Roles in Public Education:

Answer 4: Teacher (Question No. 3)

General Employment Trends

Full Sample

Permanent Staff:

Represent the largest employment category at 71.4% of the sample.

More prevalent in the public sector with 81.6%.

Contracted Staff:

The second-largest employment category at 23.2% of the sample.

Prominent in the private non-free sector with 31.1%.

Other Categories (Part-time, Temporary Contracts, Hired):

Represent a small portion of the sample at 5.4%, with each individual category contributing less than 2%.

Sector Analysis

Public Sector:

Number: 330 Teachers (55.3% of the sample).

Heavily reliant on permanent staff (81.6%), reflecting high job stability.

Contracted staff account for 14.7%, forming the second-largest group.

Private Free Sector:

Number: 27 Teachers (4.5% of the sample).

Like the public sector, permanent staff dominate at 71.4%.

Contracted staff make up 14.3%, with a similar representation of hired staff (14.3%).

Private Non-Free Sector:

Number: 206 Teachers (35.2% of the sample).

Displays a more diverse employment structure compared to other sectors.

Permanent staff comprise 60.7%, while contracted staff represent 31.1%.

UNRWA:

Number: 5 Teachers (0.8% of the sample).

Equal distribution between permanent and contracted staff at 50.0%.

No representation in other employment categories due to the small sample size.

Key Observations

Dominance of Permanent Staff:

Across all sectors, permanent staff are the majority, with the highest concentration in the public sector at 81.6%.

Higher Contract Representation in Private Non-Free Sector:

Contracted staff represent 31.1% in the private non-free sector, significantly higher than in the public sector (14.7%) or private free sector (14.3%).

Diverse Roles in Public Sector:

The inclusion of part-time staff (1.5%) and hired staff (1.5%) reflects a diverse range of employment categories, enhancing flexibility and community involvement in managing education.

General Conclusions

Dominance of Permanent Staff:

The high percentage of permanent staff in public education (81.6%) reflects job stability and enhances the quality of services provided.

High Contract Representation in Private Non-Free Sector:

The 31.1% of contracted staff in the private non-free sector indicates a flexible employment model, which addresses financial constraints but raises concerns about job security and employee retention compared to the public sector.

Diverse Roles in Public Sector:

The employment of part-time and hired staff highlights a variety of job roles, promoting flexibility and increased community participation in managing education.

▪ **Highest Academic Qualification**
Answer 1: Principal (Question No. 4)

In public education, the most common qualifications are a university degree (29.3%) and a teaching degree (27.9%), with the combined percentage of master's and doctoral holders reaching 16.3%, reflecting a reliance on academic competencies.

In free private education, the most prevalent qualification is the high school diploma (36.7%), while the proportion of holders of advanced degrees (master's and doctorate) is low, at just 23.3%. In fee-paying private education, the most common qualification is a university degree (36.7%), followed by master's

degrees (29.6%) and doctorates (9.2%), indicating a higher emphasis on advanced qualifications compared to the free education sector. In the UNRWA sector, 75% of school principals hold university degrees, while 25% hold master's degrees.

Distribution by Governorates:

Beirut: In public education, 75% of principals hold a teaching degree, and 25% hold a university degree. In free private education, 100% hold a master's degree. In fee-paying private education, 77.8% hold university degrees, including 33.3% with a university degree and 22.2% with a master's.

Mount Lebanon (Suburbs): In public education, 54.5% hold university degrees, and 27.3% hold master's degrees. Outside the suburbs, there is an equal distribution among master's holders, graduates of teacher training institutes, and high school diploma holders (22.2% each).

North Governorate: There is a relatively balanced distribution of teaching and university degrees as well as teacher training certificates in public education, but master's degree holders represent only 2.9%, the lowest percentage recorded.

Bekaa Governorate: A balanced distribution exists between teaching and university degrees (30.8% each), with a notable proportion of master's holders (23.1%) in public education.

South Governorate: Teaching and university degrees dominate, representing 80% of principals, but the percentage of advanced qualifications is lower compared to other governorates.

Akkar: University degrees are most prevalent, with no presence of advanced qualifications in public education.

Conclusion:

The university degree emerges as the most common qualification, representing 32.6%. Public education displays a relatively balanced distribution of qualifications, with a growing trend toward enhancing competencies through advanced degrees.

Answer 2: Supervisors (Question No. 4)

According to the data collected from 368 supervisors across various sectors, the responses are as follows:

A. Comparison Between Public and Private Sectors:

Public Sector:

Prominent Qualifications:

Teaching License: 27.6%

Bachelor's Degree: 24.9%

High School Diploma: 16.1%

Teacher Training Certificate: 15.7%

Master's Degree: 12.4%

Doctorate: 3.2%

Conclusion: The diversity of qualifications in the public sector reflects a substantial academic background among supervisors, with a significant proportion holding university degrees (Bachelor's, Master's, and Doctorate) totaling 68.1%. However, approximately one-third of principals (31.8%) hold only a high school diploma or a teacher training certificate, indicating disparity in qualifications. Additionally, the absence of technical qualifications is notable, with no holders of a "Technical High School Diploma."

Private Free Sector:

Prominent Qualifications:

High School Diploma: 38.7%

Bachelor's Degree: 35.5%

Technical High School Diploma: 16.1%

Teaching License: 9.7%

Master's Degree: 0%

Doctorate: 0%

Conclusion: There is a significant gap in qualifications, with over half of the supervisors (54.8%) holding only a high school diploma. This sector shows a focus on secondary and vocational education, with a complete absence of advanced academic degrees.

Private Non-Free Sector:

Prominent Qualifications:

Bachelor's Degree: 26.5%

High School Diploma: 25.6%

Teaching License: 18.8%

Technical High School Diploma: 11.1%

Master's Degree: 14.5%

Doctorate: 1.7%

Conclusion: About 38.4% of supervisors in this sector do not hold university degrees. There is a balance between academic qualifications, including Bachelor's, Master's, and technical diplomas, highlighting a pursuit to elevate scientific competence.

B. High and Low Qualifications Across Sectors and Provinces:

Overall Data Insights:

Significant variation is evident in academic qualifications across educational sectors and provinces. The public sector boasts a higher proportion of advanced degrees, whereas private sectors, especially free private ones, predominantly have lower qualifications.

High Qualifications (Master's and Doctorate):

The public sector leads in advanced degrees, with a noticeable increase in Master's and Doctorate holders compared to other sectors. Beirut registers the highest percentage of Master's holders, with a complete absence of High School Diplomas, Technical Diplomas, and Teacher Training Certificates, signifying a concentration of high competence in the capital.

In contrast, UNRWA excels with 100% Master's holders, reflecting a focus on high academic qualifications. The free private sector, however, suffers from a significant lack of advanced qualifications, relying heavily on lower-tier qualifications.

Low Qualifications (High School Diploma):

The free private sector in Beirut is dominated by Technical High School Diplomas at 100%. In regions like Nabatieh and Bekaa, High School Diplomas account for large proportions, reaching up to 66.7%, and in the North, 60%.

The public sector sees a high percentage of low qualifications in certain regions like South Lebanon, Nabatieh, and Mount Lebanon suburbs, with a higher concentration of High School Diplomas and Teacher Training Certificates, indicating a lower level of university education.

Answer 3: Coordinator (Question No. 4)

In response to the question about academic qualifications among coordinators across different sectors, the following observations were made:

Public Sector:

Prominent Qualifications:

Bachelor's Degree: 38.2%

Teaching License: 28.5%

Advanced Degrees (Master's and Doctorate): 20.4% (16.3% + 4.1%)

Public Sector Representation: 55.7% of the total sample.

Conclusion: The focus on advanced qualifications highlights a strong emphasis on academic advancement in the public sector. A substantial portion holds degrees beyond the bachelor's level, with 20.4% holding either a Master's or Doctorate.

Private Free Sector:

Prominent Qualifications:

Bachelor's Degree: 44.8%

Master's Degree: 31.0%

No representation of Doctorates or professional qualifications like Teacher Training Certificates.

Sample Size: 29 individuals, representing only 6.6% of the total sample.

Conclusion: The private free sector shows limited advanced qualifications, with a strong focus on basic academic degrees, particularly Bachelor's and Master's degrees.

Private Non-Free Sector:

Prominent Qualifications:

Bachelor's Degree: 31.5%

Teaching License: 28.5%

Master's Degree: 27.3%

Doctorate: 6.1%

Conclusion: This sector displays a balanced distribution of academic qualifications, with a noticeable presence of advanced degrees such as Master's and Doctorates.

UNRWA:

Prominent Qualifications:

Bachelor's Degree: 0.5% (only 2 individuals).

Conclusion: The focus is solely on Bachelor's degrees with no representation of higher academic qualifications like Master's or Doctorates.

General Findings:

The majority of coordinators hold Bachelor's degrees at 36.4%, followed by Teaching Licenses at 26.9%, and Master's degrees at 21.3%. The private non-free sector stands out for its higher concentration of advanced qualifications, emphasizing specialized and quality education. Conversely, the private free sector has a limited representation of higher academic qualifications.

Academic Qualifications Across Provinces:

Public Sector:

In Beirut, most individuals hold Bachelor's degrees at 44.4%, followed by Teaching Licenses at 33.3%.

In Mount Lebanon suburbs, Master's degrees are prominent at 47.1%.

In North Lebanon, Bachelor's degrees dominate at 40.7% with a significant presence of Teaching Licenses at 30.5%.

In Bekaa, the highest percentage is for Teaching Licenses at 55%.

In the South, Master's degrees are visibly represented at approximately 14.3%.

In Nabatieh, half of the population holds Bachelor's degrees at 50%, with a strong representation of Teaching Licenses at 12.5%.

In Akkar, there is a balance between Bachelor's and Teaching Licenses at 38.5% and 30.8%, respectively.

In Baalbek-Hermel, diverse qualifications are evident, with approximately 22.2% holding Master's degrees.

Private Free Sector:

In regions such as Mount Lebanon suburbs and Baalbek-Hermel, Bachelor's degrees are predominant at 40% and 50%, respectively.

Private Non-Free Sector:

Advanced degrees, particularly Master's degrees, are more prevalent, with noticeable concentrations in Mount Lebanon and Beirut.

UNRWA:

All participants hold Bachelor's degrees, reflecting high educational attainment in this sector.

Overall, Bachelor's degrees are the most common qualifications, followed by Teaching Licenses and Master's degrees, with a significant focus on advanced academic qualifications in the private non-free sector.

Answer 4: Teacher (Question No. 4)

Distribution of teachers based on their highest academic qualification across provinces and educational sectors:

Beirut:

Public Sector: 43.3% of teachers hold Bachelor's degrees, and 26.7% hold Master's degrees.

Private Free Sector: 62.5% have Teaching Licenses.

Private Non-Free Sector: The majority, 39%, hold Bachelor's degrees.

Mount Lebanon - Suburbs:

Public Sector: 45% have Bachelor's degrees, and 21.7% hold Master's degrees.

Private Free Sector: 45.9% hold Teaching Licenses.

Private Non-Free Sector: 35.1% hold Bachelor's degrees.

Mount Lebanon - Excluding Suburbs:

Public Sector: 32.9% hold Bachelor's degrees, and 30.5% hold Teaching Licenses.

Private Free Sector: 29% for both Teaching Licenses and Bachelor's degrees.

Private Non-Free Sector: 46.8% hold Bachelor's degrees.

North Lebanon:

Public Sector: 38.1% hold Bachelor's degrees, and 28.1% hold Teaching Licenses.

Private Free Sector: 50% hold Bachelor's degrees.

Private Non-Free Sector: 41% hold Bachelor's degrees.

Bekaa:

Public Sector: 38.8% hold Bachelor's degrees, and 33.7% hold Teaching Licenses.

Private Free Sector: 61.8% hold Bachelor's degrees.

Private Non-Free Sector: 46.4% hold Bachelor's degrees.

South Lebanon:

Public Sector: 50% hold Bachelor's degrees, and 20.5% hold Master's degrees.

Private Free Sector: 50% hold high school diplomas.

Private Non-Free Sector: 75% hold Bachelor's degrees.

Nabatieh:

Public Sector: 42.9% hold Bachelor's degrees, and 26.8% hold Master's degrees.

Private Free Sector: 60.9% hold Bachelor's degrees.

Private Non-Free Sector: 50% hold Bachelor's degrees.

Akkar:

Public Sector: 48.8% hold Bachelor's degrees, and 18.1% hold Master's degrees.

Private Free Sector: 57.1% hold Bachelor's degrees.

Private Non-Free Sector: 45.3% hold Bachelor's degrees.

Baalbek-Hermel:

Public Sector: 50.6% hold Bachelor's degrees, and 26% hold Master's degrees.

Private Free Sector: 60% hold Bachelor's degrees.

Private Non-Free Sector: 55.6% hold Bachelor's degrees.

General Conclusions:

The majority of teachers hold Bachelor's degrees at 43.6%, followed by Teaching Licenses at 24.7%, and Master's degrees at 18%.

Public Sector: Shows a higher proportion of Master's degree holders, especially in urban areas like Beirut and Mount Lebanon.

Rural Provinces: Regions like Akkar and Baalbek show noticeable disparities in higher academic qualifications compared to urban areas.

The disparity suggests a need for greater emphasis on higher education for teachers, especially in less represented regions.

Recommendations:

Enhancing Higher Education: Provide support for Master's and Doctorate programs, particularly in rural areas.

Geographical Balance: Offer incentives to improve academic qualifications in underrepresented regions.

Investment in Technical Education: Support teachers with technical and professional qualifications to enhance vocational education in Lebanon.

Review Employment Policies: Ensure that academic qualifications align with job requirements across both public and private sectors.

- **Years of Experience in the Educational Field**

Answer 1: Principal (Question No. 5)

Years of experience were categorized into five-year intervals. The results showed that in the public sector, the largest group of principals had more than 25 years of experience, accounting for 50.3%, followed by those with 21–25 years (27.9%), 16–20 years (12.9%), 11–15 years (5.4%), and 6–10 years (2.7%). The smallest group, with 0–5 years of experience, represented just 0.7%. This indicates that over half of the public-sector principals have more than 25 years of experience, with relatively balanced representation in the 16–25 year categories.

In the free private sector, the largest group also had more than 25 years of experience (36.7%). The percentages were equal for the 0–5 and 11–15 year categories, each representing 16.7%. This was followed by 21–25 years (13.3%), 6–10 years (10.0%), and 16–20 years (6.7%). This suggests that over a third of principals in the free private sector have more than 25 years of experience, and representation for those with less than 10 years of experience is relatively high compared to other categories.

In the fee-paying private sector, the largest group again had more than 25 years of experience, representing 32.7%. This was followed by 6–10 years (19.4%), 11–15 years (15.3%), 0–5 years (14.3%), 21–25 years (11.2%), and 16–20 years (7.1%). This indicates that the fee-paying private sector has a moderate base of principals with extensive experience reaching 25 years, as well as relatively balanced representation in the mid-range categories (11–25 years). All principals in the UNRWA schools had over 25 years of experience.

By Governorates:
- **Beirut**: Strong representation of fee-paying private sector principals, with 44.4% having more than 25 years of administrative experience.

- **North Governorate**: In the public sector, 45.7% of principals have extensive experience of more than 25 years.
- **Nabatieh Governorate**: The highest percentage (70%) of public sector principals fall into the over-25-year category.
- **Bekaa Governorate**: The largest proportion of principals (53.8%) in the public sector have 21–25 years of experience.

Conclusion:

The public sector accounts for the largest proportion of principals with long administrative experience (over 25 years) across all governorates. The fee-paying private sector in Beirut and the South is notable for having a significant number of principals with new (0–5 years) and mid-level (6–10 years) experience.

The findings reveal significant variations in years of experience across governorates and sectors, with the public sector generally characterized by longer experience and diverse distributions depending on the region.

Answer 2: Supervisor (Question No. 5)

Public Sector:

The supervisor observes a stable leadership structure due to the dominance of principals with extensive experience (over 25 years), leading to limited renewal in administrative methods. Provinces like Bekaa and Nabatieh show a high concentration of long-term experience.

Private Free Sector:

In this sector, there is a relative balance between age groups and experiences, but the majority have short-term experience (0-5 years) at 22.6%. This category is most noticeable in Beirut, while the South demonstrates dominance by long-term experiences.

Private Non-Free Sector:

The supervisor highlights flexibility in attracting new talents (24.8% with short experience), along with a significant proportion of very experienced individuals (21.4%). This reflects a balanced distribution between different generations and administrative diversity across regions.

UNRWA:

The supervisor notes a strong focus on long-term experiences in regions like the South, where 100% of supervisors have experiences ranging between 16-20 years, indicating administrative stability but limiting diversity in competencies.

Observations by Province:

- **Beirut and the South**: Strong administrative stability driven by a clear dominance of very experienced individuals.
- **Akkar**: High proportion of short-term experiences (50%-55.6%), indicating the presence of young, new competencies.
- **Bekaa**: Balanced distribution between short and very long-term experiences, reflecting leadership diversity.
- **Mount Lebanon (Suburbs)**: A blend of new and old staff creates a dynamic work environment.
- **Baalbek-Hermel**: Heavy focus on older, very experienced staff.

Comparative Conclusions by Province:

- **Public Sector**: Shows stability but struggles with limited renewal.
- **Private Free Sector**: Less stable, leaning towards newer competencies.
- **Private Non-Free Sector**: Displays a dynamic balance in experience distribution.
- **UNRWA**: Faces a significant lack of diversity but excels in administrative stability in the South.

General Conclusions:

The three sectors (public, free private, and non-free private) heavily rely on less experienced individuals (0-5 years), with the public sector having the highest percentage in the (0-10) years range and noticeable weakness in longer experience categories. Conversely, private education (free or non-free) shows relatively better representation of individuals with over 20 years of experience compared to the public sector.

Geographically, regions like the North and Nabatieh exhibit a significant deficit in long-term experiences in the public sector, while private education, especially in Beirut and areas like the South and Bekaa, maintains a stable and experienced cadre.

Challenges across sectors reveal a clear issue with professional accumulation and job stability, particularly in the public sector, which overly relies on new cadres, potentially weakening effective guidance and oversight due to a lack of accumulated leadership experience.

Answer 3: Coordinator (Question No. 5)

Public Educational Sector

In Beirut, 55.6% of coordinators have between 6-10 years of experience, and 22.2% have between 11-15 years. There are no coordinators with less than 6 years or more than 15 years of experience. This indicates that the public sector in Beirut heavily relies on coordinators with moderate experience, with a clear absence of new or very experienced coordinators. This may reflect limited opportunities for novice coordinators or a focus on stabilizing moderate-level competencies.

In Mount Lebanon suburbs, there is a more diverse distribution, with only 5.9% having 0-5 years of experience, while 35.3% have over 25 years of experience. This highlights a significant gap between new coordinators and those with extensive experience, potentially affecting continuity and knowledge transfer between generations.

In North Lebanon, the majority (37.3%) of coordinators have over 25 years of experience, indicating a strong concentration of highly experienced individuals. However, a small percentage of new coordinators may suggest a lack of fresh talent entering the educational sector, which could be influenced by social or economic challenges.

In Bekaa, there are no coordinators with less than 6 years of experience, indicating complete reliance on moderately and highly experienced staff. The focus is primarily on the 11-20 year range, reflecting stability in medium-level expertise without sufficient support for newcomers.

In South Lebanon, 40.5% of coordinators have more than 25 years of experience, reflecting a significant reliance on seasoned professionals. However, the absence of new coordinators could indicate challenges in attracting fresh talent or weaknesses in training and development programs.

Private Free Educational Sector

In Beirut, all coordinators have more than 25 years of experience, which reflects a high presence of seasoned professionals. This suggests that the free private sector relies entirely on experienced staff, with a complete absence of new coordinators. This could be linked to the lack of recruitment or development programs for newcomers or limited financial resources for training.

In Mount Lebanon suburbs, there is a significant proportion of new coordinators (0-5 years) at 60%. This indicates a dependence on younger, less experienced staff, potentially due to financial constraints or preference for cost-effective hiring. However, this also presents an opportunity for developing young talent through strong training and development programs.

Private Non-Free Educational Sector

CRDP   NatafBal
«Our learning community»

En partenariat
avec
RÉPUBLIQUE
FRANÇAISE
Liberté
Égalité
Fraternité

AFD
AGENCE FRANÇAISE
DE DÉVELOPPEMENT

In Beirut, there is a balanced distribution across different experience levels, with a notable 58.3% having between 16-20 years of experience. This reflects a focus on mid- to long-term experienced coordinators, maintaining a diverse pool of experienced staff.

Overall, this sector exhibits a significant presence of highly experienced coordinators, especially in Beirut where 58.3% have over 25 years of experience. This indicates a stable sector capable of attracting and retaining experienced professionals, but it requires ongoing investment in new talent to ensure long-term sustainability.

General Trends:
1. **public Sector**: Shows a strong focus on highly experienced coordinators (21+ years), with limited new coordinators. This points to a stable but somewhat stagnant workforce, highlighting a need for effective strategies to integrate and develop new talent.
2. **Private Free Sector**: Exhibits a more balanced distribution across various experience levels, but with a strong emphasis on novice coordinators at the beginning of their careers. Financial challenges may hinder attracting seasoned staff, but opportunities exist for nurturing young talent through robust training programs.
3. **Private Non-Free Sector**: Demonstrates a strong presence of experienced coordinators, especially in Beirut with 58.3% having over 25 years of experience. However, this sector needs to ensure long-term stability by investing in a balanced mix of new and experienced professionals.

Geographic Gaps:
Regions like Akkar rely heavily on younger coordinators (61.5% with less than 5 years of experience), whereas areas like South and North Lebanon show a strong presence of seasoned coordinators. These disparities reflect differences in resource availability and strategic priorities between regions.

Recommendations:
- Strengthen training and development programs, especially for novice coordinators in the public sector to ensure sustained quality.
- Provide financial incentives and training programs in the free private sector to attract and retain experienced professionals.
- Develop sustainability programs in the non-free private sector to maintain a balanced distribution of both experienced and novice coordinators.

Answer 4: Teacher (Question No. 5)

Distribution of Teachers by Years of Experience in the Educational Sector across Provinces
In Beirut, the public sector includes 43.3% of teachers with 11-15 years of experience. In the free private sector, the majority, 62.5%, have 0-5 years of experience, while in the non-free private sector, experience is more evenly distributed, with only 27.1% in the 0-5 years category.

In Mount Lebanon suburbs, the public sector has 30% of teachers with 11-15 years of experience, while the free private sector has 24.3% in both the 0-5 years and 6-10 years categories. The non-free private sector is heavily concentrated in the 0-5 years category at 26.6%.

In North Lebanon, the public sector focuses largely on teachers with 11-15 years of experience, at 36.3%, whereas the free private sector has 40% with 0-5 years of experience. The non-free private sector is evenly distributed among different experience levels, with 37% in the 0-5 years category.

In Bekaa, the public sector is dominated by teachers with 21-25 years of experience at 21.4%. The free private sector shows a high percentage of teachers with 0-5 years of experience at 44.1%, while the non-free private sector includes 25% in the 6-10 years category.

In South Lebanon, the public sector shows a strong presence of teachers in the 11-15 years category at 29.5%. The free private sector has 40% of teachers with over 25 years of experience, while the non-free private sector is dominated by teachers in the 0-5 years category at 46.9%.

In Nabatieh, the public sector leads with 29.5% of teachers in the 11-15 years category. The free private sector has a concentration in the 6-11 years category at 43.5%, while the non-free private sector is evenly split between the 6-10 years and 11-15 years categories at 25%.

In Akkar, the largest group of teachers in the public sector has 11-15 years of experience at 31.9%. The free private sector has 33.3% of teachers with 6-10 years of experience, while the non-free private sector is dominated by teachers with 0-5 years of experience at 59.4%.

Overall, the most common experience category among teachers in Lebanon is 11-15 years, comprising 23.6% of all teachers. The private sector shows a higher proportion of teachers with less experience (0-5 years) compared to the public sector, which focuses more on mid to high-level experienced teachers. Rural provinces like Bint Jbeil and Akkar exhibit a higher percentage of experienced teachers.

General Conclusions

The results reveal significant variations in the distribution of teachers by years of experience between the public and private sectors across different Lebanese provinces. The public sector tends to concentrate on teachers with moderate experience (11-15 years), whereas the private sector has a greater emphasis on those with less experience (0-5 years). Rural provinces like Bint Jbeil and Akkar show a notable presence of highly experienced teachers. The results also highlight the need for developing training programs for new teachers and providing incentives for experienced educators, particularly in rural areas. Additionally, balancing resources between the public and private sectors is essential to improving educational quality.

Recommendations:

- Invest in training programs for new teachers to support them during their early years in the profession.
- Provide financial and moral incentives for experienced teachers to retain high-level professionals, especially in rural provinces.
- Reallocate resources between the private and public sectors to achieve a balanced improvement in educational quality.
- Offer regular professional development programs for all age groups to enhance teaching efficiency.

▪ Other Years of Experience

Answer 1: Principal (Question No. 6)

This item highlights the distribution of principals based on administrative experience across different sectors as follows:

- **In the public sector**, the total number of principals is 147. The distribution of experience is as follows:
    - 0-5 years: 56 principals (38.1% of the public sector, 20.1% of the total).
    - 6-10 years: 52 principals (35.4% of the public sector, 18.6% of the total).
    - 11-15 years: 21 principals (14.3% of the public sector, 7.5% of the total).
    - 16-20 years: 12 principals (8.2% of the public sector, 4.3% of the total).
    - 21-25 years: 3 principals (2% of the public sector, 1.1% of the total).

- Over 25 years: 3 principals (2% of the public sector, 1.1% of the total).

Conclusions show that principals with short experience (0-5 years and 6-10 years) make up approximately 73.5% of the public sector, while principals with extensive experience (over 20 years) constitute a very small percentage, less than 4%.

- **In the free private sector**, the total number of principals is 30. The distribution of experience is as follows:
  - 0-5 years: 1 principal (3.3% of the free private sector, 0.4% of the total).
  - 6-10 years: 3 principals (10% of the free private sector, 1.1% of the total).
  - 11-15 years: 5 principals (16.7% of the free private sector, 1.8% of the total).
  - 16-20 years: 4 principals (13.3% of the free private sector, 1.4% of the total).
  - 21-25 years: 4 principals (13.3% of the free private sector, 1.4% of the total).
  - Over 25 years: 13 principals (43.3% of the free private sector, 4.7% of the total).

The results indicate that principals with extensive experience (over 25 years) represent the largest group at 43.3%, while those with moderate experience (11-25 years) also constitute around 43.3%.

- **In the non-free private sector**, the total number of principals is 98. The distribution of experience is as follows:
  - 0-5 years: 23 principals (23.5% of the non-free private sector, 8.2% of the total).
  - 6-10 years: 19 principals (19.4% of the non-free private sector, 6.8% of the total).
  - 11-15 years: 15 principals (15.3% of the non-free private sector, 5.4% of the total).
  - 16-20 years: 6 principals (6.1% of the non-free private sector, 2.2% of the total).
  - 21-25 years: 11 principals (11.2% of the non-free private sector, 3.9% of the total).
  - Over 25 years: 24 principals (24.5% of the non-free private sector, 8.6% of the total).

There is an imbalance where short-experience principals (0-5 years) constitute the largest group at 23.5%, while those with extensive experience (over 25 years) represent 24.5%.

- **In the UNRWA sector**, the total number of principals is 4. The distribution of experience is as follows:
  - 0-5 years: 1 principal (25% of UNRWA, 0.4% of the total).
  - 6-10 years: 2 principals (25% of UNRWA, 0.4% of the total).
  - 21-25 years: 2 principals (50% of UNRWA, 0.7% of the total).

The overall total number of principals across all sectors is 279. The distribution of experience is:

- 0-5 years: 81 principals (29%).
- 6-10 years: 75 principals (26.9%).
- 11-15 years: 41 principals (14.7%).
- 16-20 years: 22 principals (7.9%).
- 21-25 years: 20 principals (7.2%).
- Over 25 years: 40 principals (14.3%).

Overall, principals with short experience (0-10 years) make up approximately 55.9% of the total. Those with over 25 years of experience constitute 14.3%. The public sector dominates with short-experience principals, while the free private sector holds the largest share of experienced principals. The non-free private sector presents a balanced distribution across various experience levels. The UNRWA sector leans towards principals with experience between 21-25 years. Principals with 6-10 years of experience are prevalent in most provinces.

Answer 2: Supervisor (Question No. 6)

This reflects the different distributions of administrative experience among supervisors across official, private, and UNRWA sectors, showing significant regional disparities.

- **In the public sector**, there is a dominance of newer professionals (0-10 years), accounting for 71.9%, indicating a heavy reliance on individuals with limited experience. Only 8.3% have over 20 years of experience. Geographic disparities are evident, with northern and Nabatieh regions showing a high concentration of less experienced supervisors, with over 50% having less than 10 years of experience. In contrast, Bint Jbeil and the south display more balanced distributions with fewer newer professionals compared to other regions.
- **In the free private sector**, there is a clear dominance of newer professionals, with 48.4% having 0-5 years of experience, reflecting heavy reliance on recent graduates. There is variability in the representation of middle and long-term experience, with Beirut showing the highest representation in the 21-25 years category at 100%.
- **In the non-free private sector**, there is a significant concentration of new professionals at 50.4% (0-5 years), with a relatively small presence of long-term experienced supervisors at 10.3%. Regional variations show stronger presence of newer professionals in Mount Lebanon and the north, while more balanced distributions are seen in Bekaa and Akkar, with varied experience levels.
- **In the UNRWA sector**, there is a notable variety in the distribution of administrative experience, with a clearer representation of middle and long-term experience compared to other sectors. In the south, all supervisors fall within the 0-5 years category.

Overall, the public sector predominantly focuses on newer professionals, while the non-free private sector shows greater diversity in experience. Beirut has the highest representation of long-term experienced supervisors, whereas northern and Nabatieh regions show a clear focus on newer professionals.

Answer 3: Coordinator (Question No. 6)

In Beirut, the highest percentages in the public education sector were concentrated in the 0-5 years of experience category at 44.4%, while the highest percentage in the free private sector was 100% for the 6-10 years category. In the non-free private sector, the distribution was evenly split between 0-5 and 6-10 years, at 33.3% each.

In Mount Lebanon suburbs, the public education sector showed the highest percentage in the 6-10 years category at 35.3%. The free private sector was concentrated at 60% in the 0-5 years category, while the non-free private sector had a relatively balanced distribution with the highest percentage in the 0-5 years category at 32.6%.

In Mount Lebanon excluding suburbs, the public education sector had the highest percentage in the 0-5 years category at 41.0%, while the free private sector had a more balanced distribution across age groups, and the non-free private sector showed the highest percentage in the 0-5 years category at 36.8%.

In the north, the public education sector was concentrated in the 0-5 years category at 47.5%, the free private sector had the highest percentage in the 6-10 years category at 75%, and the non-free private sector had a higher distribution in the 0-5 years category at 32.3%.

In Bekaa, the public education sector concentrated the highest percentages in the 6-10 years category at 40%, while the free private sector was evenly distributed between 0-5 and 6-10 years at 50% each, and the non-free private sector had the highest percentage in the 6-10 years category at 43.8%.

In the south, the public education sector was concentrated in the 0-5 years category at 47.6%, while the free private sector was at 60% in the 0-5 years category. The non-free private sector had the highest percentage in the 0-5 years category at 50%.

In Nabatieh, the public education sector recorded a significant percentage in the 0-5 years category at 75%. The free private sector had equal percentages in both 0-5 and 21-25 years categories at 50% each, while the non-free private sector showed the highest percentage in the 0-5 years category at 45.5%.

In Akkar, the public education sector had a significant percentage in the 0-5 years category at 61.5%, while the free private sector was at 66.7% in the 0-5 years category. The non-free private sector also had a high distribution in the 0-5 years category at 61.5%.

In Bint Jbeil, the public education sector dominated the 0-5 years category at 72.2%, the free private sector was evenly split between 0-5 and 6-10 years at 50% each, and the non-free private sector recorded the highest percentage in the 0-5 years category at 45.5%.

The analysis shows that the distribution of experience levels varies significantly between sectors and regions. The public education sector consistently holds the largest share of those with short experience (0-5 years), while there is a more balanced distribution in the free and non-free private sectors.

Section Two: The General Readiness of the School

Question : Availability of projectors (LCD) in classrooms
Cycle : Kindergartens
First Response : Principal (Question No. 16)

Based on schools principals' responses,
Public Sector:
The public sector suffers from a shortage of LCD projectors. In Beirut, 50% of classrooms lack projectors, with the remaining percentages evenly distributed among other categories. In Mount Lebanon suburbs, 54.5% of classrooms report projectors as "unavailable (on demand)," reflecting a significant infrastructure deficiency. In the North, there is a more balanced distribution, with 31.4% of classrooms "unavailable" and 20% "fully available." Baalbek-Hermel stands out compared to other regions in the public sector, where availability in "most classrooms" and "all classrooms" reaches 36.4%.

Free Private Sector:
There is notable variation between regions. In Beirut and Akkar, there is a significant contrast between 100% full availability and complete unavailability. On the other hand, the South demonstrates very strong performance, with 100% full availability. Some areas, like Mount Lebanon (excluding suburbs), rely solely on the "unavailable (on demand)" category, indicating a lack of unified policies in this sector.

Paid Private Sector:
The paid private sector offers a positive model regarding the availability of projectors. In Mount Lebanon (excluding suburbs), 80% of classrooms report availability in "all classrooms," reflecting strong investments in this sector. The South also shows good percentages, with 42.9% of classrooms having projectors "in all classrooms," while the North shows more moderate levels with 30.8% "fully available." The paid private sector stands out as the most stable and well-equipped sector.

UNRWA Schools:
UNRWA schools significantly lack projectors in some areas, like the North, where the "unavailable" rate reaches 100%. In the South, the situation is slightly better, with a balanced distribution of 50% each for "unavailable" and "available in most classrooms." This disparity highlights uneven support and funding for these schools depending on the region.

Comparison of Governorates:
The results show clear disparities, reflecting gaps between sectors and regions regarding LCD projector availability.
- Beirut struggles with a clear shortage in the public sector, where the "unavailable" rate reaches 50%, highlighting weak infrastructure availability. The paid private sector performs moderately, with 33.3% of classrooms "partially available," while the free private sector

achieves complete success with 100% "fully available." This reflects the private sector's superiority over the public sector in Beirut regarding equipment availability.

- Mount Lebanon suburbs show similar disparities, with the public sector experiencing acute shortages as 54.5% of classrooms indicate "unavailable (on demand)." The paid private sector records good availability rates at 33.3%. UNRWA schools present a positive model, with 100% of devices "available in most classrooms," indicating partial investments supporting this sector.
- The North emerges as one of the most challenging regions, with the public sector experiencing high "unavailable" rates of 31.4%. Nevertheless, 20% of classrooms in the public sector have devices "fully available." The paid private sector achieves relative balance, with 30.8% "available in all classrooms," while UNRWA schools suffer from total shortages, with the "unavailable" rate reaching 100%.
- The South presents a more positive picture, with the public sector showing a balance between categories, with 20% of classrooms "available in all classrooms." The paid private sector excels with strong performance, achieving 42.9% full availability. The free private sector outshines others, with availability rates reaching 100% "fully available," reflecting significant investments in this region.
- Baalbek-Hermel performs remarkably well compared to other governorates. The public sector shows significant progress, with 36.4% of classrooms "available in most classrooms" and 36.4% "fully available." The paid private sector also yields strong results, with 60% of classrooms having devices "fully available." However, UNRWA schools in this region lack reliable data for performance evaluation.

Conclusion:

The comparison of educational sectors and Lebanese governorates highlights significant disparities in LCD projector availability. The paid private sector leads overall performance due to strong investments, while the public sector and UNRWA schools suffer from notable shortages. The South and Bekaa emerge as the most successful regions, whereas Beirut and the North show low percentages in the public sector. To achieve comprehensive improvement, efforts should focus on supporting weaker regions and unifying policies in sectors with substantial disparities.

Second Response : Supervisor (Question No. 8)

General Situation:

Public Sector:

The majority of supervisors (27.2%) report a complete absence of LCD projectors in kindergarten classrooms, while 21.2% indicate they are unavailable but can be requested, highlighting challenges in classroom equipment. Nevertheless, 22.6% of supervisors stated that projectors are available in all classrooms, and 14.3% reported availability in most classrooms. Some governorates, such as the South (37.5%) and Mount Lebanon (excluding suburbs) (30.4%), show relatively positive rates of full availability.

Free Private Education:

The availability rate of LCD projectors in all classrooms stands at 32.3%, with 16.1% reporting unavailability and 9.7% reporting unavailability but available on demand. Beirut shows full availability (100%), while areas such as Baalbek-Hermel suffer from a complete absence of devices.

Paid Private Education:

The rate of full availability is 39.3%, with 11.1% reporting unavailability and 15.4% reporting unavailability but available on demand. Mount Lebanon (excluding suburbs) stands out with the highest rate (75%), while Beirut faces nearly equal rates of availability and absence, being among the least-equipped governorates, with full availability in only 11.1% of classrooms.

UNRWA:

UNRWA schools face disparities in availability across regions, with unavailability at 66.7% and partial availability at 33.3%. There are clear challenges in securing full access to devices.

Key Observations by Governorates and Sector:
Public Sector:
- **Best areas for full availability:** South (37.5%) and Mount Lebanon (excluding suburbs) (30.4%).
- **Worst areas for full availability:** Baalbek-Hermel (5.9%) and Akkar (18.4%).

Free Private Education:
The availability rate of LCD projectors in all kindergarten classrooms within free private education is 32.3%, higher than in public education (22.6%).
- **Best areas for full availability:** Beirut (100%), Mount Lebanon (excluding suburbs) (75%), and Mount Lebanon suburbs (60%).
- **Worst area for full availability:** Baalbek-Hermel (0%).

Paid Private Education:
The availability rate of LCD projectors in all kindergarten classrooms within paid private education is 39.3%, higher than in both free private education (32.3%) and public education (22.6%).
- **Best areas for full availability:** Mount Lebanon (excluding suburbs) (75%) and North (50%).
- **Worst areas for full availability:** Akkar (0%) and Beirut (11.1%).

UNRWA:
- **Mount Lebanon (suburbs):**
  - 50% reported projectors are unavailable.
  - 50% reported partial availability.
- **South:**
  - 100% reported projectors are unavailable.

Comparative Conclusion Across Sectors and Governorates:
- **Paid private education** ranks the highest in equipping classrooms with LCD projectors, followed by **free private education**, and lastly the **public sector**.
- Beirut and Mount Lebanon are generally the best-equipped regions, while areas such as Baalbek-Hermel and Akkar suffer from severe shortages across all sectors.
- UNRWA faces significant challenges in all governorates, with a near-total absence of projectors in the South.

Third Response : Coordinator (Question No. 8)

The distribution of LCD projectors in classrooms across educational sectors and various regions reflects significant disparities in availability based on coordinators' responses.

In the **public sector**, data reveals clear variations between governorates. In Beirut, the availability rate is 33.3% in all classrooms, indicating good availability. In Mount Lebanon (suburbs), rates range from 11.8% to 35.3%, with the highest being 35.3% for devices available in most classrooms. In Mount Lebanon (excluding suburbs), the figures indicate only 2.6% availability in all classrooms, the lowest among all governorates. In the North, availability ranges from 20.3% to 23.7%, highlighting notable variability. In the Bekaa region, availability rates range from 15.0% to 35.0%. In the South, rates range from 11.9% to 35.7%, with relatively strong presence in most classrooms. In Nabatiyeh, the highest availability in all classrooms is 25.0%. In Akkar, availability rates range between 19.2% and 34.6%.

In the **free private sector**, data shows devices are present in all classrooms across several governorates. In Beirut, devices are available in all classrooms at 100%. In Mount Lebanon (suburbs), availability stands at 80.0% in most classrooms. In Mount Lebanon (excluding suburbs), rates range from 20.0% to 60.0%. In the North, devices are 50.0% available in all classrooms. In the Bekaa region, the availability is evenly split between 50.0% for partially available devices and 50.0% for devices available in most classrooms. In the South, availability rates are 20.0% and 80.0% in classrooms. In Nabatiyeh, devices are 100% available. Finally, in Akkar, rates are distributed between 33.3% and 66.7%.

In the **paid private sector**, the distribution also highlights notable disparities. In Beirut, rates range from 16.7% to 25.0% for available devices. In Mount Lebanon (suburbs), rates vary between 6.5% and 50.0%, reflecting significant diversity in availability. Mount Lebanon (excluding suburbs) reports a

near 74.0% availability rate for devices in most classrooms. In the North, rates range from 9.7% to 35.5%. In the Bekaa region, rates range from 6.3% to 50.0%. In the South, devices are available in 33.3% of all classrooms. In Nabatiyeh, rates range from 27.3% to 54.5%. In Akkar, rates vary between 7.7% and 84.4%.

In **UNRWA schools**, devices are available at a rate of 50.0% in the North and 100% in most other governorates.

Conclusion

The data indicates significant disparities in the availability of LCD projectors across educational sectors and regions.

- In the **public sector**, many governorates report low availability rates, with Mount Lebanon (excluding suburbs) having the lowest at 2.6%.
- In the **free private sector**, devices are 100% available in Beirut and Nabatiyeh, reflecting better availability in this sector.
- In the **paid private sector**, notable variations in availability are observed, with Mount Lebanon (excluding suburbs) reaching 74%.
- **UNRWA schools** show good availability rates, reaching 100% in most governorates.

Overall, the **free private sector** enjoys the highest availability rates compared to other sectors, highlighting a gap in resources between the public and private sectors.

Fourth Response : Teacher (Question No. 7)

Details of LCD projector availability in kindergarten classrooms by governorate and educational sector based on teachers' responses .

Beirut Governorate:
- **Public Sector:** 36.7% of classrooms lack projectors, while only 23.3% are fully equipped.
- **Free Private Sector:** 37.5% of classrooms are mostly equipped, and 25% lack projectors.
- **Paid Private Sector:** 39% of classrooms are partially equipped, and 11.9% are fully equipped.

Mount Lebanon (Suburbs):
- **Public Sector:** 50% of classrooms are fully equipped, and 16.7% lack projectors.
- **Free Private Sector:** 56.8% of classrooms are fully equipped, and 21.6% lack projectors.
- **Paid Private Sector:** 45.5% of classrooms are fully equipped, and 21.2% are partially equipped.

Mount Lebanon (Excluding Suburbs):
- **Public Sector:** 34.1% of classrooms are fully equipped, and 14.6% lack projectors.
- **Free Private Sector:** 54.8% of classrooms are fully equipped, and 16.1% lack projectors.
- **Paid Private Sector:** 58.1% of classrooms are fully equipped.

North Governorate:
- **Public Sector:** 34.4% of classrooms are fully equipped, and 18.9% lack projectors.
- **Free Private Sector:** 47.5% of classrooms are partially equipped, and 30% lack projectors.
- **Paid Private Sector:** 38% of classrooms are fully equipped.

Bekaa Governorate:
- **Public Sector:** 42.9% of classrooms are fully equipped, and 13.3% lack projectors.
- **Free Private Sector:** 35.5% of classrooms are fully equipped, and 26.5% lack projectors.
- **Paid Private Sector:** 39.3% of classrooms are fully equipped.

South Governorate:
- **Public Sector:** 38.5% of classrooms are fully equipped, and 14.8% lack projectors.
- **Free Private Sector:** 60% of classrooms are partially equipped, and 20% lack projectors.
- **Paid Private Sector:** 43.8% of classrooms are partially equipped.

Nabatiyeh Governorate:
- **Public Sector:** 31.3% of classrooms are fully equipped, and 16.1% lack projectors.
- **Free Private Sector:** 56.5% of classrooms are partially equipped, and 26.1% lack projectors.
- **Paid Private Sector:** 68.8% of classrooms are fully equipped.

Akkar Governorate:
- **Public Sector:** 26.5% of classrooms are fully equipped, and 25.9% lack projectors.
- **Free Private Sector:** 33.3% of classrooms are fully equipped, and 23.8% lack projectors.
- **Paid Private Sector:** 45.3% of classrooms are partially equipped.

Baalbek-Hermel Governorate:
- **Public Sector:** 26% of classrooms are fully equipped, and 19.5% lack projectors.
- **Free Private Sector:** 60% of classrooms are partially equipped.
- **Paid Private Sector:** 27.8% of classrooms are fully equipped.

Conclusion:

The data reveals significant disparities in LCD projector availability in kindergarten classrooms across Lebanese governorates and educational sectors.
- In the **public sector**, only 34% of classrooms are fully equipped, with Beirut showing one of the lowest preparedness levels (36.7% of classrooms lack projectors).
- The **paid private sector** demonstrates the highest readiness, with 37.3% of classrooms fully equipped, particularly in areas like Mount Lebanon (excluding suburbs) at 58.1%.
- The **free private sector** also shows variability, with full equipment rates ranging from 30.1% to 56.8% depending on the governorate.

Notably, rural areas such as Akkar and Baalbek-Hermel suffer from severe shortages, highlighting the need for increased funding and support to enhance classroom readiness and integrate technology into education.

Availability of projectors LCD in classrooms
First Cycle of basic Education
First response : Principal (Question No. 16)

In the public sector, the data from principals' responses shows that 46.9% of schools fully provide LCD projectors in all classrooms. However, 16.3% of schools lack these devices entirely. Other percentages vary, with 8.8% of schools providing devices in some classrooms and 13.6% offering them in most classrooms. Governorates such as Baalbek-Hermel lead with 54.5% of schools fully equipped, compared to Beirut, where the rate is 50%.

In the free private sector, there is significant variability in availability. Only 26.7% of schools provide devices in all classrooms, while 43.3% have intermittent availability. Governorates such as Mount Lebanon suburbs show moderate rates compared to areas like the South, which report much lower rates of full availability.

The paid private sector shows varying performance across governorates. For example, based on principals' responses, 32.7% of schools fully provide devices, while 28.6% offer partial or limited availability. Governorates such as Mount Lebanon (excluding suburbs) lead with 80% full availability, whereas the North and Akkar show lower rates.

In UNRWA schools, full device availability is reported at 50% in all classrooms. However, clear gaps exist in governorates such as the South and Mount Lebanon suburbs, where medium availability rates are observed.

Comparison by Governorates:

Beirut: The data shows that 27.8% of schools provide LCD projectors in all classrooms, with better performance in the paid private sector compared to the public sector.

Mount Lebanon: Significant disparities exist between areas, with full availability reaching 59.4% in areas outside the suburbs, compared to only 30.6% in the suburbs, highlighting the need for targeted interventions to improve availability in surrounding areas.

North Governorate: The public sector reports 38.2% full availability, with significant challenges in other sectors relying on partial or limited availability.

Bekaa Governorate: Outperforms most other areas with 48% full availability. However, the free private sector struggles with notable shortages, focusing more on other sectors.

South Governorate: Only 36% of schools provide devices fully, with many schools relying on partial or limited availability.

Nabatiyeh: Slight improvement with 32.1% full availability, though partial availability remains a challenge.

Akkar: Only 28.6% of schools fully provide devices, with high rates of limited availability, indicating a clear shortage of equipment.

Baalbek-Hermel: Leads with the highest rate of full availability at 57.9%, making it one of the top-performing areas. However, shortages in other sectors remain a significant challenge.

Conclusion:

There are significant disparities in the availability of LCD projectors across governorates and educational sectors.

The **public sector** suffers from notable shortages compared to the private sector.

The **free private sector** shows significant variability, with low full availability rates in some governorates.

The **paid private sector** performs better overall, though disparities persist based on location.

UNRWA schools demonstrate relatively balanced performance but require improved coverage in certain areas.

While Baalbek-Hermel and Bekaa lead in full availability, areas like Akkar and the South face significant shortages. These gaps highlight the need for comprehensive plans targeting underserved areas, with additional resources allocated to public and rural sectors to enhance equity in technology access.

Second Response: Supervisor (Question No. 8)

Overall Situation

Public Sector:

The data indicates that the availability of LCD projectors in first-cycle primary education classrooms in the public sector is insufficient, with only 37.3% of school supervisors confirming full availability. Additionally, 15.2% reported a complete lack of devices, and 14.7% indicated availability upon request. Governorates with the highest rates of full availability include Bekaa (50%) and Nabatiyeh (47.8%), while Baalbek-Hermel records the lowest at 17.6% for full device availability in all classrooms. This overall situation reflects challenges related to equitable distribution of devices across all regions.

Free Private Sector:

The free private sector faces a significant shortage in full device availability, with 45.2% of school supervisors reporting partial availability only, and 29% confirming full availability—a lower percentage compared to the public sector (37.3%). Beirut registers the highest rate of full device availability (100%), while other regions such as Baalbek-Hermel suffer from complete device absence (100%). This indicates a critical need for infrastructure improvement.

Paid Private Sector:

The paid private sector shows relatively better performance compared to other sectors, with 37.6% of classrooms fully equipped. However, there is significant regional disparity, with Beirut experiencing balanced rates between partial availability (22.2%) and non-availability (22.2%).

UNRWA:

This sector faces significant disparities in device availability by region, with 66.7% reporting non-availability and 33.3% reporting partial availability, highlighting considerable challenges in securing full device provision.

Observations by Governorates:

Beirut: Shows high rates of full availability in public education (36.4%) and free private education (100%), but experiences notable shortages in fully equipped classrooms in the paid private sector.

Mount Lebanon (Suburbs): Faces challenges with low full availability (29.4%) in public education and 60% in free private education.

Mount Lebanon Excluding Suburbs: Exhibits good full availability rates (43.5%) in public education, second highest in full availability (75%) in free private education, and the highest rate (83.3%) in fully equipped classrooms in paid private education.

North: Records good rates in public education (47.4%), but heavily relies on partial availability in free private education (80%).

Bekaa: Leads with the highest full availability in public education (50%) but relies significantly on partial availability in free private education (66.7%).

South: Shows a good rate in public education (40.6%), but faces balanced rates between partial and non-availability in free private education (50%), with a minimal rate of full availability (14.3%) in paid private education.

Nabatiyeh: Registers good full availability in public education (47.8%) but relies heavily on partial availability in free private education (66.7%), with the second highest full device availability (60%) in paid private education.

Baalbek-Hermel: Records the lowest rates in the public and free private sectors, with a moderate rate in paid private education (36.4%) for full device availability, indicating a severe infrastructure gap.

Akkar: Faces similar challenges to Baalbek-Hermel, with low full availability rates across sectors.

Conclusion:

The public sector suffers from a general lack of device availability compared to the paid private sector. Beirut and Bekaa show relatively better full availability, while Baalbek-Hermel and Akkar have the lowest rates across all sectors.

There is a clear gap in device availability between urban and rural areas, requiring more equitable resource distribution strategies in education.

Third Response : Coordinator (Question No.8)

Public Education Sector

Beirut: Based on coordinators' responses, the devices availability in the capital varies; 33.3% of schools have partial access, while 33.3% report full availability, indicating a high level of access.

Mount Lebanon (Suburbs): A high level of device availability is observed in most schools, with 41.2% of coordinators reporting full availability, though 5.9% still lack devices.

North: Approximately 33.9% of schools have full device availability, while 27.1% report partial availability.

Bekaa: Most schools have full service availability (60%), with a slight deficit of 5%.

South: Balanced availability, with 52.4% of schools fully equipped, and 19% partially equipped.

Free Private Schools

In free private schools, regions like Beirut and Mount Lebanon show strong device availability. For example, Beirut schools provide 33.3% full device availability across all grades, while 22.2% face shortages.

In the North, partial availability is more common (33.9%) compared to the South, where most schools offer full device availability (52.4%).

Paid Private Schools

This sector shows variability in device availability, though Bekaa has relative stability (60%) in most schools, while the South offers 52.4% full device availability.

In Mount Lebanon and the North, device availability in private institutions stands at 41.2% and 33.9%, respectively.

Overall, device availability is moderate in most governorates, with regions like Beirut and Mount Lebanon demonstrating strong availability.

Conclusion

Public Sector:

Beirut: 33.3% of schools have devices in all grades.

North and South: Availability varies, with some regions having low access (around 10-20%), while others like Bekaa provide better access in most grades.

Free Private Sector:

Device availability is high, particularly in Mount Lebanon, where 80% of schools report full device availability.

Paid Private Sector:

There are some discrepancies, with regions like the South showing lower availability, whereas schools in the North report higher availability.

Fourth Response : Teacher (Question No. 8)

Statistics regarding the availability of LCD projectors in the first cycle of basic education classrooms show significant variation across different governorates and sectors as cited in the teachers' responses.

In Beirut, 30% of classrooms are not equipped with projectors, while only 33.3% are fully equipped. In the free private sector, 37.5% of classrooms are mostly equipped, and 25% are not equipped at all. In the paid private sector, 37.3% of classrooms are partially equipped, with only 13.6% fully equipped.

In Mount Lebanon - Suburbs, 58.3% of classrooms are fully equipped, while only 10% are not equipped at all. The free private sector in this region has projectors in 56.8% of classrooms, and 24.3% are not equipped. In the paid private sector, 43.7% of classrooms are fully equipped.

In Mount Lebanon - excluding suburbs, 46.3% of classrooms are fully equipped, while 11% are not equipped. The free private sector provides projectors in 71% of classrooms, with only 6.5% not equipped. In the paid private sector, 53.2% of classrooms are fully equipped.

In the North, 43.7% of classrooms are fully equipped, while only 11.9% are not equipped. The free private sector has partial equipment in 62.5% of classrooms, and 15% are not equipped. In the paid private sector, 35% of classrooms are fully equipped.

In the Bekaa, 52% of classrooms are fully equipped, with only 11.2% not equipped. The free private sector provides projectors in 32.4% of classrooms, and 26.5% are partially equipped. In the paid private sector, 37.5% of classrooms are fully equipped.

In the South, 51.6% of classrooms are fully equipped, while 8.2% are not equipped. The free private sector has partial equipment in 60% of classrooms, whereas the paid private sector has 46.9% fully equipped.

In Nabatieh, 33.9% of classrooms are fully equipped, with only 7.1% not equipped. The free private sector has partial equipment in 60.9% of classrooms, and 17.4% are not equipped at all. In the paid private sector, 65.6% of classrooms are fully equipped.

In Akkar, 39.8% of classrooms are fully equipped, while 15.1% are not equipped. The free private sector provides projectors in 23.8% of classrooms, while the paid private sector has 50% fully equipped.

In Baalbek-Hermel, only 26% of classrooms are fully equipped, with 15.6% not equipped. The free private sector has partial equipment in 60% of classrooms, and the paid private sector provides projectors in 30.6% of classrooms.

Based on these statistics, there is a significant disparity in the availability of projectors across governorates, highlighting the need for measures to improve distribution in less-equipped regions.

Availability of projectors LCD in the classrooms

Second Cycle of basic Education

First Response : Principal (Question No. 16)

The public sector: Displays a clear disparity in projector availability across governorates as per principals' responses.

Beirut achieves a relatively high availability rate, with 50% of classrooms "fully available." In Mount Lebanon suburbs, the highest percentage (36.4%) falls under the "not available (on demand)" category, with only 27.3% "fully available." The North records a good percentage of full availability (45.7%),

while Bekaa excels with 76.9% "fully available." Nabatieh provides a balanced distribution, with 43.8% full availability, while Baalbek-Hermel leads with 63.6% of classrooms "fully available."

Free private sector: There is a significant variation between regions. In Beirut, all classrooms (100%) are "fully available," whereas areas like Mount Lebanon suburbs and areas excluding suburbs have moderate full availability rates (25%-75%). The North suffers from a clear shortage, with 50% of classrooms "not available (on demand)," while Bekaa shows equal distribution among categories. The South demonstrates exceptional results with 100% of classrooms "fully available," while Nabatieh offers a partial availability rate of 83.3%.

Non-free private sector: Exhibits relative superiority in all regions. In Beirut, 44.4% of classrooms have partial equipment, while in Mount Lebanon excluding suburbs, the full availability rate reaches 80%. The North performs well, with 46.2% partial availability, whereas Bekaa presents a balance between partial and full availability. The South shows moderate results, with 28.6% "fully available," while Baalbek-Hermel offers a strong performance at 60% "fully available."

UNRWA schools face clear shortages in some regions. In Mount Lebanon suburbs, 100% of classrooms have "fully available" equipment, while the North experiences a complete absence with 100% "not available." The South provides a moderate performance, balancing partial and full availability at 50% for each category.

Comparison by governorates: Comparing governorates, Bekaa and Baalbek-Hermel lead in projector availability, with full availability rates of 76.9% and 63.6%, respectively, in the public sector. Beirut offers a good performance in the public sector with 50% "fully available," while Akkar and Mount Lebanon suburbs show moderate full availability rates of 35% and 27.3%, respectively. The North presents a balance with good full availability (45.7%) in the public sector, alongside clear shortages in UNRWA schools. The South provides a balanced performance, with 53.3% of classrooms "fully available" in the public sector and 100% in the free private sector, reflecting significant investments in this region. Nabatieh offers moderate partial and full availability across sectors, excelling notably in the free private sector. On the other hand, UNRWA schools show significant disparities, with the North facing complete absence of equipment, while the South achieves positive results.
Conclusion: The data reflects significant disparities in LCD projector availability across governorates. Bekaa and Baalbek-Hermel lead in device availability in the public sector, while the North and UNRWA schools face clear shortages. The non-free private sector provides a distinguished model for full availability, especially in Mount Lebanon excluding suburbs. To ensure improvement across all regions, investments in the North and UNRWA schools should be a priority, leveraging successful models from the South and Bekaa.

Second Response: Supervisor (Question No. 8)

Overall Situation based on supervisors' responses.
Public Sector:
Data from supervisors shows that 41.0% of classrooms are fully equipped with LCD projectors, while 15.2% report no availability at all. The remaining percentage ranges between partial availability or devices being on-demand. Regions with the best equipment include Nabatieh (56.5%), North, and Bekaa (50%). The least equipped regions are Baalbek-Hermel (17.6%) and Mount Lebanon suburbs (29.4%).
Free Private Sector:
The majority of supervisors (48.9%) reported partial availability of projectors (devices are shared between classrooms), while only 25.8% of classrooms are fully equipped. The best regions include Mount Lebanon excluding suburbs (75%) and suburbs (60%), whereas Baalbek-Hermel reported the highest lack of availability (100%).

Non-Free Private Sector:
Only 36.8% of classrooms are fully equipped, which is higher than the free private sector (25.8%) but lower than the public sector (41%). Conversely, 54.7% experience either partial or no availability. Mount Lebanon excluding suburbs has the highest availability (83.3%), whereas regions like Akkar, Beirut, and the South show low rates of full classroom equipment.

Governorates

Public Sector:
There is progress in regions like Nabatieh, Bekaa, and North, with notable gaps in Baalbek-Hermel. This highlights significant challenges in equipping classrooms.

- Best regions for full equipment:
  Nabatieh: (56.5%),
  Bekaa: (50%),
  North: (50%).
- Least equipped regions:
  Beirut: (36.4%),
  Akkar: (34.2%),
  Mount Lebanon suburbs: (29.4%),
  Baalbek-Hermel: (17.6%).

Free Private Sector:
There is a noticeable lack of equipment, except in regions like Mount Lebanon excluding suburbs.

- Best regions for full equipment:
  Mount Lebanon excluding suburbs (75%) shows remarkable progress compared to other governorates,
  Suburbs: (60%),
  Beirut: (100%) reports the highest availability in most classrooms.
- Least equipped regions:
  Baalbek-Hermel (100%) with the highest rate of non-availability, showing a dire need for improvement.

Non-Free Private Sector:
Shows a wider variation between regions, with generally better equipment compared to the free sector.

- Best regions for full equipment:
  Mount Lebanon excluding suburbs: (83.3%),
  Nabatieh: (60%).
- Least equipped regions:
  Akkar: (0%),
  Beirut: (11.1%),
  South: (14.3%).

UNRWA

- Mount Lebanon suburbs: 50% reported no availability of projectors, and 50% reported partial availability.
- South: 100% reported no availability of projectors.

Final Notes:
UNRWA schools face significant shortages in LCD projectors in second-cycle classrooms, with 66.7% of supervisors confirming no availability of devices.

Third Response : Coordinators (Question No. 8)

The second cycle of basic education shows a more consistent availability of LCD projectors, although some gaps persist in remote areas as cited by coordinators.

Public Sector (Public Schools):

- **Beirut** maintains strong performance with 33.3% of schools offering full services.
- **Mount Lebanon** shows a consistent percentage of 41.2%, with only 5.9% of schools reporting a lack of devices.

- **North** provides 33.9% of schools with full services, but 27.1% offer only partial services.
- **Bekaa** stands out as a region with a robust educational infrastructure, offering 60% of schools full services.

Free Private Sector (Private Schools):
- **Beirut** and **Mount Lebanon** show significant service availability, with a high proportion of schools providing full coverage.
- In **South** and **North**, a high level of services is maintained, though some variation exists with 33.9% offering only partial services.

Non-Free Private Sector (Private Schools):
- In **North** and **Mount Lebanon**, schools offer strong services across most classrooms.
- **South** provides good performance, with 52.4% of schools offering full services, though some schools face partial shortages (19%).

Based on this, it is clear that both the official and free private sectors in Beirut and Mount Lebanon show advanced service availability. However, regions like the North, South, and Bekaa exhibit variability in service delivery, highlighting the need for improved coverage in some areas.

Public Sector:
- **Beirut**: Approximately 33% of schools indicate full availability.
- **Mount Lebanon** and **North**: In Mount Lebanon, 41.2% of schools report full availability, while regions like North and South show diverse service patterns.

Free Private Sector:
- Availability is high, especially in Mount Lebanon, where 80% of classrooms have projectors.

Non-Free Private Sector:

In non-free private schools, projector availability is more varied, with fewer schools reporting full services.

Fourth Response : Teacher (Question No. 7)

The data from teachers' questionnaires revealed that :

In Beirut, 26.7% of classrooms are not equipped with a projector, while 33.3% are fully equipped. In the free private sector, 50% of classrooms are mostly equipped, and 37.5% are fully equipped. In the non-free private sector, 37.3% of classrooms are partially equipped, and 13.6% are fully equipped. In Mount Lebanon - suburbs, 58.3% of classrooms are fully equipped, and 10% are not equipped in the public sector. In the free private sector, 56.8% of classrooms are fully equipped, and 24.3% are not equipped, while in the non-free private sector, 41.9% are fully equipped, and 21.2% are partially equipped.

In Mount Lebanon - excluding suburbs, 50% of classrooms are fully equipped, and 11% are not equipped in the public sector. In the free private sector, 74.2% of classrooms are fully equipped, and 12.9% are mostly equipped, while in the non-free private sector, 53.2% are fully equipped. In the North, 44.4% of classrooms are fully equipped, and 12.2% are not equipped in the public sector. In the free private sector, 62.5% are partially equipped, while in the non-free private sector, 35% are fully equipped.

In Bekaa, 53.1% of classrooms are fully equipped, and 11.2% are not equipped in the public sector. In the free private sector, 32.4% are fully equipped, and 26.5% are partially equipped, while in the non-free private sector, 39.3% are fully equipped. In the South, 54.9% of classrooms are fully equipped, and 5.7% are not equipped in the public sector. In the free private sector, 60% are partially equipped, while in the non-free private sector, 50% are partially equipped.

In Nabatieh, 33.9% of classrooms are fully equipped, and 8.9% are not equipped in the public sector. In the free private sector, 56.5% of classrooms are partially equipped, while in the non-free private sector, 50% are fully equipped. In Akkar, 42.2% of classrooms are fully equipped, and 14.5% are not equipped in the public sector. In the free private sector, 23.8% are fully equipped, and 23.8% are partially equipped, while in the non-free private sector, 48.4% are partially equipped.

In Bekaa-Hermel, 27.3% of classrooms are fully equipped, and 14.3% are not equipped in the public sector. In the free private sector, 60% of classrooms are partially equipped, while in the non-free

private sector, 30.6% are fully equipped. Overall, 39.3% of classrooms in Lebanon are fully equipped with projectors, with the public sector reaching the highest rate at 44.6%, followed by the free private sector at 31.6%, and the non-free private sector at 34.4%.

Conclusion

The data shows significant variation in the availability of LCD projectors in classrooms across second-cycle basic education in Lebanon's governorates and educational sectors. Overall, 39.3% of classrooms are fully equipped. The public sector has the highest equipment rate at 44.6%. In Beirut, the rate of fully equipped classrooms remains low, while in Mount Lebanon - excluding suburbs, the free private sector reaches a high of 74.2%. The non-free private sector also performs well, with a rate of 34.4%. Conversely, regions like Bekaa-Hermel and Akkar face shortages, requiring enhanced support and funding to improve the availability of these devices, especially in public schools, to ensure effective technology use in education.

Question: Availability of projectors LCD in the classrooms
Third Cycle of basic education
First Response : Principal (Question No. 16)

The public sector shows significant variation between governorates. Beirut records a relatively high availability rate, with 50% of classrooms "fully available," while Mount Lebanon suburbs stand out with a high rate of "not available (on demand)" at 36.4%. The North faces challenges, with 22.9% of classrooms "not available," and only 34.3% "fully available." Bekaa performs exceptionally well with 61.5% "fully available," making it the best-performing region in the public sector. The South and Nabatieh show similar rates, with around 50% of classrooms having "fully available" devices, while Akkar and Baalbek-Hermel show moderate rates with a slight improvement in infrastructure.

The free private sector reflects significant disparities across governorates. Beirut records a complete absence of devices at 100%, while Mount Lebanon suburbs and non-suburbs demonstrate better performance with 50% of classrooms "fully available." The North suffers from a significant deficit at 83.3% "not available," while Bekaa and the South offer mixed performance, with availability rates ranging between 33.3% and 100%. Nabatieh shows a notable partial availability rate at 66.7%, reflecting relatively higher investment in infrastructure.

The non-free private sector generally surpasses other sectors. Mount Lebanon, excluding suburbs, leads with the highest availability rate at 80%, while Beirut and the North show balanced rates between partial and full availability. The South faces low full availability at only 14.3%, while Akkar presents moderate rates with 50% of classrooms "partially available." Baalbek-Hermel emerges as one of the best-performing regions with 60% "fully available."

UNRWA schools experience significant shortages in most governorates. Mount Lebanon suburbs report a 100% partial availability, while the North faces a complete absence at 100% "not available." The South provides a relatively balanced performance with 50% "partial" and 50% "not available," highlighting the substantial regional disparities.

Comparison by Governorates

When comparing governorates, Bekaa and Baalbek-Hermel demonstrate exceptional performance in the public sector, with high rates of full availability exceeding 45%. Beirut offers moderate results with 50% "fully available," while Akkar and Mount Lebanon suburbs suffer from significant shortages, showing high rates in the "not available (on demand)" category exceeding 25%. The North struggles across all sectors, with high rates of "not available," particularly in UNRWA schools, which report a 100% complete absence.

The South and Nabatieh show close and moderate performance, with over 40% of classrooms having either full or partial availability. On the other hand, the non-free private sector shows less variation between governorates compared to other sectors, with Mount Lebanon (excluding suburbs) standing out with very high availability rates reaching 80%.

In the free private sector, Bekaa and the South achieve moderate results, while Beirut and the North face severe shortages. UNRWA schools highlight the greatest challenges, with significant disparities between regions, such as the South with partial availability and the North lacking entirely in devices.

Conclusion

The results indicate substantial disparities between governorates in terms of LCD projector availability in third-cycle basic education. Bekaa and Baalbek-Hermel show relative superiority in the public sector, while the North faces severe shortages, particularly in UNRWA schools. The non-free private sector emerges as the most superior across governorates, while the free private sector shows notable disparities between regions. To ensure equitable distribution of resources, there must be a focus on supporting weaker regions like the North and Akkar, alongside increased investments in UNRWA schools and the public sector to enhance overall availability.

Second Response : Supervisor (Question No. 8)

Overall Situation

Public Education

The majority of supervisors (39.2%) indicated that projectors are fully available in all classrooms, highlighting challenges in equipping third-cycle classrooms with projectors. Meanwhile, 17.5% reported that devices are not available, and 13.4% stated they are unavailable but on demand. Nabatieh recorded the highest full availability rate at 60.9%, while Baalbek-Hermel had the lowest full availability rate at 23.5%.

Private Education

The largest percentage (32.3%) reported that projectors are not available in classrooms, with an additional 22.6% stating they are unavailable but on demand, indicating challenges in ensuring permanent availability of devices. While 25.8% of supervisors reported full availability, this is lower compared to the public sector (39.2%). Mount Lebanon (excluding suburbs) recorded the highest availability at 75%, while Beirut and Baalbek-Hermel recorded the highest non-availability at 100%.

Non-Free Private Education

Data shows significant variation in projector availability in non-free private schools for third-cycle basic education. While 37.6% of schools have projectors in all classrooms, a significant portion (54.7%) experiences complete non-availability or partial availability, reflecting the need for more balanced equipment. Mount Lebanon (excluding suburbs) shows the highest availability at 83.3%, whereas regions like Akkar, the South, Nabatieh, and Beirut report lower full availability rates.

UNRWA

66.7% of UNRWA supervisors reported that projectors are not fully available in classrooms. Conversely, 33.3% indicated partial availability (device rotation between classrooms). UNRWA schools face significant shortages in third-cycle basic education classrooms, with 66.7% of supervisors confirming the absence of projectors.

Governorates

In public education, 27.3% of classrooms in Beirut are fully equipped with projectors, while 18.2% lack them or have them on demand. In Mount Lebanon suburbs, 29.4% of classrooms are fully equipped, reflecting infrastructure challenges. In Mount Lebanon (excluding suburbs), 43.5% of classrooms are fully equipped, indicating notable improvement. In the North, 44.7% of classrooms are equipped, showing progress. In Bekaa, 33.3% are equipped, although 44.4% lack projectors. In the South, 43.8% of classrooms are fully equipped, with Nabatieh recording the highest rate at 60.9%. In Akkar, 31.6% are equipped, while Baalbek-Hermel has the lowest availability at 23.5%.

In free private education, a significant 64.9% of supervisors reported no projector availability in classrooms. Mount Lebanon (excluding suburbs) had the highest equipped classrooms at 75%, followed by Mount Lebanon suburbs at 60%. Beirut and Baalbek-Hermel recorded the lowest rates, with 100% of classrooms lacking devices.

For non-free private education, Mount Lebanon (excluding suburbs) shows the highest full availability rate at 83.3%, making it the best-equipped region. Meanwhile, in Mount Lebanon suburbs, 40.6% of classrooms are equipped. In Beirut, 22.2% of classrooms are equipped, with an unbalanced

distribution, and 33.3% under demand. In the North, 38.9% are equipped, while Bekaa has 35.7% equipped, relying on partial availability for 35.7%.

Regarding UNRWA schools, Mount Lebanon suburbs show 50% partial availability, while the other 50% lack projectors. In the South, 100% of classrooms are without projectors.

Conclusion

The non-free private sector has a projector availability rate of 37.6%, lower than the public sector at 39.2%, yet higher than the free private sector at 25.8%.

The public sector excels in areas like Nabatieh, the North, and the South, while challenges are more prominent in Beirut and Baalbek-Hermel.

Free private education faces significant shortages in regions like Beirut and Baalbek-Hermel.

Non-free private education shows considerable variation, with Mount Lebanon (excluding suburbs) being the top-performing region for device availability.

Third Response : Coordinator (Question No. 8)

Public Education

Beirut: Data shows that 33.3% of schools in Beirut have full access to devices, meaning these schools can fully utilize projectors in all classrooms. However, 66.7% of classrooms face a shortage, indicating a significant need for infrastructure improvements.

Mount Lebanon: The region has a device availability rate of 41.2%, showing notable progress in equipping schools. However, 58.8% of classrooms still lack devices, requiring further investment.

North: Device availability remains at 33.9%, indicating slight improvement compared to previous years. Yet, 27.1% of classrooms offer partial availability, highlighting a gap in full equipment.

Free Private Education

In this sector, data shows that Beirut and Mount Lebanon maintain strong performance, with device availability nearing 100% in most areas. However, some schools in the South and North show partial shortages ranging from 15% to 20%, meaning some classrooms either lack projectors or depend on partial availability.

Non-Free Private Education

This sector excels in device availability, with the North and Mount Lebanon recording the highest levels. In the North, device availability reaches 83.3%, indicating well-equipped schools. While the South continues to provide good services, there are noticeable gaps in certain classrooms.

Key Observations on Basic Education

Regional Disparities: Data shows urban areas like Beirut, Mount Lebanon, and some parts of the North have higher rates of equipped classrooms with LCD projectors, while rural areas like parts of Bekaa, South, and Nabatieh face significant shortages.

Differences Between Sectors: Free private schools generally have higher full availability rates compared to public and non-free private schools, reflecting funding and support disparities.

Trends Across Educational Levels: There is a general trend towards increased availability as students advance to higher educational levels, but gaps persist, especially in rural areas or those with limited funding.

Conclusion

From coordinators' perspectives, data reveals significant variation in LCD projector availability across regions and institutional types. Urban areas and private schools are better equipped with technology, while rural and less-funded areas require additional efforts to ensure equitable access to digital education tools. Providing LCD projectors has become essential in modern education and demands continuous support to enhance the learning environment nationwide.

Fourth Response : Teacher (Question No.7)

In Beirut Governorate, statistics show that 46.7% of classrooms in the public sector are fully equipped with projectors, while 13.3% are not equipped. In the free private sector, 50% of classrooms are not equipped, and 25% are fully equipped. In the non-free private sector, 37.3% of classrooms are partially equipped, and 18.6% are fully equipped.

In Mount Lebanon - Suburbs, data indicates that 61.7% of classrooms in the public sector are fully equipped, while 10% are not equipped. In the free private sector, 59.5% of classrooms are fully equipped, and 5.4% are not equipped. In the non-free private sector, 41% of classrooms are fully equipped, and 21.2% are partially equipped.

In Mount Lebanon - Excluding Suburbs, statistics show that 48.8% of classrooms in the public sector are fully equipped, and 9.8% are not equipped. In the free private sector, 67.7% of classrooms are fully equipped, and 16.1% are not equipped. In the non-free private sector, 54.8% of classrooms are fully equipped.

In the North Governorate, 43.7% of classrooms in the public sector are fully equipped, and 15.2% are not equipped. In the free private sector, 40% of classrooms are not equipped, and 30% are partially equipped. In the non-free private sector, 37% of classrooms are fully equipped.

In the Bekaa Governorate, data shows that 52% of classrooms in the public sector are fully equipped, while 10.2% are not equipped. In the free private sector, 32.4% of classrooms are fully equipped, and 29.4% are not equipped. In the non-free private sector, 39.3% of classrooms are fully equipped.

In the South Governorate, 56.6% of classrooms in the public sector are fully equipped, and 4.9% are not equipped. In the free private sector, 60% of classrooms are partially equipped, and 30% are not equipped. In the non-free private sector, 50% of classrooms are partially equipped.

In Nabatieh Governorate, statistics indicate that 40.2% of classrooms in the public sector are fully equipped, while 12.5% are not equipped. In the free private sector, 47.8% of classrooms are not equipped, and 34.8% are partially equipped. In the non-free private sector, 53.1% of classrooms are partially equipped.

In Akkar Governorate, data shows that 42.2% of classrooms in the public sector are fully equipped, while 15.1% are not equipped. In the free private sector, 28.6% of classrooms are partially equipped, and 14.3% are fully equipped. In the non-free private sector, 51.6% of classrooms are partially equipped.

In Baalbek-Hermel Governorate, statistics indicate that 33.8% of classrooms in the public sector are fully equipped, and 10.4% are not equipped. In the free private sector, 40% of classrooms are partially equipped, and 20% are not equipped. In the non-free private sector, 30.6% of classrooms are fully equipped.

Overall, statistics show that 46.2% of classrooms in the public sector are fully equipped, 29.2% in the free private sector are fully equipped, and 34.2% in the non-free private sector are fully equipped, while 13.9% of all classrooms are not equipped.

Avaliability of projectors LCD in classrooms
Secondary classes
First response : Principal (Question No. 16)

The public sector shows clear variation between governorates. Beirut has a relatively high availability with 50% of classrooms fully equipped, whereas Mount Lebanon Suburbs stands out with a high percentage of "not available (under request)" at 36.4%. The North faces challenges, with 22.9% of classrooms not available, and only 34.3% fully equipped. Bekaa demonstrates a strong performance with 61.5% fully equipped classrooms, making it the best-performing region in the public sector. The South and Nabatieh offer comparable rates, with around 50% of classrooms fully equipped, while Akkar and Baalbek-Hermel show moderate rates with slight infrastructure improvements.

In the free private sector, there is significant variation between governorates. Beirut records a complete absence of devices at 100%, whereas Mount Lebanon Suburbs and Excluding Suburbs show better performance with 50% of classrooms fully equipped. The North struggles with a high rate of 83.3% "not available," while Bekaa and the South present mixed results with availability rates ranging from 33.3% to 100%. Nabatieh demonstrates a superior partial availability rate at 66.7%, reflecting a relative investment in infrastructure.

In the non-free private sector, there is generally better performance compared to other sectors. Mount Lebanon excluding Suburbs achieves the highest full availability rate at 80%, while Beirut and the North show balanced rates between partial and full availability. The South struggles with low full availability at only 14.3%, while Akkar provides moderate availability with 50% partially equipped classrooms. Baalbek-Hermel stands out as one of the best-performing regions with 60% fully equipped classrooms.

UNRWA schools face a clear shortage across most governorates. Mount Lebanon Suburbs records a 100% partial availability, while the North suffers a complete absence with 100% "not available." The South offers a relatively balanced performance with 50% partial and 50% "not available," reflecting significant regional disparities.

Comparison by Governorates

When comparing governorates, it is evident that Bekaa and Baalbek-Hermel perform exceptionally well in the public sector, with high full availability rates surpassing 45%. Beirut provides moderate results with 50% fully equipped classrooms, while Akkar and Mount Lebanon Suburbs suffer from significant shortages, with high percentages of "not available (under request)" exceeding 25%. The North faces widespread deficiency across all sectors, with a notably high percentage of "not available" especially in UNRWA schools, which stand at 100% absence.

The South and Nabatieh offer a balanced performance with over 40% of classrooms fully or partially equipped. On the other hand, the non-free private sector shows less variation between governorates compared to other sectors, with Mount Lebanon excluding Suburbs having exceptionally high availability rates of up to 80%.

Regarding the free private sector, Bekaa and the South achieve moderate results, whereas Beirut and the North face severe shortages in device availability. UNRWA schools highlight the most challenging sector, with significant disparities between regions, such as the South achieving partial availability and the North being entirely without devices.

Conclusion: The results highlight a significant disparity between governorates in terms of LCD projector availability in the third cycle of basic education. Bekaa and Baalbek-Hermel excel in the public sector, while the North faces severe shortages, particularly in UNRWA schools. The non-free private sector emerges as the most successful across all governorates, while the free private sector shows notable regional variation. To ensure equitable distribution of resources, efforts should focus on supporting weaker areas, especially the North and Akkar, with increased investments in UNRWA schools and the public sector to enhance overall availability.

Second Response : Supervisor (Question No. 8)

General Situation
Public Sector
The majority of school supervisors (31.8%) reported full availability of LCD projectors in all classrooms, highlighting challenges in equipping secondary education classrooms with projectors. The percentage of unavailability was 24%, and 18.9% were only available upon request. The highest full availability was in Mount Lebanon excluding Suburbs (43.5%), whereas Beirut showed the lowest percentage of full availability (18.2%).

Free Private Education
The majority (32.3%) reported no availability of projectors in classrooms, along with 25.8% reporting devices unavailable but under request. This reflects challenges in securing permanent projector access for classrooms. The highest full availability was in Mount Lebanon excluding Suburbs (75%), while Beirut and Baalbek-Hermel reported complete absence of projectors (100%).

Non-Free Private Education
Data reflects significant variation in LCD projector availability in non-free private education for secondary education. While 37.6% of schools have projectors in all classrooms, a large portion (57.3%) lacks full or partial availability, highlighting the need for better equitable classroom equipment.

UNRWA Schools
UNRWA schools show a significant shortage of LCD projectors in classrooms for secondary

education. 66.7% of supervisors reported complete unavailability, while 33.3% reported partial availability (shared among classrooms).

Key Observations by Governorates:

Public Sector

Beirut: Low availability with only 18.2% of classrooms fully equipped. Devices are often shared between classrooms (27.3%).

Mount Lebanon (Suburbs): Fair availability at 41.2%.

Mount Lebanon excluding Suburbs: Highest full availability at 43.5%.

North: Complete unavailability in 34.2% of classrooms, with only 31.6% fully equipped.

Regions like Mount Lebanon show better projector availability compared to areas like Beirut and Akkar, where significant disparities exist. Mount Lebanon and the South demonstrate noticeable improvements in equipment availability.

Free Private Education

Beirut: 100% complete unavailability.

Mount Lebanon (excluding Suburbs): Highest full availability at 75%.

Non-Free Private Education

The highest full availability was in Mount Lebanon excluding Suburbs (83.3%), with Baalbek-Hermel at 45.5%.

The lowest availability was in Akkar (0%), followed by Beirut (11.1%) and the South (14.3%).

UNRWA Schools

Struggle with significant shortages, with 66.7% of supervisors reporting no availability.

Conclusion

Overall LCD Projector Availability:

In the public sector, 31.8% of classrooms are fully equipped, while 24.0% have no availability, and 18.9% are available upon request. This sector shows a lower availability compared to non-free private education, but outperforms free private education.

In the free private sector, only 25.8% of classrooms have projectors, making this sector the weakest.

In non-free private education, 37.6% of classrooms are fully equipped, making it the highest among the three sectors.

Best Regions for Full Availability:

Public Sector: Mount Lebanon excluding Suburbs (43.5%), followed by South (40.6%).

Free Private Education: Mount Lebanon excluding Suburbs (75%).

Non-Free Private Education: Mount Lebanon excluding Suburbs (83.3%).

Weakest Regions for Full Availability:

Public Sector: Beirut (18.2%), followed by Akkar (21.1%).

Free Private Education: Beirut, North, South, Nabatieh, and Baalbek-Hermel (all 0%), with Akkar at 25.0%.

Non-Free Private Education: Akkar (0%), followed by Beirut (11.1%) and South (14.3%).

Gaps and Challenges:

The public sector shows noticeable disparities in equipment availability across governorates, with Beirut and Akkar being the weakest. Free private education faces the most significant challenges in securing projectors. Non-free private education fares better but still has regions like Akkar, Beirut, and South with substantial gaps in equipment.

Third Response : Coordinators (Question No. 8)

In the public sector, data indicates significant variation between governorates. In Beirut, although 33.3% of schools reported full availability of LCD projectors in all classrooms, a substantial proportion indicated partial availability or complete absence of projectors, reflecting major infrastructure challenges. Conversely, in Mount Lebanon Suburbs, 41.2% reported significant improvements in projector availability, indicating many schools have met their classroom equipment needs.

In Mount Lebanon excluding Suburbs, 74.4% of schools reported having projectors in most classrooms, suggesting good equipment provision in this area. In the North, 27.1% of schools reported full availability, while 18.6% provided partial availability, indicating a need for further improvements. Baalbek-Hermel shows a lower percentage, with 44.4% of schools reporting projectors in most classrooms, indicating gaps in equipment availability.

Regarding the free private sector, the situation is more positive. In Beirut, all schools reported having projectors in most or all classrooms, reflecting well-equipped institutions. In Mount Lebanon Suburbs, 80% of schools reported full projector availability, highlighting a strong commitment to technology provision.

In the North, half of the schools reported full projector availability, suggesting higher access compared to the public sector. In the South, 80% of schools reported projectors in all classrooms, showcasing a solid investment in education.

In Nabatieh, 50% of schools reported full projector availability, while in Akkar, the percentage was 33.3%. In Baalbek-Hermel, 50% of schools reported complete projector provision, while the remaining 50% had partial availability, indicating the need for further improvements.

In the non-free private sector, the situation is more varied. In Beirut, only 25% reported full availability, while a large proportion indicated partial availability or no availability. In Mount Lebanon Suburbs, 47.8% reported full projector availability, reflecting notable improvements. In Mount Lebanon excluding Suburbs, over 78% reported having projectors in most classrooms, highlighting well-equipped schools in these regions.

In the North, 35.5% of schools reported full availability, while in the South, 33.3% did so. In Nabatieh, schools reported high availability, with 100% providing projectors in some classrooms, and half having full availability. In Akkar, 46.2% reported projectors in most classrooms, while in Baalbek-Hermel, 54.5% reported full availability.

Regarding UNRWA schools, 50% of schools in the North reported full projector availability, while the other half reported availability in some classrooms, indicating a distribution gap.

Overall, data reflects significant disparities in LCD projector availability between the public and private sectors and across different governorates, necessitating action to improve school equipment, especially in areas with technological gaps.

Conclusion

Data consistently shows that urban areas like Beirut and Mount Lebanon have better access to LCD projectors, especially in non-free and free private schools. Conversely, rural and less urbanized regions like Baalbek-Hermel, Akkar, and Nabatieh experience lower access, particularly within the public sector.

Fourth Response : Teacher (Question No. 7)

Overall, data indicates that 39.6% of classrooms in the public sector are fully equipped, while 28.2% in the free private sector and 32.9% in the non-free private sector are fully equipped. Additionally, 19.4% of total classrooms are not equipped at all.

In Beirut, in the public sector, 36.7% of classrooms are not equipped, while 33.3% are fully equipped. In the free private sector, 50% of classrooms are not equipped, and 25% are fully equipped. In the non-free private sector, 33.9% of classrooms are not equipped, and 22% are partially equipped.

In Mount Lebanon Suburbs, 60% of classrooms in the public sector are fully equipped, and 15% are not equipped at all. In the free private sector, 62.2% of classrooms are fully equipped, while 21.6% are not equipped. In the non-free private sector, 39.6% are fully equipped, and 20.7% are partially equipped.

In Mount Lebanon excluding Suburbs, 48.8% of classrooms in the public sector are fully equipped, while 17.1% are not equipped. In the free private sector, 64.5% of classrooms are fully equipped, and 16.1% are not equipped. In the non-free private sector, 53.2% of classrooms are fully equipped.

In the North, 34.4% of classrooms in the public sector are fully equipped, while 24.8% are not equipped. In the free private sector, 42.5% of classrooms are not equipped, and 30% are partially equipped. In the non-free private sector, 39% of classrooms are fully equipped.

In the Bekaa, 52% of classrooms in the public sector are fully equipped, while 8.2% are not equipped. In the free private sector, 32.4% are fully equipped, and 29.4% are not equipped. In the non-free private sector, 39.3% of classrooms are fully equipped.

In the South, 42.6% of classrooms in the public sector are fully equipped, while 16.4% are not equipped. In the free private sector, 60% of classrooms are partially equipped, and 20% are not equipped. In the non-free private sector, 46.9% of classrooms are partially equipped.

In Nabatieh, 32.1% of classrooms in the public sector are fully equipped, while 22.3% are not equipped. In the free private sector, 47.8% of classrooms are not equipped, and 34.8% are partially equipped. In the non-free private sector, 50% of classrooms are partially equipped.

In Akkar, 33.7% of classrooms in the public sector are fully equipped, while 18.7% are not equipped. In the free private sector, 28.6% are partially equipped, and 14.3% are fully equipped. In the non-free private sector, 48.4% of classrooms are partially equipped.

Finally, in Baalbek-Hermel, 37.7% of classrooms in the public sector are fully equipped, while 14.3% are not equipped. In the free private sector, 40% of classrooms are partially equipped, and 20% are not equipped. In the non-free private sector, 27.8% of classrooms are fully equipped.

Key Conclusions:
1. **Public Education:**
   - **Availability of Projection Devices:** There is a continuous improvement in the availability of projection devices as students progress through educational levels, indicating effective resource allocation.
   - **Peak Availability:** The highest availability reaches 48.4% in the third cycle of basic education, highlighting strong support for foundational education.
2. **Free Private Education:**
   - **Instability:** Free private education shows significant instability in the availability of projection devices, with high rates of "Unavailable (Requested)" (27-31%), reflecting a substantial gap between demand and supply.
   - **Secondary Education Challenges:** Secondary education records the highest rate of unavailability at 24.1%, raising concerns about students' readiness for higher education and equity in educational opportunities.
3. **Non-Free Private Education:**
   - **Consistency:** This sector maintains a steady rate of availability for projection devices, ranging from 43% to 45.5% across all levels.
   - **Partial Availability Rates:** High rates of "Partially Available (Shareable)" (23-25%) suggest that resources are not fully utilized, limiting learning experiences.
4. **UNRWA Sector:**
   - **Infrastructure Constraints:** Education faces severe infrastructure constraints with 50% of devices unavailable and 50% partially available, stressing the urgent need for investment.
   - **Lack of Full Availability:** The absence of full availability across all educational levels calls for immediate intervention and strategic planning to enhance educational quality.

General Trends in Projection Device Availability:
- The condition of "Fully Available" ranges from 38% in Kindergarten to 46.2% in the third cycle, reflecting a positive trajectory in resource availability. However, disparities between educational levels require further investigation to ensure equitable access.

Specific Observations:
- **Kindergarten:** Shows the lowest rate of "Fully Available" (38%) but has higher levels of "Available on Request" (18.1%), suggesting reliance on supplementary resources that could impact basic learning.
- **Secondary Education:** Demonstrates a relatively high rate of "Fully Available" (44.8%) but also a significant "Unavailable" rate (14.3%), highlighting the need for targeted interventions to enhance resource accessibility.

Progress Through Cycles: There is a gradual increase in the "Fully Available" status and a decrease in "Partially Available" from the first to the third cycle, indicating better resource allocation as students advance. Continuous investment in early cycles remains essential.

Availability of Active Boards
Cycle: Kindergarten
First Response : Principal (Question No. 17)

Public Sector: There is a clear deficiency in interactive board availability across most governorates. In Beirut, 50% of classrooms are "Unavailable," 37.5% are "Unavailable (on demand)," and 12.5% are "Partially Available." In Mount Lebanon suburbs, the percentage of "Unavailable (on demand)" rises to 63.6%, with a complete absence of "Available in most classrooms" and "Available in all classrooms." The North shows moderate figures, with 48.6% "Unavailable (on demand)" and 5.7% "Fully Available." In the Bekaa, the percentage of "Unavailable" reaches 61.5%, indicating severe shortages, while the South registers 53.3% "Unavailable," with a slight improvement to 13.3% "Partially Available."

Free Private Sector: There is noticeable disparity between governorates. In Beirut, 100% of classrooms are "Unavailable." Mount Lebanon excluding suburbs has the best performance, with 25% "Fully Available." The North faces a significant shortage at 83.3% "Unavailable," while the South reports a complete absence of devices at 100% "Unavailable." In the Bekaa, the distribution is relatively balanced among the three availability categories (33.3%).

Non-Free Private Sector: This sector offers a relatively balanced distribution in some governorates. In Beirut, 22.2% of classrooms are "Fully Available," a similar figure to Mount Lebanon excluding suburbs. The North experiences severe shortages at 76.9% "Unavailable." Bekaa presents a balanced distribution, with 22.2% "Partially Available" and 11.1% "Fully Available." In the South, a high percentage (57.1%) remains "Unavailable."

UNRWA Schools: Performance varies. In Mount Lebanon suburbs, 100% of classrooms are "Fully Available," while the North faces a complete absence at 100% "Unavailable." The South offers a balance between "Unavailable (on demand)" and "Partially Available," with 50% for each category.
Governorate Comparison:

Beirut records high percentages of "Unavailable" in the public sector (50%) and almost complete unavailability in the free private sector.

Mount Lebanon suburbs experience significant shortages in the public sector at 63.6% "Unavailable (on demand)," while the free private sector performs better at 25% "Fully Available."

The North suffers severe deficiencies across all sectors, with 76.9% "Unavailable" in the non-free private sector and 83.3% in the free private sector.

Bekaa shows a relatively balanced model with 33.3% "Partially Available" in the free private sector and 11.1% "Fully Available" in the non-free private sector.

The South faces significant shortages in the public and free private sectors with no full availability.

Baalbek-Hermel exhibits high rates of "Unavailable" in all sectors, with relatively better performance in the free private sector at 33.3% "Fully Available."

Conclusion:

The results highlight significant disparities in interactive board availability across governorates and educational sectors. The public sector faces severe shortages in most governorates, while the free private sector performs very poorly in Beirut and the South. The non-free private sector offers some balance in certain regions like Bekaa but struggles in the North. To improve availability, investments should be directed toward the most affected areas, such as the North and Beirut, with enhanced support for the public sector and UNRWA schools to broaden availability.

Second response : Supervisor (Question No. 9)

General Situation:
Public Sector:
According to school data from supervisors' questionnaires, the average percentage of schools lacking interactive boards or relying on demand to provide them is 79.7%, a very high figure indicating significant efforts are needed to improve availability. The average availability across all schools is only 4.1%.

Free Private Sector:
According to school data, around 77.4% of free private schools lack interactive boards or depend on demand for provision, which is an extremely high percentage, emphasizing the urgent need for greater efforts to supply these devices in the future.

Non-Free Private Sector:
Data shows that 65.8% of non-free private schools either do not have interactive boards or rely on demand to obtain them. This highlights a significant need for improvement in equipping schools with interactive boards across various regions.

UNRWA:
UNRWA schools show a complete lack of interactive boards in preschool classrooms, with 100% of school administrators confirming the absence of these devices.

By Governorates:
Public Sector:
Best governorates for full availability of interactive boards:

Baalbek-Hermel: Best performing with 5.9% of schools fully equipped with interactive boards.

Bekaa: 5.6% of schools offer full availability.

North and Akkar: 5.3% of schools have full availability.

Worst governorates for full availability:

South: 34.4% of schools lack interactive boards.

Mount Lebanon suburbs: 52.9% of schools are completely without boards.

Demand for interactive boards is notably high in regions such as Mount Lebanon (excluding suburbs) and Beirut, with 47.8% and 36.4% respectively, reflecting readiness for future improvements.

Challenges and Opportunities:
Many areas show demand for interactive boards (on demand), such as Mount Lebanon (excluding suburbs), Bekaa, and South, indicating efforts are underway to improve the situation. Regions like Beirut and Mount Lebanon suburbs face significant challenges, requiring immediate interventions for technological advancements.

Free Private Sector:
Best regions for full availability:

South: 50% of schools have interactive boards.

Mount Lebanon excluding suburbs: 25% of schools have full availability.

Worst regions for full availability:

Baalbek-Hermel: 100% of schools in preschool lack interactive boards.

Beirut: 100% of administrators confirmed the absence of interactive boards.

Challenges and Opportunities:
Several areas like Beirut, Baalbek-Hermel, and Akkar suffer from severe shortages, necessitating

urgent intervention. However, regions like South and Mount Lebanon (excluding suburbs) show better availability.

Non-Free Private Sector:

Best regions for full availability:

Bekaa: 28.6% of schools offer full availability.

Baalbek-Hermel: 27.3% of schools are fully equipped.

Worst regions for full availability:

Akkar: 0% of schools have interactive boards.

North: Only 5.6% have full availability.

Challenges and Opportunities:

Akkar and North are facing significant shortages, requiring focused efforts to meet school demands. Despite challenges, regions like Bekaa and Baalbek-Hermel show moderate improvements.

UNRWA Schools:

Mount Lebanon suburbs: 100% report lack of interactive boards.

South: 100% report no interactive boards available.

Conclusion:

The data highlights significant disparities in the availability of interactive boards across regions and educational sectors. Public sector schools face severe shortages, while free private schools struggle extensively, especially in urban areas like Beirut and South. Non-free private schools show a more balanced distribution, with some regions showing promising improvements, although challenges remain, particularly in Akkar and North. Greater investments and immediate interventions are required to address these gaps, especially in high-demand regions like Beirut and Mount Lebanon suburbs.

Third Response: Coordinator (Question No. 9)

Based on the coordinators' responses,

Regarding the public education sector, Beirut faces a significant shortage of interactive boards, with 50% of schools completely lacking this technology. While 50% of schools provide partial availability, efforts to improve educational infrastructure are ongoing, but they are insufficient to meet basic educational needs.

In Mount Lebanon, the situation is similar, with 33.3% of schools lacking interactive boards, while 66.7% provide them partially. This indicates a need for greater investment in educational technology to support the learning experience.

In the North, 40% of schools lack interactive boards, while 40% provide them partially and 20% offer full availability. This shows reasonable progress in some schools, but it does not meet the standards required for a comprehensive educational environment.

In the South, the situation is also concerning, with 50% of schools lacking interactive boards and 50% providing them partially. This highlights a pressing need to enhance educational infrastructure in this region.

In Bekaa, 30% of schools lack interactive boards, while 50% provide them partially and 20% offer full availability. These figures reflect schools with adequate facilities, but a significant number still require support.

In Nabatieh, the situation is more severe, with 60% of schools lacking interactive boards, and 40% providing them partially. This substantial deficit in educational resources necessitates urgent steps to improve the educational conditions in this area.

In Baalbek-Hermel, 50% of schools face a shortage of interactive boards, while the other 50% provide them partially. These numbers reflect the challenges faced by schools in this region and underscore the need for improvements.

Regarding the free private sector, Beirut suffers from a complete lack, with 100% of schools without interactive boards. This situation reflects significant challenges in this sector, where resources for equipping classrooms are unavailable.

In Mount Lebanon, 75% of schools lack interactive boards, with only 25% providing partial availability. In the North, 80% of schools face the same issue, with only 20% offering partial availability.

In the South, 90% of schools are without interactive boards, and only 10% provide them partially, reflecting a severe shortage. In Bekaa, 60% of schools lack interactive boards, while 40% provide them partially. In Nabatieh, 70% of schools are without interactive boards, with 30% offering partial availability.

In the non-free private sector, Beirut shows a shortage with 33.3% of schools lacking interactive boards and 66.7% providing them partially. In Mount Lebanon, 40% of schools lack interactive boards, with 60% offering partial availability. In the North, 50% of schools suffer from a lack, while 50% provide them partially.

In the South, 60% of schools lack interactive boards, with 40% providing them partially. In Bekaa, 30% of schools are without interactive boards, 60% provide them partially, and 10% offer full availability. In Nabatieh, 50% of schools lack interactive boards, while the other 50% provide them partially.

These figures highlight significant gaps in the availability of interactive boards across all sectors and regions, necessitating urgent actions to improve school resources and enhance the learning experience for students.

Conclusion:

The data shows a significant disparity in the availability of interactive boards between the public and private sectors in Lebanon. The public sector experiences severe shortages in many regions like Beirut and Nabatieh, where over 50% of schools lack these essential tools, with half providing only partial access. In contrast, the free private sector faces even greater challenges, with 100% of Beirut schools and 75% of Mount Lebanon schools lacking interactive boards, highlighting significant gaps in resources. While the non-free private sector offers slightly better figures, many schools still suffer from shortages. Overall, these numbers underscore the urgent need for investment in educational technology to improve the quality of education and support student learning across all regions.

Fourth Response: Teacher (Question No. 8)

The general statistics from teachers' questionnaires show that 41.8% of classrooms in the public sector lack interactive boards, while this percentage rises to 44.5% in the free private sector, and 33% in the non-free private sector. Only 12.4% of classrooms across all sectors are fully equipped with interactive boards.

In Beirut Governorate, 53.3% of classrooms in the public sector lack interactive boards, with 40% lacking but having a demand for them. In the free private sector, 50% of classrooms are without interactive boards, while 12.5% are fully equipped. In the non-free private sector, 42.4% of classrooms lack interactive boards, and 25.4% are fully equipped.

In Mount Lebanon Suburbs, data indicates that 33.3% of classrooms in the public sector lack interactive boards, and 45% lack them but have demand. In the free private sector, 37.8% of classrooms are without boards, and 16.2% are fully equipped. In the non-free private sector, 28.8% of classrooms lack boards, and 24.8% are fully equipped.

In Mount Lebanon (excluding suburbs), 51.2% of classrooms in the public sector lack interactive boards, with only 3.7% fully equipped. In the free private sector, 38.7% of classrooms are without boards, and 32.3% are fully equipped. In the non-free private sector, 38.7% of classrooms lack boards, and 17.7% are fully equipped.

In the North Governorate, 41.5% of classrooms in the public sector lack interactive boards, with only 9.3% fully equipped. In the free private sector, 65% of classrooms lack boards, with none fully equipped. In the non-free private sector, 44% of classrooms are without boards, and 16% are fully equipped.

In Bekaa Governorate, 35.7% of classrooms in the public sector lack interactive boards, while 11.2% are fully equipped. In the free private sector, 32.4% of classrooms are without boards, and only 2.9% are fully equipped. In the non-free private sector, 21.4% of classrooms lack boards, while 41.1% are fully equipped.

In the South Governorate, 36.1% of classrooms in the public sector lack interactive boards, and 8.2% are fully equipped. In the free private sector, 50% of classrooms are without boards, and 0% are fully equipped. In the non-free private sector, 34.4% of classrooms are without boards, while 12.5% are fully equipped.

In Nabatieh Governorate, 48.2% of classrooms in the public sector lack interactive boards, with only 2.7% fully equipped. In the free private sector, 52.2% of classrooms lack boards, with none fully equipped. In the non-free private sector, 18.8% of classrooms are without boards, and 25% are fully equipped.

In Akkar Governorate, 41% of classrooms in the public sector lack interactive boards, with 6.6% fully equipped. In the free private sector, 28.6% of classrooms are without boards, and 9.5% are fully equipped. In the non-free private sector, 28.1% of classrooms lack boards, while 3.1% are fully equipped.

Finally, in Baalbek-Hermel Governorate, 44.2% of classrooms in the public sector lack interactive boards, with 7.8% fully equipped. In the free private sector, 60% of classrooms lack boards, with none fully equipped. In the non-free private sector, 41.7% of classrooms are without boards, and 22.2% are fully equipped.

Conclusion:

The statistics indicate a significant shortage of interactive boards in classrooms across Lebanon. In the public sector, 41.8% of classrooms are without boards, and 44.5% in the free private sector lack this technology. Only 12.4% of classrooms across all sectors are fully equipped. Beirut has the highest percentage of shortages, with 53.3% of public sector classrooms and 50% of free private sector classrooms lacking boards. Northern Lebanon has 65% of classrooms without boards in the free private sector. Across different regions, such as Bekaa, South, and Nabatieh, there are substantial gaps, necessitating urgent steps to enhance educational infrastructure and improve the learning experience for students.

Availability of Active Boards in classrooms
First Cycle of Basic Education
First response: Principal (Question No. 17)

Overall:
- 44.8% of schools lack interactive boards.
- 37.6% of schools lack interactive boards but have demand for them.
- 8.2% of schools have movable interactive boards.
- 2.2% of schools have interactive boards in most classrooms.
- 7.2% of schools have interactive boards in all classrooms.

Schools' principals mentioned that:

Public Education:

Over 44.9% of public schools do not have interactive boards (unavailable), while 43.5% show they are unavailable but in demand. Regions like Beirut, Bekaa, and the South show high rates of unavailable boards, while the South shows slight progress with 13.3% of schools having boards in most classrooms.

Free Private Education:

The highest percentage (43.3%) of free private schools report a lack of interactive boards. However, noticeable improvements are seen in regions like Baalbek-Hermel, where 33.3% of schools have

boards in all classrooms. Nabatieh also shows positive results, with partial board availability in 33.3% of schools.

Non-Free Private Education:
Results are mixed; 44.9% of non-free private schools show a lack of interactive boards. Areas like Beirut and Mount Lebanon Suburbs report relatively good board availability in all classrooms at rates of 22.2% and 21.2%, respectively. However, northern and Bekaa regions still have low percentages.
UNRWA:
Significant development is evident, with 25% of UNRWA schools having interactive boards in most classrooms.

Conclusion:
The findings highlight significant disparities across educational sectors regarding the availability of interactive boards. Public and free private education are lagging in equipping schools with these boards compared to non-free private schools and UNRWA.

Comparison by Governorates:
In Beirut, 50% of schools lack interactive boards, with 37.5% indicating that boards are unavailable but in demand. This indicates a pressing need for technological support in the region, as full availability in classrooms is almost non-existent.

In Mount Lebanon Suburbs, 27.3% of schools lack interactive boards, and 63.6% indicate they are unavailable but in demand. This reflects partial efforts to meet school technology needs, although full availability remains limited.

In Mount Lebanon (excluding suburbs), 50% of schools are without interactive boards, and 44.4% state they are unavailable but in demand. This region faces significant challenges in providing comprehensive access to interactive boards, with very limited use in classrooms.

In the North, 37.1% of schools lack interactive boards, and 51.4% indicate they are unavailable but in demand. This highlights a significant gap in technology availability, with only 2.9% of schools having boards in most classrooms.

In Bekaa, 53.8% of schools do not have interactive boards, and 38.5% report they are unavailable but in demand. This indicates an urgent need for improved technological infrastructure in schools, with very rare full availability of boards.

In the South, 53.3% of schools lack interactive boards, but 13.3% have boards in most classrooms. While the South is slightly better off compared to other regions, it still suffers from a significant shortage.

In Nabatieh, 50% of schools are without interactive boards, and 31.3% state they are unavailable but in demand. Despite a slight improvement, only 12.5% of schools have boards in most classrooms.

In Akkar, 35% of schools lack interactive boards, and 55% report they are unavailable but in demand. This shows significant challenges in securing technology for schools, with very limited availability (5%) in classrooms.

Lastly, in Baalbek-Hermel, 63.6% of schools lack interactive boards, the highest among governorates, with 18.2% indicating they are unavailable but in demand. Full availability in classrooms is almost nonexistent, making this region one of the most in need of technological support.

Conclusion:
Comparing governorates reveals widespread shortages in interactive boards, with significant disparities. Rural areas such as Akkar and Baalbek-Hermel have the highest deficits, while Beirut and Mount Lebanon Suburbs show some efforts to provide boards, albeit limited. There is an urgent need for a comprehensive plan to bridge the gap in educational technology, with a focus on the most underserved regions.

Second Response : Supervisor (Question No. 9)

Overall Situation
A. Public Sector
The largest percentage of supervisors (39.6%) stated that interactive boards are completely unavailable in classrooms, followed by 35.9% indicating that interactive boards are unavailable but in demand. The

combined average of both unavailable and under demand is 75.5%, which is a very high percentage and requires significant efforts for improvement. On the other hand, 5.1% stated that interactive boards are available in all or most classrooms. This highlights significant challenges in equipping first-cycle classrooms in the public sector with interactive boards.

B. Free Private Education

Data from supervisors shows that the vast majority of schools in free private education face significant challenges in providing interactive boards, with a high percentage either lacking them (54.8%) or relying on demand for provision (19.4%). In contrast, 6.5% reported that interactive boards are available in all classrooms. This underscores the need for improving technological infrastructure in schools.

C. Non-Free Private Education

Supervisors indicate an urgent need for interactive boards in many schools, with a significant percentage either lacking boards (35.9%) or relying on demand (29.9%). Conversely, 14.5% reported full availability of boards in all classrooms. This highlights the necessity of enhancing technological resources in educational institutions.

D. UNRWA

100% of UNRWA supervisors reported that interactive boards are completely unavailable in classrooms.

By Governorates

Public Sector

Best governorates for complete availability of interactive boards:

- **Baalbek-Hermel**: Among the best regions, with 11.8% of schools having interactive boards in all classrooms, the highest percentage in this context.
- **South**: 9.4% of schools offer boards in all classrooms.

Worst governorates for complete availability of interactive boards:

- The highest percentage of unavailability: ranges from 27.3% in Beirut to 47.4% in the North, highlighting that the issue is widespread across most regions.
- Demand for interactive boards: In many governorates, such as Mount Lebanon (excluding suburbs) and Nabatieh, there is a clear demand for interactive boards with percentages of 47.8% in Mount Lebanon (excluding suburbs) and 39.1% in Nabatieh, indicating readiness for future improvements.

Future Challenges and Opportunities:

- Most regions show a demand for interactive boards (under demand), such as Mount Lebanon (excluding suburbs), Nabatieh, and Beirut, indicating efforts to improve this situation in the future.
- Regions like Nabatieh and Mount Lebanon (suburbs) face significant challenges in providing interactive boards, requiring urgent interventions to equip schools with these technologies.

Free Private Education

Best regions for complete availability of interactive boards:

- **South**: The best region, with 50% of schools having interactive boards in all classrooms, reflecting good availability of educational technologies.
- **Mount Lebanon (excluding suburbs)**: Recorded a 25% rate of schools with boards in all classrooms.

Worst regions for complete availability of interactive boards:

- **Baalbek-Hermel**: The most affected region, with 100% of schools lacking interactive boards in first-cycle classrooms.
- **Beirut**: 100% of supervisors reported that interactive boards are unavailable in classrooms, indicating a complete absence of these devices in this region.
- **Akkar**: Recorded 75% of schools without interactive boards, showing a significant lack of availability.

Future Challenges and Opportunities:

- Significant demand for interactive boards: Many regions such as North, Akkar, and Nabatieh show a noticeable demand for interactive boards, indicating a readiness to improve technological infrastructure.
- Challenges in providing interactive boards: Akkar, Nabatieh, and South represent the biggest challenges in securing interactive boards, requiring focused efforts to meet school needs.

UNRWA

- **Mount Lebanon (suburbs)**: 100%: Reported that interactive boards are unavailable.
- **South**: 100%: Reported that interactive boards are unavailable.

Final Conclusions

The data reveals a notable lack of interactive boards in first-cycle classrooms across Lebanon. In the public sector, 39.6% of schools are without interactive boards entirely, while 35.9% have boards under demand, highlighting an urgent need for improvement. In free private education, 54.8% of schools lack interactive boards, demonstrating significant challenges in equipping schools. Conversely, non-free private education shows the best availability, with 16.2% of schools having boards in all classrooms. Regarding governorates, Baalbek-Hermel and South stand out as the best regions in the public sector, while North and Mount Lebanon suffer from severe shortages. In free private education, Beirut and Baalbek-Hermel report 0% of schools equipped with interactive boards, indicating greater difficulties. The disparities between regions highlight the urgent need for investment in school technological infrastructure, as many schools rely on temporary solutions such as moving boards between classrooms.

Third Response : Coordinator(Question No. 9)

Based on coordinators' responses, In the public education sector, Beirut faces a significant shortage of interactive boards, with statistics indicating that 35% of schools are completely lacking this technology. Additionally, 45% of schools provide partial access, meaning boards may be available in some classrooms or at certain times, while only 20% of schools offer interactive boards in all classrooms. In Mount Lebanon, a similar situation emerges, with 30% of schools lacking boards, 50% providing partial services, and 20% offering full access.

In the North, 28.6% of schools suffer from a shortage of interactive boards, with 50% offering partial services and 21.4% providing complete access. In the South, 40% of schools lack boards, with 40% providing partial services and 20% offering complete boards, indicating ongoing efforts to improve the situation but still a pressing need.

In the Bekaa, 25% of schools are without interactive boards, with 55% offering partial services and 20% providing full access. In Nabatieh, 35% of schools are lacking boards, 50% offer partial services, and 15% provide complete access. Lastly, in Baalbek-Hermel, 30% of schools are without boards, 50% provide partial services, and 20% offer full access.

For the free private education sector, the situation is even more severe, with all schools in Beirut (100%) lacking interactive boards. In Mount Lebanon, 80% of schools suffer from shortages, while only 20% provide partial services. In the North, 85% of schools are lacking boards, with 15% providing partial services. In the South, 90% of schools are without boards, with 10% offering partial services. In the Bekaa, 70% of schools lack boards, while 30% provide partial services. In Nabatieh, 80% of schools are without boards, with 20% offering partial services.

In the non-free private education sector, Beirut faces a shortage, with 25% of schools lacking interactive boards, 60% providing partial services, and 15% offering complete access. In Mount Lebanon, the shortage reaches 33.3%. In the North, 50% of schools offer partial services, with 10% providing complete access. In the South, half of the schools are without boards, with an equal percentage offering partial services. In the Bekaa, a similar situation exists with a third of schools lacking boards and a corresponding percentage providing partial services. Finally, in Nabatieh, 25% of schools are without boards, while 25% offer partial services.

Overall, these data reveal a significant shortage of interactive boards in both the public and private education sectors in Lebanon. Beirut experiences the highest rates of deficiency, with 35% of schools in the public sector and 100% in the free private sector lacking boards. Mount Lebanon follows with

30% of public schools and 80% of free private schools without boards. The North also faces severe shortages, with 28.6% of public schools and 85% of free private schools lacking interactive boards. In the South, 40% of public schools and 90% of free private schools are without boards. For non-free private education, the shortage is relatively lower, with 25% of Beirut schools and 33.3% of Mount Lebanon schools lacking interactive boards. Overall, these significant gaps highlight the urgent need for investment in equipping schools with interactive boards to improve educational quality and the learning experience for students across all regions.

Fourth Response : Teacher (Question No. 8)

Statistics from teachers' questionnaires indicate that 40.6% of classrooms in the public sector lack interactive boards, while this percentage reaches 46.9% in the free private sector, and 35% in the non-free private sector. Only 13.7% of classrooms across all sectors are fully equipped with interactive boards.

In Beirut Governorate, the figures show that 53.3% of classrooms in the public sector are lacking boards, with 40% partially available upon request. In the free private sector, 50% of classrooms are without boards, and 12.5% are fully equipped. In the non-free private sector, 45.8% of classrooms lack boards, while 25.4% have full access.

In Mount Lebanon - Suburbs, 35% of classrooms in the public sector suffer from a lack of boards, while 43.3% are partially available. In the free private sector, 37.8% of classrooms are without boards, and 16.2% are fully equipped. In the non-free private sector, 29.7% of classrooms lack boards, while 36% are fully equipped.

In Mount Lebanon - excluding suburbs, the data reveals that 51.2% of classrooms in the public sector are without boards, while 4.9% are fully equipped. In the free private sector, 38.7% of classrooms lack boards, and 32.3% are fully equipped. In the non-free private sector, 46.8% of classrooms lack boards, while 9.7% are fully equipped.

In the North, 40% of classrooms in the public sector are without boards, with 10% fully equipped. In the free private sector, 67.5% of classrooms are lacking boards, and none are fully equipped. In the non-free private sector, 45% of classrooms lack boards, while 15% are fully equipped.

In the Bekaa Governorate, 34.7% of classrooms in the public sector are without boards, and 11.2% are fully equipped. In the free private sector, 41.2% of classrooms lack boards, and 2.9% are fully equipped. In the non-free private sector, 21.4% of classrooms lack boards, while 39.3% are fully equipped.

In the South, 33.6% of classrooms in the public sector are lacking boards, with 9% fully equipped. In the free private sector, 60% of classrooms are without boards, and none are fully equipped. In the non-free private sector, 34.4% of classrooms lack boards, while 12.5% are fully equipped.

In Nabatieh, 47.3% of classrooms in the public sector are without boards, with 3.6% fully equipped. In the free private sector, 52.2% of classrooms are lacking boards, with none fully equipped. In the non-free private sector, 28.1% of classrooms lack boards, while 18.8% are fully equipped.

In Akkar, 39.2% of classrooms in the public sector are without boards, with 9% fully equipped. In the free private sector, 28.6% of classrooms lack boards, and 9.5% are fully equipped. In the non-free private sector, 28.1% of classrooms are without boards, while 3.1% are fully equipped.

Finally, in Baalbek-Hermel, 42.9% of classrooms in the public sector lack boards, while 9.1% are fully equipped. In the free private sector, 60% of classrooms are without boards, and none are fully equipped. In the non-free private sector, 41.7% of classrooms lack boards, while 22.2% are fully equipped.

The data indicates a significant shortage of interactive boards in classrooms across Lebanon, with most governorates facing major challenges. In the public sector, 40.6% of classrooms lack boards, while in the free private sector, 46.9%. Beirut records the highest shortage, with 53.3% of classrooms in the public sector and 100% in the free private sector without boards. In Mount Lebanon, 35% of public classrooms and 80% of free private classrooms face a severe lack of boards. Similarly, in the North, 40% of public classrooms and 67.5% of free private classrooms lack boards. In the South, 60% of free private classrooms are without boards, and in the Bekaa, the percentage reaches 41.2%. Overall, these

significant gaps highlight the urgent need for investment in equipping schools with interactive boards to ensure a conducive and supportive learning environment for students.

Availability of Active Boards in the classrooms
Second Cycle of Basic Education
First Response : Principal (Question No. 17)

The public sector shows a significant shortage of interactive boards in most governorates as mentioned the schools' principals.

In Beirut, 50% of classrooms are "unavailable," and 37.5% are "unavailable (upon request)," with no presence of "available in most classrooms" or "available in all classrooms." Mount Lebanon Suburbs report a high percentage of "unavailable (upon request)" at 63.6%, with a complete absence of full availability. The North shows moderate numbers, with 57.1% of classrooms "unavailable (upon request)" and 5.7% "fully available." Bekaa performs modestly, with 7.7% of classrooms "available in most classrooms," while Baalbek-Hermel faces a severe shortage with 63.6% "unavailable."

In the free private sector, there is a noticeable variation between governorates. Beirut faces a severe shortage, with 100% of classrooms "unavailable." Mount Lebanon excluding suburbs achieves the highest percentage of 25% "fully available." The North shows a significant deficiency at 66.7% "unavailable," while the South is completely devoid of interactive boards at 100% "unavailable." Bekaa displays a balanced distribution with 33.3% of classrooms partially available.

In the non-free private sector, performance is comparatively better but still faces a significant deficit. In Beirut, 22.2% of classrooms are "fully available," a figure comparable to Mount Lebanon Suburbs. The North struggles severely with 76.9% "unavailable." Bekaa provides a relatively balanced situation with 33.3% "partially available." Baalbek-Hermel and the South show similar figures for "fully available" classrooms, with Baalbek-Hermel marginally ahead at 20%.

UNRWA schools display a significant shortage. In Mount Lebanon Suburbs, 100% of classrooms are "fully available," whereas the North experiences a complete absence at 100% "unavailable." The South provides a balance between "unavailable (upon request)" and "partially available," each at 50%.

Comparison by Governorates:

Across governorates, the public sector suffers from severe shortages in all regions. Beirut registers high percentages of "unavailable" classrooms at 50%, a pattern repeated in Mount Lebanon excluding suburbs and the North. Bekaa and the South show relatively balanced distributions, with 7.7% and 20% of classrooms, respectively, "partially available," indicating slight improvements in some areas.

In the free private sector, Beirut tops the list with complete unavailability at 100%. Conversely, Mount Lebanon excluding suburbs performs better with 25% of classrooms "fully available." The South and North suffer severe shortages with near-total unavailability.

In the non-free private sector, the North has the highest percentage of "unavailable" classrooms at 76.9%, while Bekaa provides a relatively better outcome with 33.3% "partially available." Baalbek-Hermel and the South show similar figures for "fully available" classrooms, with Baalbek-Hermel slightly leading at 20%.

Second Response : Supervisor (Question No. 9)

Overall Situation

Public Sector

The majority of school supervisors (40.1%) indicated that interactive boards are completely unavailable in classrooms, followed by 35.9% who noted that they are unavailable but upon request. The total percentage of complete unavailability or availability upon request is 76%, which is a very high figure and indicates a significant need for improvement. In contrast, 5.5% of supervisors reported that interactive boards are available in all classrooms. This reflects substantial challenges in equipping second-cycle classrooms in the public sector with interactive boards, with potential efforts needed for future improvements.

Free Private Sector

According to supervisors, the percentage of schools without interactive boards is 54.8%, and those relying on requests for provision is 19.4%, totaling 74.2%. This is a very high percentage, pointing to the urgent need for substantial efforts to provide these devices in the future.

Non-Free Private Sector

Data shows that 35% of schools lack interactive boards, and 31.6% rely on requests for provision, totaling 66.6%. Conversely, 14.5% of supervisors reported that interactive boards are available in all classrooms. These figures highlight the urgent need for improving schools with interactive boards across various regions.

UNRWA

100% of UNRWA supervisors indicated that interactive boards are entirely unavailable in classrooms.

By Governorates

Public Sector

Best-performing governorates in terms of full availability of interactive boards in classrooms:
- **Baalbek-Hermel**: Records the highest percentage at 11.8% of schools with fully available interactive boards.
- **South**: 9.4% of schools provide interactive boards in all classrooms.

Worst-performing governorates in terms of full availability:
- The highest percentage of unavailability: Ranges between 27.3% in Beirut and 47.4% in North and Akkar, indicating a widespread issue across most regions.
- Demand for interactive boards: Many governorates, such as Mount Lebanon (excluding suburbs) and Bekaa, show significant demand, with 47.8% in Mount Lebanon (excluding suburbs) and 44.4% in Bekaa, suggesting readiness for future improvements.

Challenges and Opportunities:
- **Future Challenges**: Governorates such as Bekaa and Mount Lebanon (excluding suburbs) face significant challenges in providing interactive boards, necessitating urgent interventions.
- **Future Opportunities**: Governorates like the South and Mount Lebanon (excluding suburbs) display relatively better availability, indicating potential for growth and better distribution across regions with increased demand for these devices.

Free Private Sector

Best-performing regions for full availability of interactive boards:
- **South**: Leads with 50% of schools equipped with interactive boards in all classrooms, reflecting a good provision of educational technology.
- **Mount Lebanon (excluding suburbs)**: Records a 25% availability rate.

Worst-performing regions for full availability:
- **Baalbek-Hermel**: The most affected region, with 100% of schools lacking interactive boards.
- **Beirut**: 100% of supervisors report no availability of interactive boards in classrooms, reflecting a complete absence of these devices.
- **Akkar**: Records a 75% unavailability rate, indicating a significant deficit.

Challenges and Future Opportunities:
- **Challenges**: Regions such as Beirut, Baalbek-Hermel, and Akkar face severe shortages in interactive boards, necessitating immediate interventions.
- **Opportunities**: Some areas like South and Mount Lebanon (excluding suburbs) show better availability, suggesting potential for scaling up efforts to improve technology provision in other regions.

Non-Free Private Sector

Best-performing governorates for full availability of interactive boards:
- **Bekaa**: Reports 28.6% of schools equipped with interactive boards in all classrooms, demonstrating some progress despite challenges.
- **Baalbek-Hermel**: Shows a 27.3% availability rate, reflecting moderate improvements.

Worst-performing governorates for full availability:

- **Akkar, Nabatieh, South**: Exhibit high percentages of schools lacking interactive boards, with significant demand for these devices.

Challenges and Future Prospects:
- **High Demand**: Regions like the South, Akkar, and North demonstrate notable demand for interactive boards, highlighting the need for focused efforts to address these gaps.
- **Significant Shortages**: Akkar, Nabatieh, and South present substantial challenges in providing interactive boards, necessitating immediate attention and investment.

UNRWA
- **Comparison by Governorates**:
  - **Mount Lebanon (Suburbs)**: 100% of supervisors report complete unavailability of interactive boards.
  - **South**: 100% of supervisors indicate the absence of interactive boards.

Overall, the data reveals a noticeable lack of interactive boards in second-cycle classrooms across Lebanon, with high percentages of schools reporting either complete unavailability or dependence on requests for provision. This calls for immediate and sustained efforts to improve technological infrastructure in schools.

Third Response: Coordinator (Question No. 9)

The analysis of coordinators' questionnaires revealed that:

In the public education sector, Beirut is facing a noticeable shortage of interactive boards, with 40% of classrooms completely lacking these boards, while 60% provide them partially. In Mount Lebanon, a similar situation exists where 25% of classrooms are without boards, 50% provide them partially, and 25% have them in most classrooms. In the North, 32.3% of classrooms suffer from a lack of boards, 48.6% provide them partially, and only 13.5% offer them fully. In the South, 35.7% of classrooms lack boards, 35.7% provide them partially, and 14.3% have them in some classrooms.

In the free private sector, Beirut is even more severely affected, with all classrooms (100%) lacking interactive boards. In Mount Lebanon, 50% of classrooms do not have boards, while the other 50% provide them partially. In the North, 66.7% of classrooms are without boards, while 33.3% provide them partially.

In the non-free private sector, Beirut faces significant challenges, with 25% of classrooms lacking boards, 50% providing them partially, and 25% offering them in most classrooms. In the South, 50% of classrooms suffer from a lack of boards, while 50% provide them partially.

When examining the third cycle of basic education in the public sector, Beirut faces an additional shortage with 41.7% of classrooms lacking boards, 50% providing them partially, and only 8.3% offering them in most classrooms. In Mount Lebanon, 27.8% of classrooms are without boards, 55.6% provide them partially, and 16.7% offer them in most classrooms. In the North, 29.4% of classrooms suffer from a lack of boards, 50% provide them partially, and 16.7% offer them in most classrooms.

In the free private sector, Beirut continues to face a complete absence of boards, with all classrooms lacking them. In Mount Lebanon, 75% of classrooms are without boards, while the remaining 25% provide partial services. In the non-free private sector, Beirut has 16.7% of classrooms without boards, 66.7% providing them partially, and 16.7% offering them in most classrooms. In the South, 40% of classrooms lack boards, while 60% provide them partially, reflecting the urgent need for improving school equipment across all regions.

Data indicates a significant shortage of interactive boards in primary education across Lebanon, with Beirut particularly affected. In Mount Lebanon, 25% of classrooms in the public sector lack boards, while 50% provide them partially. In the North, 32.3% of classrooms in the public sector are without boards, and 66.7% in the free private sector face similar challenges. In the South, 35.7% of public classrooms lack boards, and similar issues are present in the private sector. In the third cycle of basic education, these trends persist, with Beirut experiencing a significant shortage, with 41.7% of public classrooms and 100% in the free private sector lacking boards. These figures underscore the urgent need for investment in equipping schools with interactive boards to enhance the quality of education and the learning experience for students across all regions.

Fourth Response : Teacher (Question No. 8)

Statistics from teachers' questionnaires indicate a significant shortage of interactive boards in classrooms at the second cycle of basic education in Lebanon.

In Beirut's public sector, 50% of classrooms are not equipped, and 40% lack them but have a demand. In the free private sector, 50% of classrooms are without boards, while 12.5% are fully equipped. In the non-free private sector, 45.8% of classrooms are without boards, and 27.1% are fully equipped.

In Mount Lebanon – suburbs, 35% of classrooms in the public sector are without boards, with only 5% fully equipped. In the free private sector, 37.8% are without boards, and 10.8% are fully equipped. In the non-free private sector, 28.8% of classrooms are without boards, while 34.7% are fully equipped.

In Mount Lebanon – excluding suburbs, 50% of public sector classrooms lack boards, and only 4.9% are fully equipped. In the free private sector, 38.7% are without boards, while 32.3% are fully equipped. In the non-free private sector, 46.8% of classrooms are without boards, and 9.7% are fully equipped.

In the North, 40.4% of public sector classrooms are without boards, while 9.6% are fully equipped. In the free private sector, 67.5% are without boards, and 0% are fully equipped. In the non-free private sector, 46% are without boards, and 15% are fully equipped.

In the Bekaa, 32.7% of public sector classrooms are without boards, and 11.2% are fully equipped. In the free private sector, 41.2% are without boards, and 0% are fully equipped. In the non-free private sector, 23.2% are without boards, while 39.3% are fully equipped.

In the South, 32.8% of public sector classrooms lack boards, while 9.8% are fully equipped. In the free private sector, 60% are without boards, and 0% are fully equipped. In the non-free private sector, 34.4% are without boards, while 6.3% are fully equipped.

In Nabatieh, 48.2% of public sector classrooms are without boards, and 2.7% are fully equipped. In the free private sector, 52.2% are without boards, and 0% are fully equipped. In the non-free private sector, 28.1% are without boards, while 12.5% are fully equipped.

In Akkar, 38.6% of public sector classrooms are without boards, while 10.2% are fully equipped. In the free private sector, 28.6% are without boards, and 14.3% are fully equipped. In the non-free private sector, 29.7% are without boards, while 1.6% are fully equipped.

In Baalbek-Hermel, 40.3% of public sector classrooms are without boards, and 9.1% are fully equipped. In the free private sector, 60% are without boards, and 0% are fully equipped. In the non-free private sector, 41.7% are without boards, and 22.2% are fully equipped.

Overall, statistics reveal a significant shortage of interactive boards in classrooms at the second cycle of basic education in Lebanon. Beirut, in particular, is deeply affected, with 50% of public sector classrooms and 100% in the free private sector lacking boards. Mount Lebanon suffers from 35% of public sector classrooms and 50% in the free private sector lacking boards. The North and South also face substantial challenges, with 40.4% and 32.8% of public sector classrooms respectively being without boards, and 67.5% and 60% in the free private sector. The overall figures indicate that 39.2% of public sector classrooms, 46.9% in the free private sector, and 35.1% in the non-free private sector are without boards, underscoring the urgent need for improving school equipment with interactive boards across all regions.

Availability of Active Boards in classrooms

Third Cycle of Basic Education

First response : Principal (Question No. 17)

Based on schools principals' responses:
Public Education: Over 44.9% of schools lack interactive boards (not available), while 43.5% indicate they are unavailable but in demand. Governorates like Beirut, Bekaa, and the South show high percentages of schools without boards, whereas the South shows slight progress with 13.3% of schools having boards in most classrooms.

Free Private Education: The highest percentage (43.3%) of schools report a lack of interactive boards. However, there is noticeable improvement in some regions such as Baalbek-Hermel, where 33.3% of schools have boards in all classrooms. Nabatieh also shows positive results with partial board availability in 33.3% of schools.

Non-Free Private Education: Shows mixed results; 44.9% of schools report a lack of boards. Regions like Beirut and Mount Lebanon suburbs register good percentages of interactive board availability in all classrooms, reaching 22.2% and 21.2%, respectively. However, percentages remain low in the North and Bekaa.

UNRWA: Shows significant progress, with 25% of schools having interactive boards in most classrooms.

Conclusion: The results indicate a significant disparity between educational sectors in terms of interactive board availability. Public education and free private education are lagging in providing interactive boards compared to non-free private education and UNRWA schools.

Comparison by Governorate: In Beirut, 50% of schools lack interactive boards, with 37.5% indicating boards are unavailable but in demand. This highlights a pressing need for technological support in this region, as full availability in all classrooms is almost absent.

In Mount Lebanon suburbs, 27.3% of schools lack boards, with 63.6% indicating they are unavailable but in demand. This suggests partial efforts to meet technological needs, although full availability is still limited.

In Mount Lebanon excluding suburbs, 50% of schools lack boards, while 44.4% indicate they are unavailable but in demand. The region faces challenges in securing complete interactive board access, with a significant shortfall in usage.

In the North, 37.1% of schools lack boards, with 51.4% indicating they are unavailable but in demand. This indicates a substantial technology gap, with a small percentage (2.9%) having boards in most classrooms.

In Bekaa, 53.8% of schools lack boards, with 38.5% indicating they are unavailable but in demand. The situation in Bekaa calls for urgent improvements in basic technological equipment, with very limited full board availability.

In the South, 53.3% of schools lack boards, but a good percentage (13.3%) have boards in most classrooms. The South is relatively better off compared to other areas, though still facing significant shortages.

In Nabatieh, 50% of schools lack boards, with 31.3% indicating they are unavailable but in demand. A small percentage (12.5%) has boards in most classrooms, showing a slight improvement compared to other areas.

In Akkar, 35% of schools lack interactive boards, with 55% indicating they are unavailable but in demand. This highlights significant challenges in securing technology in schools, with only 5% having full board availability.

Finally, in Baalbek-Hermel, 63.6% of schools lack boards, the highest rate across governorates, with 18.2% indicating they are unavailable but in demand. Full availability is nearly absent, making the region one of the most in need of technological support.

Conclusion: The comparison between governorates reveals a severe shortage of interactive boards across all regions, with notable disparities. Rural areas such as Akkar and Baalbek-Hermel show the highest deficits, while Beirut and Mount Lebanon suburbs have made limited strides in providing boards. This underscores the urgent need for a comprehensive plan to bridge technological gaps in education, focusing on the most underserved areas.

Second Response : Supervisor (Question No. 9)

Overall Situation
Public Sector
The majority of supervisors (39.2%) reported that interactive boards are completely unavailable in classrooms, followed by 35.0% who indicated that boards are unavailable but under demand. The combined average of total non-availability or availability under demand is 74.2%, which is very high

and requires significant efforts for provision. Conversely, only 5.5% reported full availability of interactive boards in all classrooms. This reflects major challenges in equipping upper elementary classrooms in the public sector with interactive boards.

Free Private Education

According to supervisors, 54.8% of schools lack interactive boards, while 25.8% rely on demand to provide them, making a total of 80.6%, which is extremely high. Conversely, 3.2% reported full availability of interactive boards in all classrooms. This indicates a substantial need for future efforts to improve board availability.

Non-Free Private Education

Data from supervisors show that 36.8% of schools lack interactive boards, while 31.6% rely on demand to secure them, totaling 68.4%. In contrast, 13.7% confirmed that interactive boards are available in all classrooms. This reflects a pressing need for better provision of interactive boards across various regions.

UNRWA

100% of UNRWA supervisors reported that interactive boards are entirely unavailable in classrooms.

According to Governorates

Public Sector

Best governorates for complete interactive board availability:

Baalbek-Hermel: The highest percentage of schools with full availability at 11.8%.

South: 9.4% of schools provide boards in all classrooms.

Worst governorates for complete interactive board availability:

Highest non-availability: Ranges from 18.2% in Beirut to 50.0% in Akkar.

Demand for boards: In areas like Mount Lebanon (excluding suburbs) and Bekaa, 43.5% and 44.4%, respectively, show significant demand for boards, reflecting a future readiness for improvement.

Challenges and Opportunities

Many regions show demand for interactive boards, like Mount Lebanon (excluding suburbs) and Bekaa, indicating ongoing efforts to address this issue.

Areas like Bekaa and Mount Lebanon (suburbs) represent significant challenges in providing interactive boards, necessitating urgent interventions.

Free Private Education

Best regions for complete interactive board availability:

Mount Lebanon (excluding suburbs): Recorded a 25% rate of schools with full board availability.

Worst regions for complete interactive board availability:

Baalbek-Hermel and Beirut: 100% of schools lack interactive boards in upper elementary classrooms.

Akkar: 75% of schools do not have interactive boards, highlighting a substantial gap.

Challenges and Future Opportunities:

Several regions, such as Beirut, Baalbek-Hermel, and Akkar, face acute shortages in interactive boards, requiring urgent efforts for provision.

Some regions like Mount Lebanon (excluding suburbs) show progress, suggesting potential for broader improvements.

Non-Free Private Education

Best governorates for complete interactive board availability:

Bekaa: 28.6% of schools offer boards in all classrooms.

Baalbek-Hermel: 27.3% have boards in all classrooms, despite ongoing challenges.

Worst governorates for complete interactive board availability:

Akkar, Nabatieh, and the South: Significant shortages with substantial demand for boards.

Challenges and Future Opportunities:

Regions like Akkar, Nabatieh, and the South face the greatest difficulties in providing interactive boards, requiring targeted strategies to meet educational needs.

UNRWA

Mount Lebanon suburbs: 100% report no interactive boards available.

South: 100% report a lack of boards.

Conclusion

Overall, the availability of interactive boards in upper elementary classrooms in Lebanon faces significant challenges across all educational sectors. Public education shows the highest rate of non-availability at 39.2%, with free private education following at 54.8%. Non-free private education performs better with 13.7% having full availability. Governorates like Baalbek-Hermel and the South exhibit better outcomes, whereas regions like Akkar and Mount Lebanon continue to struggle. The need for substantial investment and strategic planning to bridge these gaps is clear, particularly in sectors with the most pressing shortages.

Third Response : Coordinator (Question No. 9)

Analysis of coordinators' responses revealed that:

Beirut

In the public sector, there is a significant demand for interactive boards with 66.7% of classrooms classified as "unavailable (under demand)" and only 22.2% completely lacking them. The free private sector is entirely without interactive boards. In contrast, the non-free private sector shows better availability, with 16.7% of classrooms fully equipped and 33.3% partially equipped.

Mount Lebanon - Suburbs

In the public sector, 35.3% of classrooms are unavailable and another 35.3% are under demand, with only 23.5% partially equipped. In the free private sector, 40% are under demand, and only 20% are partially equipped. The non-free private sector performs better, with 39.1% fully equipped classrooms.

Mount Lebanon - Excluding Suburbs

The public sector shows 61.5% of classrooms under demand, with only 7.7% fully equipped. The free private sector displays a better balance with 40% fully equipped classrooms. Meanwhile, the non-free private sector provides 42.1% of classrooms partially equipped, and 15.8% fully equipped.

North

The public sector faces challenges, with 45.8% of classrooms under demand and only 10.2% fully equipped. The free private sector is highly deficient, with 75% of classrooms not equipped. The non-free private sector shows diversity with 41.9% under demand and 12.9% fully equipped.

Bekaa

The public sector heavily relies on demand, with 55% of classrooms under demand and 40% completely unprovided. The free private sector shows partial availability with 50% of classrooms partially equipped. The non-free private sector excels with 43.8% of classrooms fully equipped.

South

The public sector maintains a balanced distribution with 35.7% unprovided and 33.3% under demand. The remaining percentages are spread between partial and full availability. The free private sector shows full absence of complete availability, relying heavily on demand at 80%. The non-free private sector shows no complete availability.

Nabatieh

43.8% of classrooms in the public sector are under demand, with the same percentage completely unprovided. Both the free and non-free private sectors display clear lack of complete availability.

Akkar

The public sector shows a reliance on demand at 46.2%, with 34.6% completely unprovided. The free private sector depends on demand at 33.3%. The non-free private sector offers more diversity, with 23.1% partially equipped classrooms.

Baalbek-Hermel

In the public sector, 38.9% of classrooms are unprovided and another 38.9% under demand, with 11.1% fully equipped. The free private sector shows an equal distribution between demand and partial availability at 50%. The non-free private sector provides full availability in 36.4% of classrooms.

Overall Summary

Based on the coordinators responses, the largest proportion of classrooms (37.3%) are "unavailable under demand," with 34.2% completely unprovided. Only 12.4% of classrooms have full interactive board availability, with a notable advantage in the non-free private sector compared to the public and free private sectors. Beirut and Mount Lebanon exhibit relative balance in distribution, while the North and Bekaa face severe shortages. The South and Nabatieh report low levels of complete availability, highlighting significant disparities between regions and sectors in accessing this educational technology.

Fourth response : Teacher (Question no. 8)

Statistics based on teachers' questionnaires revealed that:

Beirut

In the public sector, 40% of classrooms lack interactive boards, while only 3.3% are fully equipped. The free private sector shows 50% of classrooms without interactive boards, with 12.5% fully equipped. In the non-free private sector, 47.5% of classrooms lack boards, and 25.4% are fully equipped.

Mount Lebanon - Suburbs

In the public sector, 33.3% of classrooms lack interactive boards, with 5% fully equipped. The free private sector has 37.8% of classrooms without boards, and 8.1% fully equipped. In the non-free private sector, 28.8% are without boards, and 30.2% are fully equipped.

Mount Lebanon - Excluding Suburbs

52.4% of classrooms in the public sector lack interactive boards, with only 4.9% fully equipped. The free private sector has 38.7% of classrooms without boards, and 32.3% fully equipped. In the non-free private sector, 41.9% of classrooms lack boards, with 11.3% fully equipped.

North

In the public sector, 40% of classrooms lack interactive boards, with 10.7% fully equipped. The free private sector has 67.5% without boards, and 0% fully equipped. In the non-free private sector, 44% lack boards, with 15% fully equipped.

Bekaa

32.7% of classrooms in the public sector are without boards, with 11.2% fully equipped. In the free private sector, 41.2% are without boards, and 2.9% fully equipped. In the non-free private sector, 21.4% lack boards, and 39.3% are fully equipped.

South

32.8% of classrooms in the public sector are without boards, with 9.8% fully equipped. The free private sector shows 70% without boards, and 0% fully equipped. In the non-free private sector, 34.4% lack boards, with 0% fully equipped.

Nabatieh

46.4% of classrooms in the public sector are without boards, with 5.4% fully equipped. In the free private sector, 52.2% are without boards, and 0% fully equipped. In the non-free private sector, 31.3% lack boards, and 3.1% are fully equipped.

Akkar

38% of classrooms in the public sector lack boards, with 9.6% fully equipped. In the free private sector, 33.3% are without boards, and 4.8% fully equipped. The non-free private sector has 28.1% lacking boards, with 1.6% fully equipped.

Baalbek-Hermel

41.6% of classrooms in the public sector are without boards, with 10.4% fully equipped. The free private sector shows 60% without boards, and 0% fully equipped. In the non-free private sector, 44.4% lack boards, with 22.2% fully equipped.

Overall Summary

39.5% of classrooms in the public sector are without interactive boards, 47.8% in the free private sector, and 34.5% in the non-free private sector are lacking boards. Only 12.7% of classrooms are fully equipped with interactive boards across all sectors. These statistics highlight significant disparities in

board availability, especially in regions such as Beirut, Mount Lebanon, and the North, where large proportions of classrooms are without boards.

Availability of Active Boards in classrooms
Secondary cycle
First Response : Principal (Question No. 17)

The analysis of schools' principals responses revealed that

Public Sector: Displays a clear deficiency in interactive board availability across most governorates. In Beirut, 50% of classrooms are "not available," with 37.5% being "not available (under request)" and only 12.5% partially available. In Mount Lebanon Suburbs, 63.6% are "not available (under request)," with no availability for "available in most classrooms" or "available in all classrooms." North faces a similar shortage with 51.4% "not available (under request)," and only 8.6% fully available. Bekaa suffers from a significant deficit, with 69.2% "not available." South and Baalbek-Hermel both show high percentages of "not available," with a slight improvement in the partially available category.

Free Private Sector: Shows significant variation between governorates. Beirut records a complete lack of boards with 100% "not available." In Mount Lebanon excluding Suburbs, 25% of classrooms are "fully available," the highest in this sector. North faces a severe shortage at 83.3% "not available," while South records 100% "not available." Bekaa provides a balanced distribution among the three categories, reflecting a relative improvement.

Non-Free Private Sector: Performed relatively better than other sectors. In Beirut, 22.2% of classrooms are "fully available," a percentage similar to Mount Lebanon Suburbs. North faces a severe shortage at 76.9%. Bekaa provides a relatively balanced model, with 33.3% of classrooms "partially available." Baalbek-Hermel shows moderate success with 20% of classrooms "fully available," while South faces a notable deficit with 57.1% "not available."

UNRWA Schools: Experience clear shortages in some governorates. In Mount Lebanon Suburbs, 100% of classrooms are "fully available," while North suffers a complete lack of boards at 100% "not available." South offers a balance between "not available (under request)" and "partially available," each at 50%.

Comparison by Governorates

When comparing governorates, Beirut records high percentages of "not available" with 50% in the public sector and 100% in the free private sector, while the non-free private sector performs relatively better. In Mount Lebanon Suburbs, the public sector faces a significant deficit at 63.6% "not available (under request)," whereas the free private sector provides balanced rates with 25% "fully available."
In North, all sectors face clear shortages, with 40% "not available" in the public sector and 76.9% in the non-free private sector. Bekaa provides a relatively balanced approach, especially in the free private sector, with even distribution among the categories. South shows high percentages of "not available" in both the public and free private sectors, with slight improvements in the non-free private sector. Baalbek-Hermel records high levels of "not available" across all sectors, with the non-free private sector offering the highest relative success at 20% "fully available."

Overall, the data highlights significant disparities in interactive board availability across governorates and educational sectors. The public sector struggles in most governorates, while the free private sector shows very poor performance in Beirut and South. The non-free private sector provides a more balanced distribution in some regions like Bekaa, though it still suffers from notable shortages in North. Investments should be directed towards the most affected areas like North and Beirut, with enhanced support for public schools and UNRWA schools to improve availability on a broader scale.

Second Response : Supervisor (Question No. 9)

General Situation

Public Sector: The majority of supervisors (42.9%) stated that interactive boards are completely unavailable in classrooms, followed by 34.6% who reported that boards are not available but under request. The combined total for either completely unavailable or under request is 77.5%, which is a

very high percentage. On the other hand, only 7.4% reported full availability of interactive boards in all classrooms. This reflects significant challenges in equipping secondary education classrooms in the public sector with interactive boards, with potential efforts to acquire these resources in the future.

Free Private Sector: According to supervisors, 54.8% of schools do not have interactive boards, or rely on request for their provision (29%), totaling 83.8%, a very high percentage. This indicates a substantial need for significant efforts to provide these devices in the future. Conversely, only 3.2% confirmed full availability of interactive boards in all classrooms.

Non-Free Private Sector: Although 12.8% of classrooms have fully available boards, the data shows that 35.9% lack boards entirely, and 32.5% rely on requests for their provision, totaling 68.4%. This indicates a pressing need to improve the provision of interactive boards across various regions.

UNRWA: 100% of supervisors in UNRWA schools reported that interactive boards are completely unavailable in classrooms.

Comparison by Governorates

Public Sector:
- Best governorates for full availability of interactive boards:
    - **Baalbek-Hermel**: 23.5% of schools have interactive boards in all classrooms, the highest in this sector.
    - **South**: 9.4% of schools provide full board availability.
- Worst governorates for full availability:
    - The highest lack of boards is 50.0% in Akkar, while Beirut records 27.3%. This reflects a common issue across most regions.
    - Demand for interactive boards is high in several governorates, including North (39.5%), Mount Lebanon (excluding suburbs) (39.1%), and Nabatieh, highlighting readiness for future improvements.

Challenges and Opportunities:
- Many regions show a demand for interactive boards under request, such as North, Mount Lebanon (excluding suburbs), and Nabatieh, indicating efforts are being made for future improvements.
- Regions like North and Mount Lebanon suburbs present significant challenges in providing interactive boards, necessitating urgent interventions to equip schools with these technologies.

Free Private Sector:
- Best areas for full availability of interactive boards:
    - **Mount Lebanon (excluding suburbs)**: 25% of schools have interactive boards in all classrooms.
- Worst areas for full availability:
    - Besides Mount Lebanon, data indicates no availability in all secondary classrooms in other governorates:
    - **Baalbek-Hermel** and **Beirut** have 100% non-availability, while Akkar has 75%.

Challenges and Opportunities:
- Significant demand for interactive boards is evident in regions like South, Akkar, and Nabatieh, showing a willingness to enhance technological infrastructure in the future.
- Challenging regions like Akkar, Nabatieh, and South need focused efforts to address the urgent need for interactive boards.

Non-Free Private Sector:
- Best governorates for full availability of interactive boards:
    - **Baalbek-Hermel**: 27.3% of schools provide full interactive board availability, showing progress despite challenges.
    - **Beirut**: 22.2% of schools have fully available boards, reflecting technological improvements.
- Worst governorates for full availability:

- Akkar, Nabatieh, and South show a significant lack of interactive boards, with substantial demand for their provision.

Challenges and Opportunities:
- High demand for interactive boards is present in regions like South, Akkar, and Nabatieh, suggesting readiness for future technological advancements.
- Challenging regions like Akkar, Nabatieh, and South must be prioritized to meet schools' needs for interactive boards.

UNRWA:
- **Mount Lebanon suburbs**: 100% of supervisors reported no interactive boards available.
- **South**: 100% non-availability, reflecting urgent need for technological improvements.

In summary, there is a noticeable lack of interactive boards across all sectors, with schools in the public sector experiencing the highest deficits at 42.9%, and another 34.6% relying on requests. Free private schools show high non-availability rates at 54.8%, while non-free private schools have the highest percentage of boards available at 12.8%. Governorates such as Baalbek-Hermel and South show better availability in the public sector, while areas like Akkar and Mount Lebanon struggle significantly. Urgent interventions are required to address these disparities and enhance the technological infrastructure in schools across all sectors.

Third Response : Coordinator (Question No. 9)

A detailed analysis of the availability of interactive boards in secondary education across governorates and educational sectors reveals significant disparities based on coordinators reponses.

Public Sector:

In Beirut, interactive boards are completely unavailable in 11.1% of classrooms, while 77.8% are categorized as "not available (under request)," highlighting a substantial challenge in meeting technical needs. In Mount Lebanon suburbs, 35.3% of classrooms are fully unavailable, with 41.2% "not available under request," making the majority rely on temporary or partial solutions, with only 5.9% achieving full availability. In Mount Lebanon (excluding suburbs), full availability reaches only 10.3%, with 61.5% under request and partial availability in just 2.6% of classrooms. In the North, a similar situation arises with 39% of classrooms fully unavailable, 39% under request, and a 10.2% full availability rate. In Bekaa, 40% are fully unavailable, with 50% under request and only 5% fully available. In the South, 35.7% are unavailable, 31% under request, and a high rate of partial availability at 28.6%. In Nabatieh, 43.8% are unavailable, and 43.8% are under request, with only 6.3% providing partial or full availability. In Akkar, 30.8% are fully unavailable, 46.2% are under request, and 7.7% offer partial or full availability. In Baalbek-Hermel, 44.4% are unavailable, 33.3% under request, with a 11.1% full availability rate.

Free Private Sector:

In Beirut, there are no classrooms equipped with interactive boards. In Mount Lebanon suburbs, the distribution is evenly split between "not available" and "under request" (40% each), with 20% offering partial availability. In Mount Lebanon (excluding suburbs), 40% provide full availability, 20% are not available, and 40% are under request. In the North, 75% are fully unavailable, 25% under request, with no partial or full availability. In Bekaa, the distribution is equally split between "not available" and partial availability at 50%. In the South, 80% are under request, and 20% are not available, showing near-total lack. In Nabatieh, no classrooms are equipped with interactive boards. In Akkar, 66.7% are fully unavailable, and 33.3% are under request, with no partial or full availability. In Baalbek-Hermel, 50% are under request, and 50% offer partial availability.

Non-Free Private Sector:

In Beirut, 25% are fully unavailable, 25% under request, with 33.3% partial availability and a 16.7% full availability rate. In Mount Lebanon suburbs, 23.9% are fully unavailable, 19.6% under request, with a 39.1% full availability rate, the highest among regions. In Mount Lebanon (excluding suburbs), 15.8% are fully unavailable, 21.1% under request, with partial availability at 42.1% and full availability at 15.8%. In the North, 41.9% are fully unavailable, 29% under request, with partial and full

availability each at 12.9%. In Bekaa, 31.3% are fully unavailable, 31.3% under request, and 25% offer full availability. In the South, 50% are fully unavailable, and 50% are under request. In Nabatieh, 72.7% are fully unavailable, and 27.3% under request. In Akkar, 46.2% are fully unavailable, 15.4% under request, and partial availability at 30.8%. In Baalbek-Hermel, 36.4% are fully unavailable, 18.2% under request, and 36.4% offer full availability.

UNRWA:

In the North, all classrooms (100%) are fully unavailable, with an equal split between "not available" and "under request."

Overall Results

In general, there is a severe shortage of interactive boards across all sectors and regions, with significant disparities between governorates. The non-free private sector shows relatively higher rates of full availability compared to other sectors, while the public and free private sectors suffer from significant shortages, especially in remote areas such as Akkar and Baalbek-Hermel.

Data reveals a noticeable lack of interactive boards in secondary education classrooms across various governorates and educational sectors, with a predominance of "not available" and "under request" percentages in most regions, indicating disparities between areas. In the public sector, Beirut, Mount Lebanon, and northern areas rely heavily on unmet demand, while the South and Bekaa show higher rates of partial availability. The free private sector faces severe shortages, with most areas exhibiting high percentages of non-availability, except for partial instances in Mount Lebanon and Bekaa. The non-free private sector achieves a relative advantage with higher rates of partial and full availability, especially in Mount Lebanon and Bekaa. UNRWA schools show a severe shortage, with all classrooms in the North being fully unavailable. This situation presents a significant challenge in providing equal access to educational technology across regions and sectors.

Fourth Response : Teacher (Question No. 8)

The results related to the availability of interactive boards in secondary education classrooms indicate significant disparities and a noticeable shortage across all sectors and regions as mentioned by teachers.

In Beirut, 40% of classrooms in the public sector lack interactive boards, while only 3.3% are fully equipped, highlighting a weakness in educational resources. In the free private sector, 50% of classrooms are not equipped, with only 12.5% fully equipped, reflecting major challenges in this sector. In the non-free private sector, 49.2% of classrooms are without boards, while 25.4% are fully equipped.

In Mount Lebanon suburbs, 33.3% of classrooms in the public sector lack boards, with 8.3% fully equipped. In Mount Lebanon (excluding suburbs), 56.1% of classrooms are without boards, and only 3.7% are fully equipped, underscoring a significant gap in school infrastructure in these areas.

In the North, 44.1% of public sector classrooms lack boards, with only 9.6% fully equipped. In the free private sector, 72.5% of classrooms are without boards, with no fully equipped classrooms.

In Bekaa, 29.6% of public sector classrooms lack boards, with 12.2% fully equipped. In the free private sector, 41.2% lack boards, with only 2.9% fully equipped. In the non-free private sector, 25% are without boards, while 37.5% are fully equipped.

In the South, 40.2% of classrooms in the public sector are without boards, and only 4.9% are fully equipped. In the free private sector, 70% lack boards, with no fully equipped classrooms. In the non-free private sector, 34.4% lack boards, with 0% fully equipped.

In Nabatieh, 52.7% of public sector classrooms are without boards, with only 6.3% fully equipped. In the free private sector, 52.2% lack boards, with no fully equipped classrooms. In the non-free private sector, 31.3% are without boards, with 3.1% fully equipped.

In Akkar, 43.4% of public sector classrooms lack boards, with 9.0% fully equipped. In the free private sector, 33.3% lack boards, with 4.8% fully equipped. In the non-free private sector, 28.1% are without boards, and only 1.6% are fully equipped.

Finally, in Baalbek-Hermel, 42.9% of public sector classrooms lack boards, with 11.7% fully equipped. In the free private sector, 60% lack boards, with no fully equipped classrooms. In the non-free private sector, 44.4% are without boards, with 22.2% fully equipped.

Overall, statistics indicate that 43.2% of public sector classrooms lack boards, 48.8% in the free private sector, and 37.6% in the non-free private sector. Only 11.5% of classrooms across all sectors are fully equipped with interactive boards, calling for urgent measures to improve school resources and ensure suitable learning environments for all students.

The results highlight a significant shortage of interactive boards in secondary education across various sectors and regions. In the public sector, 43.2% of classrooms are without boards, while in the free private sector, this percentage rises to 48.8%, reflecting major challenges in equipping schools. Beirut reports 40% of classrooms lacking boards, while the North faces a high percentage of 72.5% in the free private sector. Regions such as Akkar and Mount Lebanon face severe shortages, with no fully equipped classrooms in some areas. Overall, data indicates that only 11.5% of classrooms are fully equipped with interactive boards, necessitating urgent actions to enhance school infrastructure and provide conducive learning environments for all students.

General observations across all levels and sectors indicate that the availability of interactive boards in the public sector (official) shows partial availability in most educational cycles, but a significant proportion of classrooms lack interactive boards. The South demonstrates better distribution compared to other regions, with a higher percentage of partial availability.

Regarding the private sector – free (private free), free private schools face a severe shortage of interactive boards, especially in Beirut, with a slight improvement in Mount Lebanon and the North, where they are partially available in some schools.

For the private sector – non-free (private non-free), non-free private schools show better distribution compared to free schools, with interactive boards available partially or fully in most classrooms, especially in Beirut and Mount Lebanon. However, the North and South still face relative shortages, despite some improvements compared to free schools. Regional trends indicate that Beirut exhibits a clear lack of interactive boards, particularly in free private schools, while the situation improves somewhat in public and non-free private schools. Mount Lebanon provides better distribution of interactive boards, especially in the public sector and non-free private sector, while the North and South face significant challenges with a noticeable shortage in the free private sector, with a relative improvement in public and non-free private schools.

In summary, there is a significant disparity in the availability of interactive boards across governorates and educational sectors. The public sector shows partial availability but still faces challenges in achieving full provision. Free private schools suffer from severe shortages, whereas non-free private schools perform better. Beirut and Mount Lebanon demonstrate relatively better performance, while the North and South face greater challenges.

Question: Availability of computers in the classrooms
Section: Kindergarten
Response 1: Principal (Question No. 18)

Public Sector: The availability of computers varies significantly between governorates. In Beirut, 37.5% of responses indicate "not available," and another 37.5% indicate "not available (upon request)". In Mount Lebanon suburbs, there is a clear shortage with 72.7% indicating "not available (upon request)". In the north, 31.4% of respondents in schools report "not available," and 28.6% report "partially available," highlighting the disparities in availability. In the Bekaa, there is a 30.8% rate for

both "not available" and "not available (upon request)," with 15.4% fully available. In the south, there is a significant shortage with 46.7% "not available," and only 6.7% fully available. Baalbek-Hermel registers 36.4% "not available," with small availability proportions.

Private Free Sector: Beirut shows a severe shortage at 100% "not available". Mount Lebanon suburbs and Baalbek-Hermel show a relatively balanced distribution, with 25% and 33.3% respectively "fully available". In the North, 50% of respondents in schools report "not available (upon request)," with 16.7% partially available. The south achieves a 100% fully available rate, representing the best performance in this sector.

Private Non-Free Sector: Shows relatively positive results in some areas. In Beirut, 33.3% of respondents in schools report "fully available". Mount Lebanon suburbs exhibit 39.4% "fully available," while in the north, 38.5% report "partially available." The Bekaa shows a balanced distribution with 33.3% "partially available" and 22.2% "fully available." The south records 28.6% "fully available."

UNRWA Schools: Show modest performance with clear shortages in availability. In Mount Lebanon suburbs, 100% of respondents in schools report "fully available," while the north suffers a complete lack of availability at 100% "not available". The South displays an equal distribution between "not available (upon request)" and "partially available".

Response 2: Supervisor (Question No. 10)

General Situation
Public Sector:
The general situation indicates significant challenges in equipping kindergarten classrooms in the public sector with computers. The percentage of complete non-availability reached 31.8%, while 29% of respondents in schools reported that devices are unavailable but can be requested. Computers are partially available in 29% of schools, and completely available in only a small percentage (6.5%). These figures highlight the significant gap in digital infrastructure within schools.

Private Free Education
The results indicate that a large percentage of private free education schools face a shortage of computers. Specifically, 41.9% of supervisors reported complete non-availability or computers that are unavailable but can be requested. Conversely, computers are partially available in 32.3% of schools, while 25.9% of supervisors affirmed that computers are available in most or all classrooms. These numbers reflect a clear disparity in school readiness, emphasizing the need to bolster digital infrastructure and support schools in providing comprehensive and sustainable technology solutions.

Private Non-Free Education
Data shows a notable number of private non-free education schools struggling with computer availability, with 32.4% of supervisors reporting complete non-availability or computers unavailable but can be requested. Conversely, computers are partially available in 31.6% of schools. Additionally, 24.8% of supervisors indicated complete availability of computers in all classrooms, and 11.1% affirmed availability in most or all classrooms. This result highlights the necessity for improving technological infrastructure in educational institutions.

UNRWA
In UNRWA schools, 33.3% of supervisors reported that computers are completely unavailable, while an equal percentage reported that computers are unavailable but can be requested. Additionally, 33.3% stated that computers are partially available (transferred from classroom to classroom).

By Governorate
Public Sector
The overall percentage of complete non-availability or non-availability but upon request is 60.8%, which is a high-rate necessitating efforts for improvement.
Best governorates in terms of complete computer availability in classrooms:
Bekaa: Best performing with 27.8% of respondents in schools reporting computers in all classrooms, the highest percentage in this context.
Nabatieh: 13.0% of respondents in schools have computers in all classrooms.
Worst governorates in terms of complete computer availability in classrooms:
The highest percentages of non-availability: Between 25.0% in the south and 47.1% in Mount Lebanon suburbs and Baalbek-Hermel, reflecting widespread challenges in these regions.
Computer demand: In many governorates such as Beirut and Baalbek-Hermel, there is a clear demand for computers with rates of 36.4% in Beirut and 35.3% in Baalbek-Hermel, reflecting readiness for future improvements.

Future Challenges and Opportunities:
Many regions show a demand for computers (upon request), such as Beirut and Baalbek-Hermel, indicating efforts are underway to improve this situation in the future.
Areas like Beirut and Baalbek-Hermel represent significant challenges in computer provision, necessitating urgent interventions to equip schools with these technologies.

Private Free Education
The overall percentage of complete non-availability or non-availability but upon request in the private free education sector is 41.9%, a high rate indicating the need for substantial efforts to provide these devices in the future.

Best regions for complete computer availability:
Akkar: The best-performing region with 50% of respondents in schools having computers in all classrooms, indicating good technological provision.
Mount Lebanon (suburbs): 40% of respondents in schools have computers in all classrooms.
Worst regions for complete computer availability:
Beirut and Baalbek-Hermel: Among the lowest with 100% of respondents reporting no computers in kindergartens.
South: Recorded 100% of respondents in schools without computers, with 50% under request, indicating significant shortages.

Future Challenges and Opportunities:
High computer demand: Several regions, including Baalbek-Hermel and Mount Lebanon suburbs, show significant computer demand, suggesting potential for technological improvement.
Challenges in providing computers in Akkar and the south: Akkar and the south face the greatest challenges in providing computers, requiring focused efforts to meet school needs.
Private Non-Free Education
The overall percentage of complete non-availability or non-availability but upon request in the private non-free education sector is 32.4%. This reflects a critical need for improving computer availability across different regions.
Best governorates for complete computer availability:
Beirut: 44.4% of respondents in schools have computers in all classrooms, reflecting improved technological coverage.
Mount Lebanon (excluding suburbs): 41.7% of respondents have computers in all classrooms, highlighting progress despite existing challenges.
Worst governorates for complete computer availability:

Akkar and the South: Show a significant shortage, with many schools lacking computers entirely and experiencing high demand.

Future Challenges and Opportunities:

High computer demand: Many regions, such as Baalbek-Hermel and Mount Lebanon suburbs, demonstrate a noticeable demand for computers, indicating a readiness for technological advancement in the future.

Challenges in Akkar and the South: Akkar and the South face the greatest hurdles in computer provision, necessitating concentrated efforts to meet school requirements.

Response 3: Coordinator (Question No. 10)

In the public education sector (public schools), there is significant variation in the availability of interactive boards and computers across regions. In Beirut, 50% of respondents in schools lack interactive boards, while 50% provide them partially, with limited computer availability. In Mount Lebanon (suburbs), 33.3% of respondents in schools lack interactive boards, while 66.7% provide them partially, facing similar challenges in computer availability. In Mount Lebanon (excluding suburbs), 5.1% of respondents lack interactive boards, while 46.2% provide them partially, highlighting the need for resource improvement. In the North, 40% of respondents in schools lack interactive boards, with a similar percentage facing challenges with computers. In Bekaa, 30% of respondents in schools lack interactive boards, with a similar percentage lacking computer. In the South, 50% of respondents in schools lack interactive boards, with a noticeable deficiency in computer resources. In Nabatieh, 60% of respondents in schools lack interactive boards, reflecting a critical gap in educational resources. In Akkar, 15.4% of respondents in schools lack interactive boards, with similar computer challenges. In Baalbek-Hermel, 22.2% of respondents in schools lack interactive boards, highlighting the need for investment in educational technology.

In the private sector - free schools, schools face severe resource shortages. In Beirut, all classrooms (100%) lack computers, indicating a severe lack of technological resources. In Mount Lebanon (suburbs), 20% of respondents in schools lack computers, with partial availability in the remaining schools. In Mount Lebanon (excluding suburbs), a significant percentage lacks computers, showing the need for infrastructure improvement. In the North, 50% of classrooms lack computers, deepening the technological resource gap. In Bekaa, all schools report a complete lack of computers, demonstrating an urgent need for intervention. In the South, a similar trend exists, with 20% of respondents in schools lacking computers, while the remaining schools have partial access. In Nabatieh, both free and public schools display a significant lack of computer availability.

For the private sector - non-free, in Beirut, 25% of classrooms lack computers, while the remaining schools show varying degrees of availability. In Mount Lebanon (suburbs), only a small percentage have full access to computers, with most schools facing challenges in this area. In the North, similar patterns are observed with many respondents in schools lacking adequate resources.

Conclusion

For preschool education (kindergartens), public schools show significant gaps in several regions such as Beirut, South Lebanon, and Nabatieh, where more than 50% of respondents lack interactive boards and computers, reflecting a substantial technological gap. Some regions like Mount Lebanon (excluding suburbs) and Akkar show partial availability, but the overall situation remains concerning. For free private schools, there is a severe lack of resources in many regions, including Beirut and Bekaa, where a complete absence of computers is reported, underscoring the urgent need for intervention. In non-free private schools, there is better availability of computers compared to other sectors, but challenges remain, especially in suburbs and northern regions.

Response 4: Teacher (Question No. 9)

Regarding the availability of computers in classrooms according to governorates and education sectors in preschools, the overall results across all schools show that 23.5% of respondents in schools do not have computers, and 21.7% require computers and are considered "on demand." Meanwhile, 29.6% of computers are partially available and are moved between classrooms. For schools with greater computer availability, 16.8% have computers in most classrooms, and 8.4% have computers in all classrooms.

In Beirut, in the public sector, 43.3% of respondents in schools lack computers, while only 6.7% have computers in most classrooms. In the non-free private sector, 15.3% of respondents in schools lack computers, whereas 18.6% have computers in all classrooms.

In Mount Lebanon (suburbs) in the public sector, 15.0% of respondents in schools lack computers, while 26.7% have computers in most classrooms. In the non-free private sector, 13.1% of respondents lack computers, while 42.3% have computers in most classrooms.

In Mount Lebanon (excluding suburbs) in the public sector, 15.9% of respondents lack computers, while 13.4% have computers in all classrooms. In the non-free private sector, 14.5% of respondents lack computers, while 32.3% have computers in most classrooms.

In the North, in the public sector, 31.5% of respondents lack computers, while 10.0% have computers in all classrooms. In the non-free private sector, 24.0% of respondents lack computers, while 30.0% have computers in most classrooms.

In Bekaa, in the public sector, 25.5% of respondents lack computers, while 12.2% have computers in all classrooms. In the non-free private sector, 19.6% of respondents lack computers, while 21.4% have computers in most classrooms.

In the South, in the public sector, 22.1% of respondents lack computers, while 6.6% have computers in all classrooms. In the non-free private sector, 31.3% of respondents lack computers, while 6.3% have computers in most classrooms.

In Nabatieh, in the public sector, 21.4% of respondents lack computers, while 8.0% have computers in all classrooms. In the non-free private sector, 12.5% of respondents lack computers, while 25.0% have computers in most classrooms.

In Akkar, in the public sector, 33.1% of respondents lack computers, while 3.6% have computers in all classrooms. In the non-free private sector, 17.2% of respondents lack computers, while 4.7% have computers in most classrooms.

In Baalbek-Hermel, in the public sector, 26.0% of respondents lack computers, while 5.2% have computers in all classrooms. In the non-free private sector, 36.1% of respondents lack computers, while 19.4% have computers in most classrooms.

Conclusion

The results indicate significant gaps in computer availability in preschools across all governorates, where 23.5% of respondents in schools completely lack computers, and 29.6% rely on partially available computers moved between classrooms. These challenges are more pronounced in the public sector compared to the private sector, especially in regions like Beirut, the North, and Akkar, where the computer shortage ranges between 31.5% and 43.3%. Conversely, the non-free private sector shows relatively better computer availability, particularly in Mount Lebanon (suburbs), where 42.3% have computers in most classrooms. Overall, this highlights the urgent need for investment in technological infrastructure and improving computer access in schools across various sectors and regions.

Question: Availability of computers in the classroom
Cycle 1 of basic education
Response 1: Principal (Question No. 18)

Public Sector: Displays noticeable variation in computer availability across governorates. In Beirut, half of the schools have "partially available" computers, while the others are distributed between "not available" and "not available (on demand)". In Mount Lebanon suburbs, 63.6% of respondents in schools are classified as "not available (on demand)", indicating a severe shortage, with a very small

percentage having "partially available". In the North, 28.6% have "partially available" computers, and 14.3% have "fully available", suggesting moderate distribution compared to other areas. In Bekaa, about 38.5% of respondents in schools have "partially available" computers, while the South and Nabatieh show varying percentages, with the South recording 40% "not available", and Nabatieh showing an improvement with 25% "fully available".

Free Private Sector: Faces clear shortages in some regions. In Beirut, all schools are classified as "not available" at 100%. In Mount Lebanon excluding suburbs, half of the schools have "fully available" computers, making it one of the better regions in this sector. In the North, 83.3% of respondents in schools are "not available", highlighting a significant gap in availability. The South, on the other hand, performs exceptionally well, with 100% of respondents in schools having "fully available" computers. Bekaa shows a balanced distribution among the three categories: "not available," "partially available," and "fully available."

Non-Free Private Sector: Provides relatively balanced results compared to other sectors. In Beirut, 33.3% of respondents in schools have "fully available" computers, a strong performance compared to other governorates. In Mount Lebanon suburbs, approximately 39.4% have "fully available" computers, while the North struggles significantly with 76.9% "not available". Bekaa stands out with a more balanced distribution, with 44.4% "partially available" and 22.2% "fully available."

UNRWA Schools: Display significant variation by region. In Mount Lebanon suburbs, all schools (100%) are classified as "fully available," while the North faces a complete lack of computers (100% "not available"). The South shows a balance between different availability categories, with 50% "not available (on demand)" and 50% "partially available."

Comparison by Governorates

When looking at differences between governorates, the public sector faces severe shortages in several areas. Beirut and Mount Lebanon suburbs record high percentages in the "not available (on demand)" category, highlighting the significant gap in computer availability. In the North, the largest category is "partially available", showing slight improvement compared to other areas such as the South, which faces a significant shortage at 40% "not available".

The free private sector shows a clear contrast between regions. In Beirut, schools suffer from a complete lack of computers, while the South achieves 100% "fully available". On the other hand, areas like the North and Bekaa offer more balanced results, with a relative distribution among the different availability categories.

The non-free private sector demonstrates relatively balanced performance in Beirut and Bekaa, with distributions between "partially available" and "fully available". However, the North struggles significantly with the highest percentage in the "not available" category.

UNRWA schools show varying performance; some regions like Mount Lebanon suburbs achieve very high percentages with 100% "fully available", while the North faces a complete absence of computers.

Conclusions

The results highlight significant variations in computer availability across governorates and educational sectors. The public sector faces severe shortages in several governorates, especially Beirut and the South. The free private sector performs poorly in some areas like Beirut, but well in the South. The non-free private sector shows relative balance in some regions like Bekaa but faces significant shortages in the North. UNRWA schools show inconsistent performance, with noticeable success in Mount Lebanon suburbs and a significant deficit in the North. To improve the situation, investment is needed in areas most in need, such as the North and Beirut, with additional support for the public sector and UNRWA schools.

Second response : Supervisor (Question No.10)

General Situation
Public Sector
A high percentage of supervisors (25.3%) confirmed that computers are completely unavailable in classrooms, followed by 27.2% who stated that computers are unavailable but on demand. The combined average of complete unavailability or unavailability on demand is 52.5%, a high percentage

requiring efforts to improve availability. Only 10.1% mentioned that computers are available in all classrooms. This reflects significant challenges in equipping first-stage classrooms in the public sector with computers, with potential efforts for future improvements.

Private Free Education

Results indicate a significant proportion of private free schools suffer from a lack of computer availability. 32.2% of supervisors reported complete unavailability or on-demand computers. Conversely, computers are partially available in 41.9% of schools, while 25.9% of supervisors confirmed computers are available in most or all classrooms. These figures reflect clear disparities in school infrastructure, highlighting the need for enhanced digital infrastructure and comprehensive technological support for schools.

Non-Free Private Education

Results indicate that approximately 29.1% of respondents in schools do not have sufficient computers (either unavailable or on demand), reflecting a significant shortfall in availability. On the other hand, 31.6% have partially available computers, while 39.3% of respondents reported computers available in most or all classrooms, suggesting notable disparities in technological infrastructure. This disparity emphasizes the urgent need to improve educational device availability in first-stage classrooms to ensure equitable educational opportunities.

UNRWA

33.3% of UNRWA supervisors reported complete unavailability of computers in classrooms, while another 33.3% stated that computers are unavailable but on demand, and 33.3% indicated partial availability (with computers being moved from classroom to classroom). These results highlight the urgent need for improved computer availability in UNRWA schools, as the significant number of schools experiencing shortages or high demand for computers underscores the necessity for greater device provision to enhance educational quality in the region.

By Governorates

Public Sector

The combined average of complete unavailability or unavailability on demand is 52.5%, a high percentage requiring efforts for improvement.

Best Governorates for Full Computer Availability:

Bekaa: Considered one of the best governorates with 27.8% of respondents in schools having computers in all classrooms, the highest percentage in this context.

Mount Lebanon suburbs: 17.6% of respondents in schools have computers in all classrooms.

Worst Governorates for Full Computer Availability:

The highest percentage of unavailability: ranges from 13.0% in Nabatieh to 41.2% in Baalbek-Hermel, highlighting a common issue across most areas.

Demand for Computers: In many governorates, such as Beirut and Mount Lebanon excluding suburbs, there is a clear demand for computers, with 36.4% in Beirut and 34.8% in Mount Lebanon excluding suburbs, reflecting future readiness for improvements in availability.

Future Challenges and Opportunities:

Most areas show a demand for computers (on demand), such as Beirut and Mount Lebanon excluding suburbs, indicating efforts are underway for future improvements.

Areas like Nabatieh and Baalbek-Hermel represent significant challenges in providing computers, requiring urgent interventions to equip schools with these technologies.

Private Free Education

The combined percentage of complete unavailability or on-demand availability in the private free sector stands at 32.2%, a high percentage indicating significant efforts needed to provide these devices in the future.

Best Regions for Full Computer Availability:

Akkar: The best region with 50% of respondents in schools having computers in all classrooms, reflecting good technological availability.

Mount Lebanon suburbs: Recorded a 40% availability of computers in all classrooms.
Worst Regions for Full Computer Availability:
Beirut and Baalbek-Hermel: These regions show the lowest computer availability in all classrooms, with 100% of respondents in schools reporting no computers in first-stage classrooms.

Future Challenges and Opportunities:
Challenges: Many regions, such as Beirut and Baalbek-Hermel, face acute shortages of computers in first-stage classrooms, necessitating urgent intervention.
Opportunities: Some regions like Akkar and Mount Lebanon suburbs show relatively better computer availability, suggesting potential to enhance efforts and expand improvements to other areas with clear demand for these devices.
Non-Free Private Education
Complete unavailability or on-demand provision:
Data shows that 29.1% of schools do not have computers or rely on demand-based provision. This reflects a pressing need to improve school computer infrastructure across various regions.
Best Governorates for Full Computer Availability:
Beirut: Recorded a 44.4% rate of respondents in schools with computers in all classrooms, indicating improved technological coverage.
Mount Lebanon excluding suburbs: Recorded a 41.7% rate of respondents in schools with computers in all classrooms, demonstrating improvements despite ongoing challenges.
Worst Governorates for Full Computer Availability:
Nabatieh, Akkar, and the South: These regions show significant gaps in computer availability, with 0% of respondents in schools having computers in all classrooms, highlighting pressing needs.

Future Challenges and Opportunities:
High demand for computers: Many regions such as Baalbek-Hermel and Mount Lebanon suburbs show substantial demand for computers, suggesting future readiness for technological advancements.
Challenges in Nabatieh, Akkar, and the South: These regions represent the greatest challenges in providing computers, necessitating focused efforts to meet educational needs.
UNRWA

Governorate Comparison:
Mount Lebanon suburbs:
50% reported complete unavailability of computers
50% reported computers are unavailable but on demand.
South:
100% reported computers are partially available.

Key Conclusions
Overall computer availability in first-cycle classrooms:
Public Sector:
Full computer availability in classrooms is weak, with 52.5% of schools lacking complete computer access, and 27.2% of respondents in schools lacking computers but relying on demand, indicating future readiness for improved access.

Private Free Education:
Computer availability in classrooms is lower compared to non-free private education, with 16.1% lacking computers.
The percentage of schools lacking computers or relying on demand is high (32.2%), highlighting significant challenges in equipping schools in this sector.
Non-Free Private Education:
Computer availability in classrooms is highest compared to the public sector and private free education, with 26.5% of respondents in schools having computers in all classrooms, while the public sector stands at 10.1% and private free education at 19.4%.

Best Governorates for Computer Availability:
Public Sector:

The most accessible areas for computers include Bekaa (27.8%) and Mount Lebanon suburbs (17.6%) of respondents in schools with computers in all classrooms.

Private Free Education:

Best regions for interactive boards in private free education include Akkar (50%) and Mount Lebanon suburbs (40%), showing significant regional disparities.

Non-Free Private Education:

In non-free private education, Beirut had the highest percentage (44.4%) of respondents in schools with computers in all classrooms.

Weakest Governorates for Full Computer Availability:

Public Sector:

Akkar (2.6%) and Baalbek-Hermel (5.9%) have the lowest computer availability, highlighting significant shortages.

Private Free Education:

Beirut, North, Bekaa, South, and Baalbek-Hermel show 0% availability of computers in all classrooms, underscoring greater challenges.

Non-Free Private Education:

South, Nabatieh, and Akkar have 0% availability, indicating substantial challenges in this sector.

Gaps and Challenges in Computer Availability:

Public Sector:

Significant disparities exist between regions, with areas like Akkar and Baalbek-Hermel facing severe computer shortages.

Many schools are resorting to temporary solutions such as moving computers from classroom to classroom.

Private Free and Non-Free Education:

Private Free education faces severe shortages.

In non-free private education, there is relatively better availability compared to the public sector, though regions such as South and Akkar still face substantial gaps.

Third Response: Coordinator (Question No.10)

In the analysis of computer availability in the first cycle of basic education, the public sector in Beirut shows that 22.2% of respondents in schools do not have computers, 33.3% provide them partially, and 11.1% provide them in most classrooms. In Mount Lebanon (Suburbs), 29.4% of schools do not have computers, while only 11.8% provide them in all classrooms. In Mount Lebanon (excluding suburbs), only 5.1% of respondents in schools lack computers, while 15.4% provide them in all classrooms.

In the North, 15.3% of respondents in public schools do not have computers, 32.2% provide them partially, while only 11.9% provide them in all classrooms. In the Bekaa, 20% of respondents in schools lack computers, while 25% provide them in all classrooms. In the South, 16.7% of respondents in public schools do not have computers, and 35.7% provide them partially. In Nabatieh, the majority of respondents in schools (56.3%) rely on computers "on demand," while only 12.5% provide computers in all classrooms.

In Akkar, 15.4% of schools do not have computers, and only 7.7% provide them in all classrooms, while in Baalbek-Hermel, 22.2% of schools do not have computers, with only 11.1% providing them in all classrooms.

Regarding the **free private sector,** in Beirut, all schools lack computers, whereas Mount Lebanon (Suburbs) shows a relative advantage with 60% of respondents in schools providing them in all classrooms. In the Bekaa and South, there are varying reports of severe shortages or partial availability. In the private non-free sector, Beirut provides 25% of computers in all classrooms, while Mount Lebanon (excluding suburbs) provides 42.1%. In the North and Bekaa, the ranges are between 25% and 43.8%.

Finally, in **UNRWA schools** in the North, 50% of respondents in schools provide computers partially, while the other half lack them entirely. Overall, the results indicate significant disparities between regions and educational sectors, highlighting the need for strategic intervention to improve technological availability and enhance equitable distribution of educational resources.

Fourth Response : Teacher (Question No.9)

Regarding computer availability in the first cycle of basic education, national data indicates that 19.8% of respondents in schools do not have computers, and 20.6% provide them "on demand," while 31.6% of respondents have partial access, with computers being moved between classrooms. Additionally, 18.0% provide computers in most classrooms, and only 10.0% of respondents have computers in all classrooms.

By sector, the public sector shows the highest percentage of schools lacking computers at 23.6%, followed by the private free sector at 15.3%, and the private non-free sector at 14.5%.

In Beirut Governorate, the public sector faces a significant shortage, with 36.7% of respondents in schools lacking computers, whereas the non-free private sector shows a better result with 25.4% of respondents providing computers in most classrooms. In Mount Lebanon (suburbs), 13.3% of respondents in public schools do not have computers, while 26.7% provide them in most classrooms. The non-free private sector in the same region shows positive ratios with 45.5% of respondents providing computers in most classrooms.

In Mount Lebanon (excluding suburbs), 14.6% of respondents in public schools lack computers, compared to 17.1% providing them in most classrooms, while in the non-free private sector, 14.5% of respondents do not have computers, and 27.4% provide them in most classrooms. In the North Governorate, 25.2% of respondents in public schools lack computers, and 13.7% have them in all classrooms, whereas in the non-free private sector, 30.0% of respondents provide computers in most classrooms.

In the Bekaa, 23.5% of respondents in public schools do not have computers, and 13.3% provide them in all classrooms, while the non-free private sector shows similar figures with 14.3% lacking computers and 21.4% providing them in most classrooms. In the South, 18% of respondents in public schools do not have computers, and only 6.6% have them in all classrooms, while in the non-free private sector, 12.5% of respondents lack computers, and the same percentage provides them in most classrooms.

In Nabatieh, 20.5% of respondents in public schools lack computers, and 13.4% provide them in most classrooms, while the non-free private sector shows positive ratios with 21.9% of respondents providing computers in most classrooms. In Akkar, 31.3% of respondents in public schools face a shortage of computers, and only 5.4% have them in all classrooms, while in the non-free private sector, 14.1% lack computers, and 6.3% provide them in most classrooms.

Finally, in Baalbek-Hermel, 27.3% of respondents in public schools do not have computers, and only 6.5% have them in all classrooms, whereas in the non-free private sector, 22.2% lack computers, and 19.4% provide them in most classrooms.

Conclusion

The data indicates significant disparities in computer availability in schools for the first cycle of basic education across sectors and governorates. Nationally, 19.8% of respondents in schools do not have computers, with 20.6% providing them "on demand," and 31.6% with partial access. Public schools face the greatest shortage, with 23.6% lacking computers, compared to 14.5% in the non-free private sector and 15.3% in the free private sector. At the governorate level, Beirut records the highest percentage of schools without computers at 36.7%, whereas Mount Lebanon shows a relatively better ratio in the non-free private sector, with 45.5% providing computers in most classrooms. In the North and Bekaa, there are higher ratios of partial or most classroom access, while the South, Akkar, and Baalbek-Hermel show lower percentages of full classroom computer availability. Overall, the general shortage is primarily concentrated in public schools compared to the private sector.

Question: Availability of computers in the classrooms
Cycle 2 of basic Education
Response: Principal (Question No. 18)

The overall results for all governorates show that 22.9% of respondents in schools do not have computers, 20.1% have computers "on demand," while 32.3% of respondents provide computers partially, 6.8% in most classrooms, and 17.9% have computers fully available in all classrooms.

In the public sector, the highest "unavailable" rates were in Baalbek-Hermel at 36.4% and the South at 40%, reflecting a severe shortage in these regions, while the lowest rates were in Mount Lebanon (suburbs) at 18.2% and Beirut at 25%. On the other hand, Bekaa and Baalbek-Hermel achieved the highest full availability rates at 15.4% and 18.2%, respectively.

In the free private sector, the highest "unavailable" rate was in Beirut at 100%, while the lowest was in other regions. Full availability was highest in Baalbek-Hermel at 66.7% and Mount Lebanon (excluding suburbs) at 50%.

In the non-free private sector, the highest "unavailable" rates were in the North at 23.1% and Baalbek-Hermel at 20%. The highest full availability rates were in Mount Lebanon (suburbs) at 39.4% and Beirut at 33.3%.

In UNRWA schools, the highest "unavailable" rate was in the North at 100%, with similar challenges in other regions. The South recorded a moderate full availability rate of 50%.

The governorate analysis shows that Beirut had a "non-available" rate of 27.8%, with limited full availability at 16.7%. In Mount Lebanon (suburbs), the "non-available" rate was 14.3%, with notable full availability at 28.6%. In Mount Lebanon (excluding suburbs), the "non-available" rate was 18.8%, with good full availability rates at 18.8%. In the North, the highest "non-available" rate was 29.1%, with a significant shortage in full availability at 12.7%. Bekaa recorded a moderate "non-available" rate of 20% with limited full availability at 8%.

In the South, the "non-available" rate was 28%, with limited full availability at 12%. Nabatieh had a moderate "non-available" rate at 17.9%, with a similar full availability rate. In Akkar, the "non-available" rate was high at 28.6%, with a moderate full availability rate of 17.9%. Finally, in Baalbek-Hermel, the "non-available" rate was 26.3%, with good full availability at the same rate.

Conclusions:

Partial computer availability is the highest percentage in most governorates, indicating temporary solutions or limited use of computers.

Bekaa and the South show higher rates of partial computer availability compared to other governorates. There is a significant gap in full computer availability, especially in rural areas like Baalbek-Hermel and Akkar.

Second Response: Supervisor (Question No.10)

General Situation
Public Sector:

A high percentage of supervisors (24.4%) indicated that computers are not fully available in classrooms, followed by 26.3% stating that computers are unavailable but on demand. The total average of non-availability, either fully or on demand, is 50.7%, which is a significant figure indicating a need for efforts to improve this situation. Conversely, 10.6% of supervisors mentioned that computers are available in all classrooms.

Free Private Education:

Results show that a significant number of free private schools suffer from a lack of computer availability, with 32.2% of supervisors reporting that computers are either unavailable or only available on demand. On the other hand, computers are partially available in 41.9% of schools, while 25.9% confirmed full availability of computers in most or all classrooms. These figures reflect a noticeable disparity in school infrastructure, emphasizing the need to enhance digital infrastructure and support schools in providing comprehensive and sustainable technology.

Non-Free Private Education:
Results indicate that approximately 29.1% of respondents in schools lack adequate computer access (either unavailable or on demand), reflecting a significant shortfall in providing this technology. Furthermore, 32.5% of respondents noted partial computer availability, while 38.4% reported that computers are available in most or all classrooms, highlighting noticeable variation in technological infrastructure. This disparity calls for urgent efforts to improve educational technology in the second cycle of education to ensure equal opportunities.

UNRWA
33.3% of supervisors in UNRWA schools reported that computers are entirely unavailable in classrooms, while another 33.3% mentioned that computers are unavailable but available on demand. Similarly, 33.3% indicated that computers are partially available (transferred from one classroom to another). These findings underscore the urgent need to improve computer availability in UNRWA schools for the second cycle, with a significant number of schools facing shortages or reliance on demand-based access, necessitating more substantial equipment provision to enhance educational quality in the region.

By Governorates
Public Sector
The total average of non-availability, either fully or on demand, is 50.7%, which is a high percentage requiring considerable efforts for improvement.
Best governorates in terms of full computer availability:
Bekaa: The best governorate with 33.3% of supervisors in schools having computers in all classrooms, the highest rate in this context.
Mount Lebanon Suburbs: 17.6% of supervisors reported full computer availability in all classrooms.
Worst governorates in terms of full computer availability:
Highest non-availability: Schools lacking computers ranged from 13.0% in Nabatieh to 35.3% in Baalbek-Hermel and Mount Lebanon Suburbs, indicating a widespread issue.
Demand for computers: In many governorates like Mount Lebanon (excluding suburbs) and Baalbek-Hermel, there is a clear demand for computers, with 34.8% in Mount Lebanon and 29.4% in Baalbek-Hermel, reflecting a readiness to improve future availability.

Challenges and Opportunities:
Many regions show demand for computers (on demand), such as Mount Lebanon (excluding suburbs) and Baalbek-Hermel, indicating ongoing efforts to improve the situation.
Regions like Nabatieh and Baalbek-Hermel present significant challenges in providing computers, necessitating urgent interventions to equip schools with these technologies.

Free Private Education
The total average of non-availability, either fully or on demand, is 32.2%, a high percentage indicating the need for substantial efforts to improve computer availability in the future.
Best regions for full computer availability:
Akkar: Leading with 50% of supervisors in schools having computers in all classrooms, indicating good availability.
Mount Lebanon (Suburbs): 40% of supervisors reported full computer availability in all classrooms.
Worst regions for full computer availability:
Beirut and Baalbek-Hermel: Among the lowest, with 100% of supervisors in schools lacking computers in the second cycle classrooms.
Challenges and Opportunities:
Challenges: Many regions like Beirut and Baalbek-Hermel suffer from severe shortages of computers in the second cycle classrooms, requiring urgent interventions.
Opportunities: Some areas like Akkar and Mount Lebanon (Suburbs) show good computer availability, suggesting potential for enhancing efforts and improving technology access across other regions.

Non-Free Private Education
Non-availability or reliance on demand:

The data shows that 29.1% of schools do not have computers or rely on demand to provide them. This reflects an urgent need for improving computer access across regions.
Best governorates for full computer availability:
Beirut: Leading with 44.4% of supervisors in schools having computers in all classrooms, suggesting advancements in technological coverage.
Mount Lebanon (excluding suburbs) and the North: 33.3% of supervisors reported full computer availability in all classrooms.
Worst governorates for full computer availability:
Nabatieh and Akkar: Both show 0% of supervisors in schools with computers in all classrooms, indicating significant challenges in these areas.
Challenges and Opportunities:
High demand for computers: Regions such as Baalbek-Hermel and Mount Lebanon (Suburbs) show notable demand, suggesting readiness for future improvements.
Challenges in providing computers: Nabatieh and Akkar remain the most challenging regions, requiring focused efforts to meet their needs.

UNRWA
Mount Lebanon (Suburbs):
50% reported computers are unavailable.
50% reported computers are unavailable but on demand.
South:
100% reported computers are partially available.

Key Conclusions
Overall computer availability in the second cycle classrooms:
Public Sector:
Full computer availability in classrooms is weak, with 26.3% of supervisors reporting computers unavailable but on demand, suggesting readiness for future improvements.
Free Private Education:
Computer availability in classrooms is lower compared to non-free private education, with a non-availability rate of 16.1%.
32.2% of schools rely on demand for computers, reflecting significant challenges in equipping schools in this sector.
Non-Free Private Education:
The availability of computers in classrooms is highest compared to the public sector and free private education, with 25.6% of supervisors in schools having computers in all classrooms, compared to 10.6% in the public sector and 19.4% in free private education.
Best governorates for computer availability:
Public Sector:
Bekaa (33.3%) and Mount Lebanon Suburbs (17.6%) are leading regions in full computer availability.
Free Private Education:
Akkar (50%) and Mount Lebanon Suburbs (40%) are the best regions for computer availability.
Non-Free Private Education:
Beirut recorded the highest rate (44.4%) of supervisors in schools with computers in all classrooms.
Weakest governorates for full computer availability:
Public Sector:
Akkar (2.6%) and Baalbek-Hermel (5.9%) show the lowest rates in computer availability.
Free Private Education:
Beirut, North, Bekaa, South, and Baalbek-Hermel reported 0% of supervisors in schools with computers in all classrooms, reflecting significant challenges.
Non-Free Private Education:
Nabatieh and Akkar showed 0% computer availability in all classrooms, highlighting greater challenges in these areas.

Gaps and challenges in computer availability:
Public Sector:
Significant disparities exist between regions, with areas like Akkar and Baalbek-Hermel suffering from acute computer shortages.
Many schools resort to temporary solutions, such as transferring computers from one classroom to another.
Free and Non-Free Private Education:
Both sectors face severe computer shortages, with free private education experiencing a higher non-availability rate.
Non-free private education shows relatively better computer availability compared to the public sector, yet regions like Nabatieh and Akkar still face substantial gaps.

Third Response : Coordinator (Question No.10)

In the public sector, Beirut shows the highest percentage of partial computer availability at 33.3%, while 22.2% of schools do not have computers at all. In Mount Lebanon Suburbs, the highest percentage was for partial availability at 35.3%, with 23.5% of schools lacking computers altogether. In Mount Lebanon (excluding suburbs), 38.5% of respondents in schools face non-availability (on demand), while computers were fully available in 15.4% of classrooms. In the North, partial availability was 33.9%, with non-availability on demand at 27.1%. In Bekaa, the highest percentage for partial availability was 35%, with full availability in all classrooms at 25%. In the South, 38.1% of respondents reported partial availability, while 28.6% indicated non-availability on demand. In Nabatieh, half of the schools were on demand at 50%, with partial availability at 25%. In Akkar, the highest percentage for partial availability was 42.3%, while 23.1% were on demand. Finally, in Baalbek-Hermel, the highest percentage of non-availability was 33.3%, with partial availability at 27.8%.

For free private education, in Beirut, 100% of schools did not have computers. In Mount Lebanon Suburbs, 80% of respondents in schools had computers available in all classrooms, while 20% were on demand. In Mount Lebanon (excluding suburbs), the percentages were split between partial and full availability at 40% each, with 20% having partial availability. In the North, 50% of respondents had on-demand computers, and 25% had partial availability. In Bekaa, 100% of schools had partial computer availability. In the South, the percentages were divided between partial availability at 40% and on demand at 40%. In Nabatieh, 50% had partial availability, while 50% were on demand. In Akkar, the percentages were equally split between non-availability, partial availability, and full availability at 33.3% each. In Baalbek-Hermel, 50% of respondents had partial availability, and 50% had full availability in most classrooms.

In non-free private education, in Beirut, 25% of respondents had computers available in all classrooms, while 33.3% did not have any computers. In Mount Lebanon Suburbs, the highest percentage for full availability was 56.5%, with 23.9% having partial availability. In Mount Lebanon (excluding suburbs), the percentages were split between partial and full availability at 42.1% each. In the North, 32.3% had partial availability, and another 32.3% had full availability in all classrooms. In Bekaa, the percentages were equal between partial and full availability at 37.5% each. In the South, 50% were on demand, and 16.7% had partial availability. In Nabatieh, the highest percentage for partial availability was 63.6%, with 18.2% having full availability. In Akkar, 46.2% had partial availability, and 23.1% had full availability. In Baalbek-Hermel, the highest percentage of non-availability was 36.4%, with 27.3% having full availability in all classrooms.
In UNRWA schools, in the North, the percentages were split equally between non-availability and partial availability at 50% each.

Conclusion
The findings indicate that computer availability in schools varies significantly by sector and governorate. In the public sector, partial computer availability is the most common, especially in Akkar and the North, while some regions like Baalbek-Hermel face high non-availability. In free private education, there is significant variation, with regions like Mount Lebanon Suburbs showing high full

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availability, whereas Beirut struggles with complete non-availability. In non-free private education, full availability is relatively common in Mount Lebanon Suburbs and Bekaa, while Beirut and Baalbek-Hermel show notable non-availability. For UNRWA schools, availability is mostly limited to partial and non-availability, highlighting clear disparities in technological resources across different sectors and governorates.

Fourth Response : Teacher (Question No.)

On a national level, data shows that 19.1% of respondents in schools do not have computers, while 20.3% have computers "on demand." Additionally, 32.4% have partial computer availability shared among classrooms, 18.3% have computers in most classrooms, and only 10.0% have computers in all classrooms. By sector type, the public sector faces the greatest shortage with 23.2% of its schools lacking computers, compared to 13.6% in non-free private and 14.4% in free private sectors.

Looking at governorates, Beirut shows a significant shortage in the public sector, with 30.0% of respondents in schools lacking computers, while computers are available in most classrooms at 23.7% in non-free private. In Mount Lebanon (suburbs), the public sector shows a lower non-availability rate at 15.0%, with notable computer availability in most classrooms at 45.5% in non-free private. In Mount Lebanon (excluding suburbs), computer availability in most classrooms is at 18.3% in the public sector and 27.4% in non-free private.

In the North, the public sector faces a shortage with 25.6% of respondents in schools lacking computers, with full availability in all classrooms at 12.2%. In Bekaa, 22.4% of respondents in public schools do not have computers, while full availability reaches 13.3%. In the South, non-availability in the public sector stands at 18.0%, compared to 12.5% in non-free private.

In Nabatieh, the public sector faces a 20.5% shortage of respondents in schools without computers, while full availability in most classrooms is at 13.4%. In Akkar, non-availability in the public sector is 30.7%, with limited availability in all classrooms at 6.0%. In Baalbek-Hermel, 24.7% of respondents in public schools lack computers, compared to 19.4% in non-free private, with limited availability in most classrooms.

Conclusion

The data shows significant challenges in computer availability in schools nationwide, with 19.1% of respondents lacking computers altogether and 32.4% having partial availability. Only 10.0% have computers in all classrooms. The public sector suffers the greatest shortage compared to free and non-free private sectors, with 23.2% of public school respondents lacking computers. Across governorates, disparities are evident, with Beirut and Mount Lebanon showing higher computer availability in the private sector, while regions like Akkar and Baalbek-Hermel experience higher non-availability, especially in the public sector. These figures reflect a clear disparity in technological resource distribution between sectors and regions, requiring further efforts to enhance technological infrastructure in public schools and less privileged areas.

Question: Availability of computers in the classrooms

Cycle 3 of basic Education

First Response: Principal (Question No.18)

In the public sector, some areas suffer from significant computer shortages, with the highest "unavailable" rates recorded in Baalbek-Hermel at 36.4% and the North at 34.3%, while the lowest rates were in Mount Lebanon suburbs at 18.2% and Beirut at 25%. For complete computer availability, the highest rates were in Bekaa at 15.4% and Beirut at 9.1%.

In the free private sector, a 100% "unavailable" rate was observed in Beirut, while there were varying rates in other regions. The highest complete availability rates were in Baalbek-Hermel at 33.3% and Mount Lebanon excluding suburbs at 50%.

In the non-free private sector, the highest "unavailable" rates were in the North at 30.8% and Baalbek-Hermel at 20%. The highest complete availability rates were in Mount Lebanon suburbs at 45.5% and Beirut at 33.3%.

In UNRWA schools, the highest "unavailable" rates were in the North at 100%, highlighting a clear shortage of computers across all regions. However, the highest complete availability rates were in the South at 50%.

At the governorate level, rural areas like Akkar and Baalbek-Hermel have significantly lower rates of complete computer availability compared to major urban areas like Beirut. In Beirut, the "unavailable" rate was 27.8%, with limited complete availability at 16.7%. In Mount Lebanon, suburbs had a 12.2% "unavailable" rate with higher complete availability at 32.7%, while other regions in Mount Lebanon had an 18.8% "unavailable" rate with good complete availability at the same percentage. In the North, the highest "unavailable" rate was 40%, with a significant shortage of complete availability at 10.9%. In Bekaa, the "unavailable" rate was 24% with limited complete availability at 8%. In the South, the "unavailable" rate was 20% with low complete availability at 8%. In Nabatieh, the "unavailable" rate was 21.4%, with moderate complete availability at 14.3%. In Akkar, the "unavailable" rate was high at 32.1%, with limited complete availability at 17.9%. Lastly, in Baalbek-Hermel, the "unavailable" rate was 31.6%, with good complete availability at 21.1%.

Conclusions

Partial computer availability is the highest in most governorates, indicating limited practical usage.
Rural areas such as the North, Akkar, and Baalbek-Hermel have higher rates of computer unavailability compared to urban areas like Beirut.
There is a clear need for infrastructure improvements in rural governorates to enhance computer availability and increase complete access.

Second response: Supervisor (Question No.10)

General Situation
Public Sector
A high percentage of school supervisors (26.7%) reported that computers are completely unavailable in classrooms, with an additional 32.3% stating that computers are unavailable but upon request. This reflects significant challenges in equipping third-cycle classrooms in the public sector with computers, with potential future efforts to address these shortages. Conversely, 9.2% indicated that computers are available in all classrooms.

Free Private Education
Results show that a large proportion of free private schools suffer from a lack of computers, with 51.6% of supervisors reporting either complete unavailability or computers that are available only upon request. Conversely, computers are partially available in 29.0% of schools, while 16.1% of supervisors confirmed that computers are available in all classrooms. These figures highlight a noticeable disparity in school infrastructure, emphasizing the need for enhanced digital infrastructure and support for schools to provide comprehensive and sustainable technology.

Non-Free Private Education
The results indicate that approximately 26.5% of respondents report insufficient computer availability (either unavailable or available upon request), highlighting a significant shortage. On the other hand, 34.2% report partial computer availability, and 39.3% indicate computers are available in most or all classrooms, reflecting noticeable disparities in technological infrastructure. This disparity underscores the urgent need to improve educational technology in third-cycle classrooms to ensure equal educational opportunities.

UNRWA
33.3% of UNRWA school supervisors reported that computers are unavailable but upon request, while 66.7% confirmed that computers are partially available (transferred from one classroom to another). These results highlight an urgent need to improve computer availability in third-cycle classrooms in UNRWA schools, with a significant number of respondents reporting a lack of or reliance on requested

computers, reflecting a pressing need for greater access to these devices to enhance educational quality in the region.

By Governorates

Public Sector

The overall average of complete unavailability or computers available only upon request is 53.4%, which is a high percentage requiring significant efforts for improvement.

Best governorates in terms of full computer availability in classrooms:

Bekaa: Notable with a 22.2% rate of schools providing computers in all classrooms, the highest in this context.

Mount Lebanon suburbs: 17.6% of respondents reported computers available in all classrooms.

Worst governorates in terms of full computer availability:

The highest unavailability rates: Schools without computers ranged from 15.6% in the South to 35.3% in Baalbek-Hermel and Mount Lebanon suburbs, reflecting a widespread issue.

Demand for computers: In several governorates like Mount Lebanon excluding suburbs and Bekaa, there is a clear demand with rates of 34.8% in Mount Lebanon excluding suburbs and 33.3% in Bekaa, suggesting future efforts to address this need.

Future Challenges and Opportunities:

Most regions exhibit demand for computers (upon request), such as Mount Lebanon excluding suburbs and Bekaa, indicating ongoing efforts to improve this situation.

Regions like the South and Baalbek-Hermel represent significant challenges in computer provision, necessitating immediate interventions to equip schools with these technologies.

Free Private Education

Overall rate of complete unavailability or computers available only upon request:

Free private sector schools exhibit a high rate of computer unavailability (51.6%), highlighting a significant need for future improvements.

Best regions for full computer availability:

Mount Lebanon suburbs: Noted for a 40% rate of schools with computers in all classrooms.

Akkar: Recorded a 25% rate of schools providing computers in all classrooms, indicating good availability.

Worst regions for full computer availability:

Beirut, the North, Bekaa, the South, and Baalbek-Hermel all reported 0% of schools with computers in all classrooms, reflecting substantial challenges.

Future Challenges and Opportunities:

Significant demand for computers: Several regions such as Baalbek-Hermel, and Mount Lebanon suburbs exhibit substantial demand, signaling readiness for future improvements.

Challenges in regions like the South, Nabatieh, and Akkar require urgent attention to meet school technology needs.

Non-Free Private Education

Complete unavailability or computers available only upon request:

Data indicates that 26.5% of schools lack sufficient computer access (unavailable or requested), reflecting a pressing need for technological enhancements in these schools.

Best governorates for full computer availability:

Beirut: Recorded a 44.4% rate of schools providing computers in all classrooms, showing progress in technological coverage.

Mount Lebanon suburbs: Reported a 37.5% rate of schools with computers in all classrooms, indicating improvement despite challenges.

Worst governorates for full computer availability:

South, Nabatieh, and Akkar reported 0% of schools with computers in all classrooms, indicating the largest gaps in this sector.

Challenges and Future Opportunities:

High demand for computers: Many areas such as Baalbek-Hermel and Mount Lebanon suburbs show significant demand, suggesting readiness for technological development.
Challenges in the South, Nabatieh, and Akkar require focused efforts to bridge the technology gap in schools.

Third Response : Coordinator (Question No. 10)

In Beirut, data shows that the public sector faces a shortage of computers, with 22.2% of respondents in schools reporting no computers available, while 33.3% have partial availability and only 11.1% offer computers in all classrooms. In the free private sector, 100% of respondents reported no computers available, while the non-free private sector shows a balance, with 33.3% providing computers in all classrooms.

In Mount Lebanon, disparities exist between suburbs and other regions. In the suburbs, the public sector faces a relative shortage with 23.5% of respondents in schools reporting no computers, while only 11.8% offer them in all classrooms. In the non-free private sector, 60.9% provide computers in all classrooms, a significantly higher rate compared to other sectors.

In the North, the public sector has 20.3% of respondents in schools lacking computers, with only 6.8% offering them fully. In the free private sector, 50% of respondents report no computers, while in the non-free private sector, 32.3% provide computers fully, with a relative shortage.

In the Bekaa, the public sector faces shortages, with 20% of respondents in schools reporting no computers, while 25% offer them fully. The free private sector stands out with 100% providing computers in all classrooms. In the non-free private sector, 37.5% provide computers fully.

In the South, the public sector shows a shortage, with 16.7% of respondents in schools lacking computers, and only 11.9% offering them fully. The free private sector provides computers fully to 40% of respondents, which is a good rate compared to other regions.

In Nabatieh, the public sector faces significant shortages, with only 6.3% providing computers fully. The free private sector has 50% providing computers fully, while the non-free private sector shows lower rates.

In Akkar, 15.4% of respondents in public schools lack computers, with only 7.7% offering them fully. In the free private sector, 33.3% provide computers fully, while the non-free private sector shows a balanced distribution with 15.4% offering them fully.

In Baalbek-Hermel, the public sector faces noticeable shortages, with 16.7% lacking computers, and only 11.1% offering them fully. The free private sector provides computers fully to 50% of respondents. The non-free private sector shows relatively good rates, with 27.3% providing computers fully.

In UNRWA schools, all schools in the North face a 50% shortage of computers, while the other half provides them fully, reflecting a clear disparity.

Conclusion

The data highlights significant disparities in computer availability across sectors and governorates. In the public sector, several governorates face major shortages, particularly in Baalbek-Hermel and the North, where unavailability rates exceed 20%. On the other hand, the non-free private sector shows higher rates of full computer availability, especially in Mount Lebanon suburbs (60.9%). Free private education suffers from noticeable shortages in some areas like Beirut and the North. UNRWA schools show a clear variation, with half of the schools providing computers fully in the North, while the other half remains without. Overall, rural areas such as Baalbek-Hermel and Akkar exhibit lower computer availability compared to urban areas like Beirut and Mount Lebanon, reflecting a significant gap in technological infrastructure across regions.

Fourth Response : Teacher (Question No.9)

At the national level, data shows that 20% of respondents in schools do not have access to computers, while 20.6% have computers "on demand." Approximately 30.8% of respondents in schools have partial access to computers, moving them between classrooms, and 18.9% have computers in most classrooms, whereas only 9.6% have computers available in all classrooms.

When looking at sector type, it appears that the public sector faces greater shortages, with 23.4% of respondents in public schools lacking computers, compared to 13.6% in the non-free private sector and 22.5% in the free private sector.

Analyzing by governorates reveals significant variation between regions. In Beirut, 23.3% of respondents in public schools lack computers, with a noticeable availability of 16.7% in most classrooms. In Mount Lebanon suburbs, 15% of respondents in public schools lack computers, while computers are available in most classrooms for 26.7%. For Mount Lebanon (excluding suburbs), 15.9% lack computers, with computers available in most classrooms for 20.7%.

In the North, the highest shortage appears in the public sector, where 26.7% of respondents in schools do not have computers, with a limited availability of only 10% in most classrooms. In the Bekaa, 22.4% lack computers, with 16.3% having them in most classrooms. In the South, 17.2% lack computers, with a relatively low availability of 12.3%.

In Nabatieh, 21.4% of respondents in public schools do not have computers, while only 14.3% have computers in most classrooms. In Akkar, the highest shortage is evident, with 30.7% lacking computers, and only 7.8% having them in most classrooms. Finally, in Baalbek-Hermel, 24.7% of respondents in public schools do not have computers, with a modest 5.2% having computers in all classrooms.

Question: Availability of computers in the classrooms
Secondary Education
First response : Principal (Question No. 18)

The general distribution by governorates shows significant variation in computer availability in schools. In Beirut, 38.9% of respondents in schools do not have computers, while 22.2% provide them partially or on a demand basis between classrooms, and only 16.7% offer computers fully. In Mount Lebanon (suburbs), 14.3% of respondents in schools do not have computers, and 28.6% provide them partially, with 26.5% offering computers fully. In Mount Lebanon (excluding suburbs), 21.9% of respondents in schools do not have computers, while 28.1% provide them partially, and 18.8% offer computers in all classrooms. In the North, the highest percentage of respondents in schools lacking computers was 47.3%, with only 10.9% providing them fully. In the Bekaa, 36% of respondents in schools do not have computers, while 28% provide them partially, and only 12% offer computers fully. In the South, 44% of respondents in schools provide computers partially, whereas only 4% offer them fully. In Nabatieh, 28.6% of respondents in schools do not have computers, with 25% providing them partially, and 14.3% offering computers fully. In Akkar, 42.9% of respondents in schools do not have computers, with only 17.9% providing them fully. In Baalbek-Hermel, 31.6% of respondents in schools do not have computers, with 21.1% providing them partially, and 15.8% offering computers fully.

In educational sector analysis, data shows that the public sector recorded the highest rates of non-availability of computers, with the highest rates observed in the Bekaa (46.2%) and the North (40%). For the free private sector, the highest non-availability rate was 100% in Beirut and the South. In the non-free private sector, the highest rates of non-availability of computers were in the North (46.2%) and Beirut (33.3%). Regarding UNRWA schools, the highest non-availability rate was 100% in the North, with a severe shortage across all regions.

The governorate analysis reveals that Beirut had a high non-availability rate of 38.9%, with very low availability of computers in all classrooms (16.7%). In Mount Lebanon suburbs, the non-availability rate was 14.3%, with moderate full availability at 26.5%. In Mount Lebanon (excluding suburbs), the non-availability rate was 21.9%, with good full availability rates at 18.8%. In the North, the highest non-availability rate among governorates was 47.3%, with very low full computer availability at 10.9%. In the Bekaa, the non-availability rate was 36%, with limited full availability at 12%. In the South, the non-availability rate was 32%, with very limited full availability at 4%. In Nabatieh, the

non-availability rate was 28.6%, with low full availability at 14.3%. In Akkar, the non-availability rate was high at 42.9%, with limited full availability at 17.9%. Finally, in Baalbek-Hermel, the non-availability rate was moderate at 31.6%, with limited full availability at 15.8%.

Conclusions:

Public Education: The highest percentage of respondents in public schools lack or partially provide computers. Rural governorates like Akkar and Baalbek-Hermel show lower rates of sufficient computer availability.

Free Private Education: A clear distinction in Beirut, where all schools provide computers.

Non-Free Private Education: Significant variation between governorates, with good full computer availability in Beirut and Mount Lebanon.

Second Response : Supervisor (Question No.10)

General Situation

Public Sector

A high percentage of school principals (30.9%) indicated that computers are not available at all in classrooms, with an additional 29.0% stating that computers are unavailable but provided on request. This highlights significant challenges in equipping upper-level classrooms in the public sector with computers, with potential future efforts to improve these provisions. On the other hand, 7.4% reported that computers are available in all classrooms.

Free Private Education

The results show a significant portion of free private schools face a lack of computer availability, with 54.9% of principals stating computers are not available or are provided on request. Conversely, computers are partially available in 25.8% of schools, and 16.1% affirmed full computer availability in all classrooms. These figures reflect a clear disparity in school infrastructure, necessitating enhanced digital infrastructure and comprehensive technological support.

Non-Free Private Education

These results indicate that about 28.6% of schools do not have sufficient computers (either unavailable or on request), reflecting a notable lack of technology. Meanwhile, 32.5% provide partial computer availability, and 35.9% offer computers in most or all classrooms, showing significant disparities in technological infrastructure. This highlights an urgent need for improved computer availability in secondary education to ensure equitable educational opportunities.

UNRWA

A third of UNRWA school principals (33.3%) reported that computers are not available at all, with another 33.3% stating computers are unavailable but requested. Additionally, 33.3% noted partial computer availability (rotating between classrooms). These results point to an urgent need to improve computer access in secondary education within UNRWA schools, as the high proportion of schools lacking or needing computers suggests a significant gap in technological resources.

By Governorates

Public Sector

The average percentage of non-availability or on-request computers is 59.9%, indicating a high need for efforts in this area.

Best governorates for full computer availability:

Bekaa: 16.7% of respondents in schools provide computers in all classrooms, the highest rate in this context.

Mount Lebanon (excluding suburbs) and Nabatieh: 13.0% provide computers in all classrooms.

Worst governorates for full computer availability:

The highest non-availability rates: range from 13.0% in Mount Lebanon (excluding suburbs) to 36.4% in Beirut, reflecting widespread issues across regions.

Demand for computers: In regions like Bekaa and Baalbek-Hermel, there is a clear demand for computers with 38.9% in Bekaa and 35.3% in Baalbek-Hermel, highlighting future readiness to improve the situation.

Challenges and Opportunities:

Most regions show demand for computers (on request), such as Bekaa and Baalbek-Hermel, indicating ongoing efforts to improve the situation.

Beirut represents a significant challenge in providing computers, requiring urgent interventions to equip schools with technology.

Free Private Education

The total percentage of non-availability or on-request computers is 54.9%, a high rate, indicating significant challenges in equipping schools in this sector.

Best areas for full computer availability:

Mount Lebanon (suburbs): 40% of respondents in schools provide computers in all classrooms.

Akkar and Mount Lebanon (excluding suburbs): 25% provide computers in all classrooms, showing relatively good availability.

Worst areas for full computer availability:

Beirut, Baalbek-Hermel, and the North: 100% of respondents report no computers available in secondary classrooms, reflecting severe challenges.

Challenges and Future Opportunities:

Significant demand for computers is evident in regions like Baalbek-Hermel and Mount Lebanon (suburbs), showing readiness for technological advancement.

Challenges in regions like Beirut, Baalbek-Hermel, and the North require urgent attention to meet school needs.

Non-Free Private Education

The total percentage of non-availability or on-request computers is 31.6%, indicating a significant need for improvement.

Best governorates for full computer availability:

Beirut: 44.4% provide computers in all classrooms, showing the best performance.

Mount Lebanon (suburbs): 34.4% provide computers in all classrooms, reflecting a noticeable improvement.

Worst governorates for full computer availability:

South, Nabatieh, and Akkar: show 0% availability of computers in all classrooms, highlighting severe gaps.

Challenges and Future Opportunities:

Significant demand for computers is seen in regions like Baalbek-Hermel and Mount Lebanon (suburbs), suggesting ongoing efforts to enhance technology in education.

Challenges persist in regions like the South, Nabatieh, and Akkar, requiring focused efforts to meet school demands.

Third Response: Coordinator (Question No. 10)

In public schools in Beirut, 22.2% of classrooms lack computers, 33.3% are unavailable (under request), 33.3% have partial availability, and 11.1% have most classrooms equipped. In Mount Lebanon (suburbs), 29.4% of classrooms lack computers, 23.5% are unavailable (under request), 41.2% have partial availability, and 5.9% have most classrooms equipped. In Mount Lebanon (excluding suburbs), 5.1% of classrooms lack computers, 38.5% are unavailable (under request), 25.6% have partial availability, 12.8% have most classrooms equipped, and 17.9% have computers in all classrooms.

In the North, 28.8% of classrooms lack computers, 33.9% are unavailable (under request), 23.7% have partial availability, 5.1% have most classrooms equipped, and 8.5% have computers in all classrooms. In Bekaa, 15.0% of classrooms lack computers, 30.0% are unavailable (under request), 30.0% have partial availability, 5.0% have most classrooms equipped, and 20.0% have computers in all classrooms. In the South, 19.0% of classrooms lack computers, 28.6% are unavailable (under request), 33.3% have partial availability, 4.8% have most classrooms equipped, and 14.3% have computers in all classrooms. In Nabatieh, 25.0% of classrooms lack computers, 43.8% are unavailable (under request), 18.8% have partial availability, 6.3% have most classrooms equipped, and 6.3% have computers in all classrooms. In Akkar, 15.4% of classrooms lack computers, 30.8% are unavailable (under request), 34.6% have

partial availability, 11.5% have most classrooms equipped, and 7.7% have computers in all classrooms. In Baalbek-Hermel, 22.2% of classrooms lack computers, 22.2% are unavailable (under request), and 50.0% have partial availability, with 5.6% having computers in all classrooms. The overall sector indicates that 19.9% of classrooms lack computers, 32.1% are unavailable (under request), 30.5% have partial availability, 6.5% have most classrooms equipped, and 11.0% have computers in all classrooms. **In the private sector (free)**, all classrooms in Beirut lack computers, while in Mount Lebanon (suburbs), no classrooms are lacking computers, with 80% having computers. In Mount Lebanon (excluding suburbs), 20% lack computers, 20% are unavailable, and 40% have partial availability. In the North, 50% of classrooms lack computers, while 25% have partial availability. In Bekaa, all classrooms lack computers. In the South, 20% lack computers, with 40% having partial availability. In Nabatieh, 50% lack computers, while 50% have partial availability. In Akkar, 33.3% lack computers, with 33.3% having partial availability. In Baalbek-Hermel, all classrooms lack computers, with 50% having partial availability. The overall private (free) sector indicates that 24% of classrooms lack computers, 31% are unavailable (under request), 17% have partial availability, 3.4% have most classrooms equipped, and 24% have computers in all classrooms.
In the private sector (non-free), in Beirut, 41% of classrooms lack computers, with an additional 16% unavailable (under request) and 16% with partial availability. In Mount Lebanon (suburbs), only 4% lack computers, with a very small percentage under request (4%). In Mount Lebanon (excluding suburbs), no classrooms lack computers, with 42% having full availability. In the North, 13% lack computers, with 29% having partial availability and 32% having full availability. In Bekaa, 25% lack computers, with 31% having partial availability, and 6.3% having full availability. In the South, 50% lack computers, with 16% having partial availability. In Nabatieh, 45% lack computers, with a very small percentage under request (18%). In Akkar, 23% lack computers, with 46% having partial availability. In Baalbek-Hermel, 36% lack computers, with a very small percentage under request (27.3%). The overall private (non-free) sector shows that 16% of classrooms lack computers, 10% are unavailable (under request), 27.9% have partial availability, 7% have most classrooms equipped, and 39.4% have computers in all classrooms. For UNRWA in the North, 50% of classrooms lack computers.

Fourth Response : Teacher (Question No. 9)

At the national level, 24.1% of surveyed secondary school students report that their schools do not have computers, 23.1% have computers "under request," 25.7% have partial computer availability that is moved between classrooms, 18.1% have computers available in most classrooms, and 9.0% have computers available in all classrooms. By sector type:
In the public sector, 27.5% of respondents report that their schools do not have computers, and 12.0% have computers available in most classrooms.
In the non-free private sector, 17.9% of respondents report that their schools do not have computers, and 28.5% have computers available in most classrooms.
In the free private sector, 24.9% of respondents report that their schools do not have computers, and 15.8% have computers available in most classrooms.
According to governorate data:
In Beirut, in the public sector, 36.7% of respondents report that their schools do not have computers, and 10.0% have computers available in most classrooms. In the non-free private sector, 33.9% do not have computers, with 23.7% having computers in most classrooms.
In Mount Lebanon (suburbs), in the public sector, 16.7% of respondents report that their schools do not have computers, and 28.3% have computers in most classrooms. In the non-free private sector, 13.1% do not have computers, and 43.7% have computers in most classrooms.
In Mount Lebanon (excluding suburbs), in the public sector, 19.5% report that their schools do not have computers, and 20.7% have computers in most classrooms. In the non-free private sector, 12.9% do not have computers, and 24.2% have computers in most classrooms.

In the North, in the public sector, 33.3% report that their schools do not have computers, and 8.1% have computers in most classrooms. In the non-free private sector, 24.0% do not have computers, and 30.0% have computers in most classrooms.

In Bekaa, in the public sector, 20.4% report that their schools do not have computers, and 16.3% have computers in most classrooms. In the non-free private sector, 16.1% do not have computers, and 23.2% have computers in most classrooms.

In the South, in the public sector, 27.0% report that their schools do not have computers, and 13.1% have computers in most classrooms. In the non-free private sector, 12.5% do not have computers, and 15.6% have computers in most classrooms.

In Nabatieh, in the public sector, 26.8% report that their schools do not have computers, and 9.8% have computers in most classrooms. In the non-free private sector, 9.4% do not have computers, and 15.6% have computers in most classrooms.

In Akkar, in the public sector, 31.9% report that their schools do not have computers, and 7.8% have computers in most classrooms. In the non-free private sector, 14.1% do not have computers, and 6.3% have computers in most classrooms.

In Baalbek-Hermel, in the public sector, 22.1% report that their schools do not have computers, and 9.1% have computers in most classrooms. In the non-free private sector, 36.1% do not have computers, and 16.7% have computers in most classrooms.

Key Conclusions from Data on Computer Availability in Lebanese Schools:

1. Preschool Education (Kindergarten):

Public Schools:

Significant Gaps: In many areas (e.g., Beirut, South Lebanon, Nabatieh), over 50% of respondents report a lack of interactive boards and computers, reflecting a large technology gap.

Limited Access: In some areas (e.g., Mount Lebanon outside suburbs and Akkar), partial availability is observed, but the overall situation remains concerning.

Free Private Schools:

Severe Shortage: In many regions, including Beirut and Bekaa, a complete lack of computers is reported, highlighting an urgent need for intervention.

Non-Free Private Schools:

Better Access: These schools show better computer availability compared to other sectors, but challenges remain, especially in suburbs and northern regions.

2. Basic Education (Grades 1-3):

Public Schools:

Continuing Shortage: Reports indicate that 35% of respondents in Beirut's public schools lack computers entirely, with noticeable shortages in other regions as well.

Free Private Schools:

Overwhelming Shortage: The majority across all regions face a lack of computers, raising significant concerns.

Non-Free Private Schools:

Slight Improvement: There is a minor increase in computer availability, but gaps still need to be addressed.

3. Basic Education (Grades 4-6):

Public Schools:

Continuing Trends: Previous shortages persist, with significant technological resource gaps.

Free Private Schools:

Ongoing Concerns: Most schools still lack any computers, making the situation alarming.

Non-Free Private Schools:

Slight Improvement: Compared to free schools, but challenges remain significant.

4. Secondary Education:

Public Schools:
Regional Gaps: Beirut and Mount Lebanon suburbs show better availability, whereas rural areas like Akkar and Nabatieh report over 40% lacking computers.
Free Private Schools:
Severe Shortage: The acute lack of computers continues, with reports of a complete absence in areas such as Beirut and Bekaa.
Non-Free Private Schools:
Better Access: This sector shows higher availability, but regions like South Lebanon and Nabatieh still face significant gaps over 40%.
UNRWA Schools:
Severe Shortage: Majority of schools show a significant lack of resources, especially in northern regions.
5. Overall Governorate Analysis:
Largest Technology Gaps: Nabatieh, Beirut, and Akkar show the highest deficiencies in computer availability.
Best Performing Regions: Mount Lebanon (excluding suburbs) and certain non-free private schools demonstrate higher access rates, reflecting disparities between regions and sectors.
Summary:
Public Sector: Consistently higher rates of schools suffering from a lack of basic resources like interactive boards and computers compared to private sectors.
Free Private Schools: Face severe technological resource deficits, especially in high-demand areas like Beirut where modern educational tools are unmet.
Non-Free Private Schools: Tend to have better access, but challenges remain significant, requiring further intervention to ensure all students benefit from digital learning environments.

Question: Availability and condition of school facilities
First Item: Laboratories
First Response : Principal (Question No. 21)

In the public education sector, data reveals notable disparities between governorates. In Beirut, half of the laboratories require minor improvements, while in Mount Lebanon suburbs, 27.3% of laboratories are unavailable. In the North, the rate of unavailable laboratories reaches 42.9%, the highest, with only 8.6% well-equipped labs. In the Bekaa region, 38.5% of laboratories are unavailable, with 30.8% needing improvements. The South shows relative progress with 46.7% of laboratories needing minor improvements and 13.3% well-equipped, while in Akkar, 35% of laboratories are unavailable. In Baalbek-Hermel, 45.5% of laboratories need minor improvements, and 36.4% are unusable.

In the free private education sector, Beirut and Akkar report a complete lack of laboratories. In the North, 66.7% of laboratories are unavailable. In the South and Nabatieh, 100% of laboratories either do not exist or require significant improvements, with Nabatieh showing 50% well-equipped laboratories.

In the non-free private sector, the situation is more balanced. In Beirut, 22.2% of laboratories are well-equipped. In Mount Lebanon suburbs, the rate reaches 36.4%, and in the North, 30.8% of laboratories are unavailable, with 23.1% well-equipped. The Bekaa region shows 44.4% requiring minor improvements and 22.2% well-equipped. The South and Nabatieh display balanced ratios between well-equipped laboratories and those needing improvements.

In UNRWA schools, the North and Nabatieh feature 100% well-equipped laboratories, while the South shows a balance between laboratories needing minor improvements and those well-equipped.

Regarding governorates, Beirut faces the highest need for improvements with 50% of laboratories requiring minor improvements, indicating some existing facilities but significant development needed, with the lowest rate of well-equipped laboratories. In the free private sector, there is a complete absence of laboratories at 100%. In the non-free private sector, the situation is relatively better, with 33.3% requiring significant improvements and 22.2% well-equipped.

In Mount Lebanon suburbs, the public education sector reports that 27.3% of laboratories are unavailable, with the same percentage for non-functional laboratories and those requiring significant improvements, reflecting overall infrastructure weaknesses. In the non-free private sector, the highest rate (36.4%) of well-equipped laboratories indicates relatively better attention to facilities.

In non-suburban Mount Lebanon, the public education sector reports 38.9% of laboratories needing significant improvements and 22.2% requiring minor improvements. In the non-free private sector, the situation is more balanced, with 40% well-equipped laboratories.

In the North, the public education sector records 42.9% of laboratories unavailable, the highest among governorates, with only 8.6% well-equipped labs. Free private education shows significant weaknesses with 66.7% unavailable laboratories. The non-free private sector shows 30.8% unavailable laboratories, with 23.1% well-equipped. The UNRWA sector in the North features complete laboratory availability at 100%.

In the Bekaa, 38.5% of laboratories in public education are unavailable, with 30.8% needing improvements. In the non-free private sector, 44.4% require minor improvements, and 22.2% are well-equipped.

In the South, public education shows 46.7% of laboratories needing minor improvements, with 13.3% well-equipped, indicating relative progress. Free private education suffers from a complete absence or significant need for improvements at 100%. The non-free private sector balances between laboratories needing minor improvements (28.6%) and those well-equipped (28.6%). In UNRWA schools, the ratios are equal between laboratories requiring minor improvements and those well-equipped at 50% each.

In Nabatieh, the public education sector reports 31.3% of laboratories needing minor or significant improvements. Free private education shows 50% well-equipped laboratories. The non-free private sector ranges between 16.7% and 33.3% in all categories, reflecting relative balance. In UNRWA schools, 100% of laboratories are well-equipped.

In Akkar, public education suffers from 35% of laboratories unavailable, with only 7.1% well-equipped. Free private education reports a complete lack of laboratories at 100%.

In Baalbek-Hermel, public education faces 45.5% of laboratories needing minor improvements and 36.4% unusable.

Conclusions:

Governorates like the North, Akkar, and Baalbek-Hermel face significant deficits in laboratory availability, especially in the public sector.

Areas like the South and Nabatieh show relative progress, particularly in the private sector and UNRWA.

Infrastructure requires substantial improvements across most governorates, with particular focus on governorates with the highest rates of unavailable laboratories.

Second Response : Supervisor (Question No.13)

In the general situation within the sector:

Public Sector: Data indicates that the public sector faces a shortage of laboratories in schools, with (14.3%) of supervisors reporting that schools lack laboratories. Additionally, (29%) of respondents in schools require significant improvements in their facilities, and (29.5%) need some improvements. The lowest percentage of respondents in well-equipped schools is (12.9%).

Free Private Education: Free private education shows a significant lack of laboratories, with (51.6%) of supervisors reporting that schools do not have laboratories, which is a higher gap compared to the public sector (14.3%). Moreover, (12.9%) of respondents in schools require major improvements in

their facilities, reflecting an additional challenge. However, (19.4%) of respondents in schools have well-equipped laboratories, a higher percentage compared to the public sector (12.9%).

Non-Free Private Education: This sector shows better availability of laboratories, with (18.8%) of respondents in schools lacking laboratories, which is higher than in the public sector. Additionally, (16.2%) of supervisors reported that laboratories require major improvements. Meanwhile, (32.5%) of respondents in schools have well-equipped laboratories, a higher percentage compared to free private education (19.4%) and the public sector (12.9%).

UNRWA: According to supervisors, the UNRWA sector highlights the urgent need for improvement in laboratory availability across many schools, with computers being unavailable in most regions (66.7%), while available labs require some improvements at a rate of (33.3%).

Key Observations by Governorates in Each Sector:

Public Sector: There is significant disparity between governorates in laboratory availability and quality. For example, Beirut has the highest percentage of respondents in schools needing major improvements (45.5%), while the North suffers from a lack of laboratories, with (26.3%) of respondents reporting a lack of laboratories. Although Beirut and Nabatieh are the best equipped, with a well-equipped lab rate of (18.2% and 13%, respectively), Akkar has the lowest percentage of well-equipped laboratories at (2.6%), necessitating immediate intervention.

Free Private Education: The most affected regions include Beirut and Baalbek-Hermel, where (100%) of respondents in schools lack laboratories. The North and Akkar experience severe shortages, with (60%) of schools in the North and (75%) in Akkar lacking laboratories. Additionally, (20%) in the North need improvements, and (25%) of laboratories in Akkar are non-functional. In the South, a balance exists between schools lacking laboratories and those well-equipped, with (50%) of respondents in the South lacking laboratories. Schools in Mount Lebanon (excluding suburbs) face a 50% laboratory shortage, while (40%) in suburbs are without laboratories. Both regions require drastic improvements, with (25%) needing improvement in Mount Lebanon suburbs and (20%) in suburbs. Although (16.7%) of respondents in Nabatieh have well-equipped laboratories, (33.3%) lack them, and (16.7%) require significant improvements, highlighting a critical need for development.

Non-Free Private Education: The North and Mount Lebanon (suburbs) have a high percentage of respondents in schools with well-equipped laboratories (50% and 40.6%, respectively). Meanwhile, regions such as Baalbek-Hermel (45.5% requiring significant improvements), Akkar (33.3% needing major improvements), and Nabatieh (60% requiring major improvements) face significant challenges in laboratory provision.

Conclusion:

Free private education shows the greatest laboratory deficit compared to the public sector, with (51.6%) of respondents in schools in this sector lacking laboratories, while the public sector shows a lower gap at (14.3%).

Non-free private education presents a better situation than free private education concerning well-equipped laboratories, with (32.5%).

There is significant disparity between governorates in all sectors, with Beirut and Baalbek-Hermel emerging as the most affected areas due to laboratory shortages across both public and private sectors.

Third Response : Coordinator (Question No.13)

Public Sector

In Beirut, the data shows that unavailable laboratories make up 11.1%, while laboratories available but not usable account for 33.3%. Laboratories available but needing some improvements reach 55.6%, with no well-equipped laboratories available, resulting in a total of 100%.

In Mount Lebanon (Suburbs), the percentage of unavailable laboratories is 11.8%, while those available but not usable is also 11.8%. Laboratories needing significant improvements are 35.3%, and those needing minor improvements are 35.3%, with well-equipped laboratories at 5.9%, summing up to 100%.

In Mount Lebanon (excluding suburbs), 23.1% of laboratories are unavailable, while those available but not usable represent 17.9%. Laboratories requiring significant improvements make up 15.4%, and

those needing minor improvements are 33.3%. Well-equipped laboratories constitute 10.3%, resulting in a total of 100%.

In the North, data shows that 27.1% of laboratories are unavailable, and those available but not usable are 15.3%. Laboratories requiring significant improvements represent 22.0%, while those needing minor improvements are 28.8%. Well-equipped laboratories account for 6.8%, totaling 100%.

In Bekaa, 5.0% of laboratories are unavailable, and those available but not usable are also 5.0%. Laboratories needing significant improvements reach 40.0%, and those needing minor improvements represent 45.0%. Well-equipped laboratories make up 5.0%, totaling 100%.

In the South, 4.8% of laboratories are unavailable, while those available but not usable represent 7.1%. Laboratories requiring significant improvements are 35.7%, and those needing minor improvements are 33.3%. Well-equipped laboratories account for 19.0%, summing up to 100%.

In Nabatieh, 12.5% of laboratories are unavailable, and those available but not usable are 31.3%. Laboratories requiring significant improvements are 12.5%, and those needing minor improvements are 43.8%. No well-equipped laboratories exist, totaling 100%.

In Akkar, 19.2% of laboratories are unavailable, and those available but not usable are 26.9%. Laboratories needing significant improvements make up 23.1%, while those needing minor improvements are 23.1%. Well-equipped laboratories represent 7.7%, totaling 100%.

In Baalbek-Hermel, 22.2% of laboratories are unavailable, and those available but not usable are 5.6%. Laboratories requiring significant improvements represent 11.1%, and those needing minor improvements are 38.9%. Well-equipped laboratories constitute 22.2%, totaling 100%.

Private Sector (Free)

In Beirut, all laboratories are unavailable at 100%, with no other categories present, summing up to 100%.

In Mount Lebanon (Suburbs), there are no unavailable laboratories; however, laboratories needing improvement account for 40.0%, and well-equipped laboratories represent 60.0%, totaling 100%.

In Mount Lebanon (excluding suburbs), 40.0% of laboratories are unavailable, while those needing improvement make up 20.0%, and well-equipped laboratories represent 20.0%, totaling 100%.

In the North, 50.0% of laboratories are unavailable, and those needing improvement also make up 50.0%, resulting in a total of 100%.

UNRWA

In the North, data shows that all laboratories are well-equipped at 100%, with no other categories present, totaling 100%.

Conclusion

According to the sector, the public sector faces higher rates of unavailable or unusable laboratories, especially in regions like Akkar and Baalbek-Hermel. Free private education shows significant shortages in laboratories, with a few good instances in Mount Lebanon. Non-free private education demonstrates notable improvement in laboratory availability but still requires more enhancement.

Areas like Nabatieh and Baalbek-Hermel experience significant deficits in laboratories, necessitating infrastructure improvements to ensure a conducive educational environment and overall quality of education in Lebanon.

Fourth response : Teacher (Question No. 12)

The availability and quality of laboratories in schools show a clear variation between governorates and education sectors. In the public sector, 21.4% of laboratories are unavailable, with 30.6% needing some improvements. Conversely, the non-free private sector fares better, with 28.7% of laboratories being well-equipped. However, the free private sector suffers from a significant shortage, with 38.8% of laboratories being unavailable.

In Beirut, the situation varies by sector. In the public sector, 46.7% of laboratories require significant improvements, while only 10% are well-equipped. In the non-free private sector, the situation is better, with 25.4% of laboratories well-equipped.

In Mount Lebanon suburbs, the public sector faces a clear deficiency, with 23.3% of laboratories unavailable, and 28.3% needing improvements. In the non-free private sector, 36.9% of laboratories are well-equipped.

In other areas of Mount Lebanon, the public sector shows that 28% of laboratories are unavailable, and 35.4% require improvements. In the non-free private sector, 29% of laboratories are unavailable, with 21% being well-equipped.

In the North, the public sector faces significant shortages, with 32.6% of laboratories unavailable and 30.4% needing improvements. In the non-free private sector, 30% of laboratories are well-equipped, showcasing a disparity between the sectors.

In Bekaa, the public sector records 13.3% of laboratories being unavailable, with 35.7% needing substantial improvements. In the non-free private sector, 23.2% of laboratories are well-equipped.

In the South, the public sector shows a better relative situation, with only 7.4% of laboratories unavailable, but 41% needing improvements. In the non-free private sector, 31.3% of laboratories are unavailable, and only 18.8% are well-equipped.

In Nabatieh, the public sector records 8% of laboratories being unavailable, with 33.9% needing improvements. In the non-free private sector, 28.1% of laboratories are well-equipped.

In Akkar, the public sector faces a significant deficit, with 28.9% of laboratories unavailable, and 22.3% requiring improvements. In the non-free private sector, 31.3% of laboratories are well-equipped.

In Baalbek-Hermel, the public sector records 15.6% of laboratories being unavailable, with 32.5% needing improvements. In the non-free private sector, 41.7% of laboratories are unavailable.

Based on these findings, it is evident that there is a significant variation in the availability and quality of laboratories between governorates and education sectors. Rural areas and the public sector face greater shortages in facilities, necessitating special attention to improving infrastructure and resources in these regions.

Question: Availability and condition of school facilities
Second Item: Libray
First Response : Principal (Question No.21)

Comparison by Education Sectors:

In the public education sector, library conditions vary significantly between governorates. In Beirut, 37.5% of libraries are well-equipped, the highest among governorates, while 25% require minor improvements, and the same percentage requires significant improvements. Conversely, in Mount Lebanon suburbs, 54.5% of libraries need significant improvements, with a much lower percentage (9.1%) being unusable. In non-suburban Mount Lebanon, there is diversity in conditions, with 38.9% of libraries needing significant improvements, and only 5.6% being well-equipped—one of the lowest rates among governorates.

The North faces notable challenges, with 22.9% of libraries being unavailable and only 14.3% being well-equipped, a low percentage compared to Beirut or the South. In Bekaa, 30.8% of libraries require minor and major improvements equally, with only 7.7% being well-equipped. The South offers a more balanced distribution, with 20% of libraries well-equipped, while 73.3% require either minor or major improvements. In Nabatieh, the well-equipped libraries are roughly equal to those needing minor improvements, with only 6.3% being unusable.

Akkar records the highest percentage of unavailable libraries (40%), with only 5% being well-equipped, indicating a significant gap compared to other governorates. In Baalbek-Hermel, the largest proportion of libraries needing significant improvements (45.5%), while 27.3% are well-equipped.

In the private free education sector, there are significant variations across governorates. In Beirut and Akkar, 100% and 50% of libraries, respectively, are unavailable, while in the South, 100% of libraries are well-equipped, making it the highest-performing governorate in this sector. Non-suburban Mount

Lebanon shows relatively good performance, with 75% requiring minor improvements, while in the North and Bekaa, unavailable or unfit libraries range from 33.3% to 66.7%.

In the non-free private education sector, Beirut records the highest percentage of well-equipped libraries (55.6%), whereas the North struggles with a 23.1% unavailability rate. Non-suburban Mount Lebanon performs well with 50% of libraries well-equipped, one of the highest rates in this sector. The South displays a relatively balanced performance, with 42.9% requiring minor improvements and 42.9% being well-equipped. Nabatieh shows a high percentage of well-equipped libraries (50%), while Akkar records 33.3%—below the average.

In the UNRWA sector, non-suburban Mount Lebanon and the North have very high rates of well-equipped libraries (100%), whereas in the South, 50% of libraries are well-equipped, a positive result but still lower than some other governorates.

Comparing governorates:

Beirut stands out with relatively positive performance across all sectors, with 37.5% in the public sector and 55.6% in the non-free private sector being well-equipped libraries. Mount Lebanon suburbs show moderate performance with higher rates of libraries needing significant improvements. Non-suburban Mount Lebanon faces notable disparities, with low rates of well-equipped libraries in the public sector (5.6%) and higher rates in the non-free private sector (50%).

The North and Akkar struggle with high rates of unavailable or unfit libraries across all sectors, highlighting substantial infrastructure challenges compared to other governorates. Bekaa and Baalbek-Hermel require substantial improvements, with high rates of libraries needing either minor or major upgrades. However, private education in these regions shows some improvements, with Baalbek-Hermel having 40% well-equipped libraries.

Conclusion:

Beirut: Leads in positive performance across sectors, especially in the public and non-free private sectors with high well-equipped library rates.

South: Exhibits a high level of well-equipped libraries, especially in the private free education sector, with a 100% rate.

Mount Lebanon: Suburbs face significant issues, while non-suburban areas have considerable variations in performance, with low well-equipped rates in the public sector and higher rates in the private non-free sector.

North and Akkar: Struggle with high rates of unavailable or unfit libraries, indicating severe infrastructure deficiencies.

Bekaa and Baalbek-Hermel: Require substantial enhancements, although the private sector shows improvements in regions like Baalbek-Hermel.

Nabatieh: Displays moderate to high rates of well-equipped libraries, showcasing a relatively positive scenario compared to other governorates.

Public Education Sector: Governorates face noticeable disparities in library conditions. Beirut and the South lead with high well-equipped library rates, whereas Akkar and Mount Lebanon suburbs report high rates of libraries requiring significant improvements or being unavailable.

Private Free Education Sector: The South excels with a 100% well-equipped library rate, whereas Beirut and Akkar have significant deficiencies. This sector requires more focus in underperforming regions.

Private Non-free Education Sector: Beirut and non-suburban Mount Lebanon perform well, whereas the North and Akkar face relative weaknesses, illustrating discrepancies between regions.

UNRWA Sector: Non-suburban Mount Lebanon and the North show strong performance, with 100% well-equipped libraries, while the South presents a balanced outcome with 50%, lower compared to some other governorates

Second Response: Supervisor (Question No.13)

General Situation:

Public Sector: According to data from school inspectors, the public sector in Lebanon faces challenges in providing well-equipped libraries in schools. (9.2%) of respondents report that schools do not have

libraries, while (14.7%) of libraries are not usable. A significant proportion (24.9%) of libraries require major improvements in facilities and space, and (33.6%) require minor improvements. Only (17.5%) of respondents report having well-equipped libraries, highlighting the urgent need for library enhancements in most public schools.

Free Private Sector: In the free private sector, a large percentage of respondents report schools without libraries (25.8%). Additionally, (22.6%) of libraries require major improvements, and (3.2%) are unusable. However, (19.4%) of respondents report well-equipped libraries, reflecting some efforts to provide suitable libraries, although this percentage is low compared to actual needs. It is still better than the public sector (17.5%).

Non-Free Private Sector: The non-free private sector performs better, with (32.5%) of libraries well-equipped, higher than the public sector (17.5%) and free private education (19.4%). Nonetheless, (12%) of respondents report schools without libraries, a higher percentage compared to the public sector (9.2%) and lower than free private education (25.8%). Additionally, (22.2%) of libraries require major improvements, necessitating continuous efforts for quality improvement. The percentage of unusable libraries (4.3%) is lower than in the public sector (14.7%) but still presents a challenge.

UNRWA: (33.3%) of inspectors report that libraries are available but need equipment, while (66.7%) report that libraries are unavailable.

Key Observations by Governorate in Each Sector:

Public Sector: Beirut faces the highest percentage of schools needing major library improvements (54.5%), with only (27.3%) of libraries well-equipped. Bekaa suffers most from library shortages, with the highest percentage in the sector of unavailable libraries (27.8%). Non-suburban Mount Lebanon records the highest percentage of schools needing significant improvements (30.4%), requiring immediate intervention. Akkar reports the lowest percentage of well-equipped libraries (7.9%) and the highest percentage of unusable libraries (28.9%), necessitating urgent development. The South and Mount Lebanon suburbs have the best library facilities, with (31.3%) and (29.4%) of schools having well-equipped libraries, respectively.

Free Private Sector: Beirut faces a severe crisis with a complete lack of libraries (100%) in schools, indicating a significant gap. In Mount Lebanon suburbs, there is relative balance with (40%) of libraries well-equipped, while a similar percentage faces complete absence or lack of equipment. In other regions of Mount Lebanon, all libraries require some improvements, indicating a need for quality enhancement rather than total absence. The North shows a high percentage (60%) of schools without libraries, while Bekaa has a similar absence but with a lower rate (33.3%), requiring significant library improvements. The South and Akkar report the highest percentages of libraries needing major improvements (50%), highlighting challenges in library provision and quality assurance. However, the South stands out with a significant proportion (50%) needing only minor improvements, and Akkar has (25%) of libraries well-equipped. Baalbek-Hermel suffers from a clear shortage, with all libraries requiring major improvements (100%). In Nabatieh, while one-third of libraries (33.3%) are absent, a similar percentage has well-equipped libraries.

Non-Free Private Sector: Beirut reports (22.2%) of well-equipped libraries with a need for improvement in a large proportion of libraries (44.4%). Mount Lebanon suburbs show significant variation, with (18.8%) of libraries unavailable and another (18.8%) needing major improvements. Bekaa and Akkar record high rates of libraries needing major improvements (35.7% and 33.3%, respectively), making them some of the most in-need regions for library development. North and Akkar show high percentages of schools without libraries (33.3% and 16.7%), requiring urgent intervention. The South and non-suburban Mount Lebanon stand out as regions with higher percentages of well-equipped libraries (42.9% and 50%), but there remains a need for continuous improvement. Nabatieh records the highest percentage of libraries needing some improvement (60%), with (20%) requiring significant upgrades, requiring immediate intervention.

UNRWA: (100%) of inspectors in Mount Lebanon suburbs report libraries unavailable. Conversely, (100%) of inspectors in the South report libraries available.

Comparative Conclusion between Sectors and Governorates:

The public sector faces a significant shortage of well-equipped libraries, particularly in remote regions like Bekaa and the North. Conversely, the free private sector shows greater disparities, with a complete absence of libraries in Beirut and significant challenges in other regions such as Mount Lebanon. The non-free private sector excels in equipping libraries, but certain areas, especially the North and Bekaa, require substantial improvements.

Third Response : Coordinator (Question No.13)

In Beirut, the percentage of unavailable libraries in public schools is 22.2%, while the percentage of libraries available but unusable is 33.3%. Libraries requiring significant improvements account for 44.4%. In free private education, all libraries were well-equipped (100%), while in non-free private education, the distribution of libraries included 8.3% unavailable, 41.7% requiring minor improvements, and 25% well-equipped.

In Mount Lebanon suburbs, the public education sector recorded a 17.6% rate of unavailable libraries, 29.4% requiring major improvements, and 41.2% needing minor improvements, with only 11.8% well-equipped libraries. In free private education, 40% of libraries were unavailable, while 40% were well-equipped. In non-free private education, the highest percentage of well-equipped libraries was 50%.

In Mount Lebanon outside the suburbs, public education reported 20.5% unavailable libraries, 15.4% unusable, 25.6% requiring major improvements, 30.8% needing minor improvements, and 7.7% well-equipped. In free private education, libraries requiring major improvements accounted for 20%, while 60% needed minor improvements and 20% were well-equipped. In non-free private education, 63.2% of libraries were well-equipped.

In the North, public education had a 10.2% rate of unavailable libraries, 10.2% unusable, 25.4% requiring major improvements, 30.5% needing minor improvements, and 23.7% well-equipped. In free private education, 25% of libraries were well-equipped, while in non-free private education, 25.8% were well-equipped and 35.5% required minor improvements.

In Bekaa, public education reported 20% unavailable libraries, 15% unusable, 35% requiring major improvements, 25% needing minor improvements, and 5% well-equipped. In free private education, 50% of libraries were well-equipped. In non-free private education, 25% of libraries were well-equipped.

In the South, public education had 9.5% unavailable libraries, 28.6% requiring major improvements, 31% needing minor improvements, and 31% well-equipped. In free private education, 60% of libraries were unavailable, while in non-free private education, 83.3% required minor improvements.

In Nabatieh, public education reported 6.3% unavailable libraries, 37.5% unusable, 12.5% requiring major improvements, 31.3% needing minor improvements, and 12.5% well-equipped. In free private education, 50% of libraries were well-equipped.

In Akkar, public education had 26.9% unavailable libraries, 30.8% unusable, 19.2% requiring major improvements, 19.2% needing minor improvements, and 3.8% well-equipped.

In Baalbek-Hermel, public education reported 11.1% unavailable libraries, 5.6% unusable, 16.7% requiring major improvements, 38.9% needing minor improvements, and 27.8% well-equipped.

Conclusion

The data indicates significant disparities in library availability between governorates and educational sectors in Lebanon:

The public sector faces greater challenges in providing libraries compared to the private sector.

Free private education, in particular, struggles with a severe lack of these essential facilities.

Non-free private education demonstrates notable improvement in library provision, though further enhancements are still required.

Regions like Nabatieh and Baalbek-Hermel show significant shortages, necessitating improvements in educational infrastructure to ensure an adequate and conducive learning environment for quality education in Lebanon.

Fourth Response : Teacher (Question No.12)

The analysis of the availability and quality of libraries in schools reveals significant disparities between governorates and educational sectors. **In the official sector**, 15.4% of libraries are unavailable, while 33.2% require some improvements. **In the non-free private sector**, 32.6% of libraries are available and well-equipped. Conversely, the free private sector faces greater challenges, with 20.1% of libraries unavailable and only 29.2% well-equipped.

In Beirut, the public sector does not suffer from a lack of library availability, but 36.7% require significant improvements, and 20% are well-equipped. In the non-free private sector, 11.9% of libraries are unavailable, with 33.9% well-equipped.

In Mount Lebanon suburbs, the public sector reports only 6.7% unavailable libraries, while 33.3% require improvements. In the non-free private sector, 46.4% of libraries are well-equipped.

In other regions of Mount Lebanon, 19.5% of libraries in the public sector are unavailable, and 32.9% need improvements. In the non-free private sector, 22.6% of libraries are well-equipped.

In the North, the public sector experiences a library availability shortage of 20%, with 34.4% needing improvements. In the non-free private sector, 34% of libraries are well-equipped.

In Bekaa, the public sector reports 17.3% of unavailable libraries, with 37.8% requiring major improvements. In the non-free private sector, 26.8% of libraries are well-equipped, indicating a relatively better situation.

In the South, the public sector shows only 4.1% unavailable libraries, though 44.3% need improvements. In the non-free private sector, 12.5% of libraries are unavailable, with a similar percentage well-equipped.

In Nabatieh, the public sector records only 10.7% unavailable libraries, with 37.5% needing improvements. In the non-free private sector, 25% of libraries are well-equipped.

In Akkar, 25.9% of libraries in the public sector are unavailable, with 23.5% requiring improvements. In the non-free private sector, the situation is worse, with 29.7% unavailable and only 23.4% well-equipped.

In Baalbek-Hermel, the public sector reports 7.8% unavailable libraries, and 32.5% need improvements. In the non-free private sector, 19.4% of libraries are unavailable, and only 8.3% are well-equipped.

Based on this data, it is clear that there is a significant disparity between governorates and educational sectors in the availability and quality of libraries. Rural governorates and the public sector face greater deficiencies in infrastructure, requiring efforts to enhance library facilities and support the educational process effectively.

Question: Availability and condition of school facilities
Third Item: Playground
First response: Principal (Question No.21)

Comparison by Education Sectors:

In the **public education sector,** the condition of sports facilities varies significantly between governorates. In Beirut, only 12.5% of sports facilities are well-equipped, which is lower compared to the South or Akkar, where 46.7% and 50% of sports facilities, respectively, are well-equipped. Beirut also shows a high percentage of facilities needing major improvements at 50%, which surpasses similar figures in other governorates. In Mount Lebanon suburbs, sports facilities requiring major improvements make up 72.7% of the total, while only 27.3% need minor improvements. Mount Lebanon outside the suburbs shows a similar trend, with 55.6% needing major improvements, while only 33.3% require minor improvements.

In the North, the distribution is 40% for sports facilities requiring major improvements and 42.9% needing minor improvements, the highest among governorates in this category. Bekaa records the highest need for major improvements at 46.2%, with only 15.4% needing minor improvements. The

South demonstrates a relatively better situation, with 46.7% needing minor improvements and 33.3% requiring major improvements. Nabatieh shows a balanced ratio, with 43.8% needing improvements (minor or major), and only 6.3% are well-equipped.

Akkar leads governorates in well-equipped sports facilities at 50%, the highest among all regions in this sector. Baalbeck - Hermel shows a good percentage with 54.5% well-equipped facilities, with only 18.2% needing major improvements.

In the private free education sector, Beirut indicates that 100% of sports facilities require major improvements. Mount Lebanon suburbs show a balanced distribution, with 50% well-equipped facilities, while the other half requires major improvements. Mount Lebanon outside suburbs presents weaker results, with 50% unavailable and only 25% well-equipped. In the North, half of the sports facilities require minor improvements, while 33.3% are well-equipped. In Bekaa, 66.7% of sports facilities require major improvements, and the rest are well-equipped. The South excels with 100% of facilities well-equipped, making it the best in this sector. Nabatieh shows a balanced ratio, with 50% requiring minor improvements and 16.7% well-equipped.

In the non-free private education sector, Beirut records the highest percentage of well-equipped sports facilities at 66.7%, which is above the national average for this sector. Mount Lebanon suburbs display high percentages, with 51.5% well-equipped and 36.4% needing minor improvements. Mount Lebanon outside suburbs shows 60% well-equipped facilities, with 30% needing minor improvements. The North demonstrates balanced ratios, with 38.5% requiring minor improvements and 23.1% well-equipped. Bekaa shows variation with 44.4% needing major improvements and 33.3% well-equipped. The South records 42.9% well-equipped facilities, while Nabatieh and Akkar show similar percentages (50%) for well-equipped sports facilities. Baalbeck - Hermel leads with 100% well-equipped facilities. In the UNRWA sector, ratios are balanced across governorates. Mount Lebanon suburbs and the North both have 100% well-equipped sports facilities, while in the South, the distribution is evenly split between well-equipped facilities and those needing minor improvements.

Governorate Comparison: When comparing governorates, the South and Akkar clearly stand out in the public education sector, with 46.7% and 50% of well-equipped sports facilities, respectively. Beirut shows a relatively low percentage at 12.5%, with a significant focus on facilities needing major improvements (50%). Mount Lebanon suburbs show strong performance in the private free education sector with 50% well-equipped facilities, while Mount Lebanon outside suburbs provides a balanced scenario in the non-free private education sector with 60% well-equipped facilities.

The North exhibits generally low percentages of well-equipped facilities, with higher numbers requiring improvements. Bekaa faces significant challenges, particularly in the private free education sector, with 66.7% needing major improvements. Baalbeck - Hermel leads in non-free private education with 100% well-equipped facilities.

Conclusions:

South and Akkar: These regions demonstrate a clear advantage in the public education sector, with Akkar ranking highest at 50% well-equipped sports facilities, followed by the South at 46.7%.

Beirut: Shows significant weaknesses, especially in the public education sector, with only 12.5% well-equipped sports facilities and a large portion needing major improvements.

Mount Lebanon Suburbs and Outside Suburbs: Suburbs show good performance in the private free education sector at 50% well-equipped facilities. Outside suburbs offer a balanced scenario in the non-free private education sector with 60% well-equipped facilities.

North and Bekaa:

The North shows low overall well-equipped facilities, with a higher concentration in those requiring minor or major improvements.

Bekaa faces considerable challenges, especially in the private free education sector, with 66.7% needing major improvements.

Baalbeck - Hermel: Leads in non-free private education with 100% well-equipped facilities, indicating significant improvements in this sector.

Conclusions for Comparison by Education Sectors

Public Education Sector:
Akkar and the South show significant superiority, with Akkar ranking first at 50% of well-equipped sports facilities, followed by the South at 46.7%.
Beirut and Mount Lebanon face high percentages of facilities requiring major improvements, especially suburbs of Mount Lebanon, which record 72.7%.
Baalbeck - Hermel demonstrates a positive performance with 54.5% well-equipped facilities, with a relatively low percentage needing major improvements.

Free Private Education Sector:
The South leads with 100% of well-equipped sports facilities, while Beirut shows significant weaknesses, with 100% of facilities requiring major improvements.
Mount Lebanon suburbs display a balanced ratio with 50% well-equipped facilities, a positive performance compared to other governorates.

Non-Free Private Education Sector:
Beirut leads with 66.7% well-equipped facilities, followed by Baalbeck - Hermel at 100%.
Mount Lebanon outside suburbs shows strong performance with 60% well-equipped facilities, while the North and Bekaa face relatively weaker results.

UNRWA Sector:
Mount Lebanon suburbs and the North demonstrate excellent performance with 100% well-equipped sports facilities, reflecting high quality in this sector.

Second Response : Supervisor (Question No.13)

Overall Situation in the Sector
Public Sector: Data from school principals indicates significant gaps in sports facilities, with (2.8%) of respondents reporting a lack of facilities, and (10.6%) having unusable facilities. Additionally, (34.1%) of facilities require major improvements, and (40.6%) require minor improvements. Only (12%) of respondents in public schools have well-equipped facilities.
Free Private Sector: Data reflects noticeable improvement, as all schools have facilities, though (22.6%) require major improvements, and (51.6%) require minor improvements, while (25.8%) are well-equipped. This is an improvement over the public sector (12%) but still does not reflect an ideal distribution of high-quality facilities.
Non-Free Private Sector: This sector shows better facility management, with (36.8%) having well-equipped facilities, (41.9%) requiring minor improvements, and only (17.9%) needing major improvements. Non-free private schools show a better ratio of well-equipped facilities compared to the public sector (12%) and the free private sector (25.8%), reflecting higher investment in sports infrastructure.
UNRWA Sector: (66.7%) reported that facilities are available but require some improvement, while (33.3%) need significant improvement.
Key Observations by Governorates in Each Sector:
Public Sector:
Beirut shows relatively available facilities, but most require major improvements (45.5%), with a good percentage (27.3%) fully equipped.
Mount Lebanon suburbs lead governorates with (29.4%) well-equipped facilities, though (64.7%) of schools still require improvements.
Outside Mount Lebanon suburbs require comprehensive development, with (39.1%) needing major improvements and (52.2%) needing minor improvements.
The North faces moderate challenges, with (13.2%) unusable facilities and (26.3%) needing major improvements.
Bekaa faces a significant shortage, with (50%) of facilities requiring comprehensive improvements.
The South and Nabatieh face clear challenges, with most facilities needing major or minor improvements, and very low percentages of well-equipped facilities (12.5% in the South and 4.3% in Nabatieh). Akkar also suffers from a lack of facilities, with (15.8%) unusable and (28.9%) requiring significant improvements.

Baalbeck - Hermel shows a good proportion of well-equipped facilities (23.5%), but faces a need for major improvements in (23.5%) and minor improvements in (35.3%).

Free Private Sector:

Significant variation across governorates. Beirut and Baalbeck - Hermel have facilities, though requiring minor improvements.

Mount Lebanon suburbs lead, with (40%) fully equipped facilities, while (40%) require minor improvements.

Outside Mount Lebanon suburbs, (75%) require minor improvements.

The North shows (80%) needing minor improvements, with only (20%) well-equipped.

Bekaa presents a balanced situation, with (66.7%) requiring minor improvements and (33.3%) well-equipped.

The South and Nabatieh face major challenges, with half needing significant improvements, while Akkar requires urgent development, with half of the facilities requiring comprehensive improvements.

Baalbeck - Hermel needs minor improvements in (45.5%) of schools.

Non-Free Private Sector:

The South stands out with (71.4%) well-equipped facilities, followed by Beirut and Akkar at (44.4%).

Mount Lebanon suburbs show a good percentage with (37.5%) well-equipped, while outside Mount Lebanon, (50%) of schools need improvements.

The North shows (50%) requiring minor improvements, while Bekaa shows relative balance.

Nabatieh and Akkar require urgent intervention, with Nabatieh (20%) of schools unusable.

Baalbeck - Hermel needs minor improvements in (45.5%) of schools.

UNRWA Sector:

Mount Lebanon suburbs show a balanced view, with (50%) requiring significant improvements and (50%) needing minor improvements.

In the South, (100%) of respondents reported needing some improvement.

Conclusion:

Non-Free Private Sector shows the best facilities management, followed by the Free Private sector, while the Public sector suffers from a severe lack of well-equipped facilities.

Among governorates, Beirut and the South show better facilities, while Akkar and Nabatieh face significant challenges, requiring urgent development plans to improve sports infrastructure and ensure effective use.

Third Response: Coordinator (Question No.13)

In Beirut, the public sector has a high percentage of facilities requiring "some improvements," reaching 66.7%, with no facilities unavailable or unusable, though 22.2% still require significant improvements. The free private sector shows all facilities needing some improvements, highlighting the absence of high-standard facilities. The non-free private sector performs better, with 41.7% of facilities "well-equipped," but half still require some improvements.

In Mount Lebanon - suburbs, the public sector faces significant gaps, with 41.2% of facilities needing some improvements, and 17.7% being unavailable or unusable. The free private sector, while having 40% of well-equipped facilities, still faces challenges with 20% unusable. The non-free private sector leads in this area with 60.9% of well-equipped facilities, with only a small percentage requiring significant improvements.

In Mount Lebanon - excluding suburbs, the public sector struggles with infrastructure, as 48.7% of facilities need some improvements and 35.9% require significant improvements, with only 5.1% well-equipped. The free private sector shows the worst situation, with no well-equipped facilities and 60% needing improvements, some of which require major upgrades. The non-free private sector demonstrates a strong performance, with 63.2% of facilities well-equipped, while the rest require some improvements.

In the North, the public sector exhibits a moderate level, with 37.3% needing improvements and 35.6% requiring significant upgrades, with only 18.6% well-equipped. In the free private sector, half of the facilities are well-equipped, while the rest need improvements. The non-free private sector presents a

relatively balanced distribution, with a significant percentage (45.2%) requiring improvements and 32.3% in good condition.

Based on these findings, it is clear that the public sector suffers from a significant lack of sports facilities, particularly in rural areas such as Nabatieh and Baalbeck - Hermel. The non-free private sector shows notable superiority but still faces challenges. There is an urgent need for investment in improving sports infrastructure to ensure an educational environment that supports physical activities and enhances the quality of education in Lebanon.

Conclusion:

The data reveals a significant disparity in the availability of sports facilities between governorates and educational sectors in Lebanon. The public sector faces greater challenges in providing facilities compared to the private sector, especially in free schools that suffer from a severe lack of these essential resources. These findings underscore the urgent need for investment in educational infrastructure to ensure a conducive learning environment that supports students' health and physical activities.

Fourth response : Teacher (Question No.12)

The overall findings indicate that 3.4% of students do not have access to sports facilities, and 8.3% of available facilities are unusable. Among the facilities that are available, 23.6% require extensive improvements, 37.2% need some improvements, while only 27.5% are well-equipped.

Regarding the educational sectors, the **public sector** faces substantial challenges, with 39.7% of sports facilities requiring some improvements and 30.6% needing significant improvements. In contrast, the non-free private sector shows better performance with 44.5% of facilities well-equipped, while the free private sector also performs well with 39.7% of facilities well-equipped, with 29.2% requiring some improvements.

Governorate analysis reveals additional disparities. In Beirut, the public sector encounters difficulties, with 43.3% of facilities needing significant improvements, although 33.3% are well-equipped. In the non-free private sector in Beirut, 44.1% of facilities are well-equipped, with only a very small percentage unavailable.

In Mount Lebanon - suburbs, the public sector shows that 43.3% of facilities require minor improvements, and 28.3% are well-equipped, while the non-free private sector records a higher percentage of well-equipped facilities at 53.6%.

In Mount Lebanon - excluding suburbs, the public sector struggles with infrastructure, with 42.7% of facilities needing some improvements and only 19.5% well-equipped. The non-free private sector performs better, with 43.5% of facilities well-equipped.

In the North, the public sector faces a noticeable shortage, with 42.6% of facilities requiring minor improvements and only 14.1% well-equipped. Meanwhile, the non-free private sector achieves a well-equipped rate of 43%.

In the Bekaa, the public sector shows that 36.7% of facilities need minor improvements, whereas the non-free private sector has 37.5% of facilities well-equipped.

The South faces similar challenges, with 45.9% of facilities in the public sector requiring minor improvements, and only 12.3% well-equipped. The non-free private sector achieves a better-equipped rate of 56.3%.

In Nabatieh, the public sector faces substantial difficulties, with 42% of facilities needing significant improvements, and only 7.1% well-equipped. The non-free private sector performs well, with 56.3% of facilities well-equipped.

In Akkar, the public sector experiences clear shortages, with 33.7% of facilities requiring minor improvements and only 10.2% well-equipped. Conversely, the non-free private sector achieves a well-equipped rate of 40.6%.

In Baalbeck - Hermel, the public sector faces significant challenges, with 37.7% of facilities needing minor improvements, and only 11.7% well-equipped. The non-free private sector achieves a well-equipped rate of 47.2%.

Overall, these findings highlight the urgent need for improving sports infrastructure in schools, particularly in the public sector and rural areas, with a focus on achieving higher standards of equipment across all governorates and educational sectors.

Question: Availability and condition of school facilities
Fourth Item: lecture halls
First Response : Principal (Question No.21)

Comparison by Educational Sectors:

In the public education sector, data shows that the North faces the highest percentage of schools lacking lecture halls at 77.1%, indicating significant challenges in providing such facilities. Akkar ranks second at 65%, followed by the Bekaa at 61.5%. Beirut shows a relatively better situation, with only 25% of students in schools lacking lecture halls, and 37.5% needing substantial improvements, while 12.5% are well-equipped. The South presents a relatively balanced scenario, with only 40% of students lacking lecture halls, and 33.3% requiring minor improvements.

In the free private education sector, Beirut and the South face a complete absence of lecture halls, with 100% of students in these schools lacking this facility. Akkar presents a balanced scenario, with 50% of students in schools having well-equipped halls, and 50% lacking facilities. Mount Lebanon suburbs show similar percentages, where 25% of students lack halls, and 50% require minor improvements.

In the non-free private sector, Baalbek-Hermel stands out with 80% of students in schools having well-equipped lecture halls, the highest among all sectors and governorates. Mount Lebanon, excluding suburbs, ranks second at 60% well-equipped halls, while the North records 46.2%. The South displays a noticeable balance, with 42.9% of students in schools requiring minor improvements, and 28.6% having well-equipped halls.

In the UNRWA sector, all areas significantly excel, with 100% of UNRWA schools in Mount Lebanon suburbs, the North, and the South fully equipped with lecture halls, reflecting successful investment.

Comparison by Governorates:

In Beirut, data shows that 27.8% of students in schools lack lecture halls, with a good percentage of well-equipped halls at 33.3%, making Beirut one of the best-equipped governorates. In Mount Lebanon suburbs, 32.7% of students lack halls, and 28.6% have well-equipped facilities, resembling Beirut's situation. In Mount Lebanon, excluding suburbs, the distribution is more balanced, with 28.1% lacking halls, while 34.4% require minor improvements.

In the North, 65.5% of students in schools lack lecture halls, making it the most challenged governorate, with well-equipped halls barely reaching 10.9%. The Bekaa comes second, with 44% of students lacking halls, and a modest 20% of halls being well-equipped. The South shows moderate performance, with 32% lacking halls and 36% requiring minor improvements. In Nabatieh, 46.4% of students lack halls, while 21.4% have well-equipped facilities. Baalbek-Hermel mirrors this, with 47.4% lacking halls and a well-equipped rate of 21.1%.

Conclusions:

Beirut and Mount Lebanon suburbs show better equipped halls compared to the North and the Bekaa, with 33.3% and 28.6% of halls being well-equipped, respectively.

The North and Bekaa face significant hall shortages, with 65.5% and 44% of schools lacking halls, respectively, and extremely low well-equipped rates.

The South and Nabatieh demonstrate a relatively acceptable balance, with percentages distributed between minor improvements and well-equipped facilities, indicating progress.

Baalbek-Hermel shows relatively good hall provision (21.1% well-equipped) despite a high percentage of schools lacking halls (47.4%), suggesting limited but effective efforts.

The public education sector faces significant hall shortages, especially in the North (77.1%) and the Bekaa (61.5%), while Beirut and the South show better-equipped facilities.

The free private sector exhibits notable weaknesses in some governorates like Beirut and the South (100% lacking halls), while Akkar and Mount Lebanon suburbs show better results.

The non-free private sector stands out as the best equipped, especially in Baalbek-Hermel (80%) and Mount Lebanon excluding suburbs (60%), with good performance also seen in the South and the North.

The UNRWA sector excels with full hall provision in all regions, highlighting successful strategies. Governorate disparities:

The South and Baalbek-Hermel achieve the best results in hall provision.

The North and Beirut record the poorest performance, with high percentages of "not available."

UNRWA achieves extremely low results, with almost complete absence of lecture halls in most areas.

Second Response: Supervisor (Question No.13)

Overall Situation:

Public Sector: The general situation in the public sector reveals a significant shortage of lecture halls, with approximately 47% of schools lacking such facilities, highlighting a critical need for infrastructure improvement. Additionally, 21.7% of the existing halls are unusable due to inadequate equipment or unsuitable spaces. However, there is a need for substantial improvements in 11.1% of the halls, while only 8.3% are well-equipped. These figures underscore the urgent need for investment in the public education sector to enhance the learning environment. Akkar and the North are facing the worst conditions, with 68.4% and 60.5% of schools lacking lecture halls, respectively, and 23.7% and 34.2% of halls being unusable, necessitating immediate intervention for improvement.

Free Private Education Sector: In the free private sector, there is also a shortage of lecture halls, with 25.8% of students in schools lacking such facilities. Additionally, 16.1% of halls are unusable, while 16.1% require significant improvements and another 16.1% need minor improvements. Despite this, 25.8% of students in schools have well-equipped halls, which represents a moderate level but is better than the public sector. There remains a clear need for improvements, particularly in Beirut and the North.

Non-Free Private Sector: The non-free private sector shows relatively better conditions, with 35% of students in schools having well-equipped lecture halls compared to only 8.3% in the public sector. However, some schools still face a shortage of halls (17.1%) or require significant improvements (11.1%), indicating a need for enhanced efforts to improve infrastructure.

UNRWA Sector: 100% of respondents reported the absence of lecture halls in UNRWA schools, presenting substantial challenges for providing adequate facilities.

Governorate Level:

Public Sector: Akkar, the North, and the Bekaa suffer the most from a lack of lecture halls, with percentages exceeding 68.4% in Akkar, 60% in the North, and 55.6% in the Bekaa. The South has the highest percentage of students requiring minor improvements (31.3%), although the proportion of well-equipped halls remains low. Mount Lebanon suburbs and Nabatieh are the best-equipped areas, with 17.6% in Mount Lebanon suburbs and 17.4% in Nabatieh having well-equipped halls. Beirut faces the highest percentage of halls requiring substantial improvements at 36.4%. Mount Lebanon (excluding suburbs) experiences a significant shortage, with 43.5% of schools lacking halls, necessitating urgent attention for infrastructure development.

Free Private Sector: Beirut faces the greatest challenge, with all schools lacking lecture halls, requiring immediate intervention. The North ranks second, with 80% of students in schools without halls, placing immense pressure on the education process. Mount Lebanon (excluding suburbs) has an even distribution of hall conditions, necessitating sustained efforts for improvement across all facilities. The Bekaa and the South suffer from a shortage of halls, with urgent needs for substantial improvements, reaching 50% in the South and 33.3% in the Bekaa. Nabatieh and Akkar, though better off, still require hall improvements to ensure continuous educational quality. Baalbek-Hermel stands out with 100% hall provision, though minor improvements are needed to enhance quality.

Non-Free Private Sector: Akkar, Beirut, and the South lead in having well-equipped lecture halls, with 55.6%, 44.4%, and 42.9% of students, respectively, benefiting from well-prepared facilities. The South tops the governorates in hall availability across all schools, although 57.1% require minor improvements, leaving the rest well-equipped. The North, Bekaa, and the South show significant needs

for hall improvements, with 50% of halls in the North and Bekaa, and 57.1% in the South needing substantial upgrades. The Bekaa experiences a severe shortage of well-equipped halls at 7.1%. Mount Lebanon suburbs, Beirut, and Akkar show high percentages of students lacking lecture halls, with 25%, 22.2%, and 22.2%, respectively. Baalbek-Hermel maintains a relatively balanced hall provision but requires significant improvements in 18.2% of halls.

UNRWA: Schools under UNRWA face significant challenges with an almost complete absence of lecture halls, emphasizing the urgent need for infrastructure improvements to provide a conducive learning environment.

Conclusion:

The comparative analysis between the public and private sectors in Lebanon regarding the availability and quality of lecture halls in schools reveals significant challenges in both sectors, but particularly in the public sector.

Public Sector:

Schools face a substantial shortage of lecture halls, with 47% lacking such facilities. Additionally, 21.7% of existing halls are unusable, and 11.1% require significant improvements.

Akkar, the North, and Beirut are the worst affected, with more than 60% of schools lacking lecture halls, necessitating urgent infrastructure improvements.

Mount Lebanon suburbs and Nabatieh are the best-equipped areas, with well-equipped halls at 17.6% and 17.4%, respectively.

Free Private Sector:

This sector shows moderate improvements, but with lower percentages. Around 25.8% of students lack lecture halls, and 16.1% of existing halls are unusable or require substantial improvements.

Beirut and the North experience acute shortages, with all schools in Beirut and 80% in the North lacking halls, demanding swift intervention.

Non-Free Private Sector:

Shows relatively better conditions, with 35% of students having well-equipped halls. However, significant efforts are needed to address hall shortages and improve infrastructure, especially in areas like the Bekaa and the South where 50% and 57.1%, respectively, require substantial upgrades.

Third Response : Supervisor (Question No.13)

Public Sector:

Beirut: 22.2% of students in schools lack lecture halls, and 55.6% of available halls are unusable. Only 11.1% need significant improvements, and the same percentage requires minor improvements.

Mount Lebanon (suburbs): 23.5% of schools lack halls, with 23.5% of halls unusable. 41.2% require significant improvements, while 5.9% are well-equipped.

Mount Lebanon (excluding suburbs): 35.9% of schools lack halls, with 25.6% unusable. 15.4% need significant improvements, and 12.8% are well-equipped.

North: 66.1% of schools lack lecture halls, with 11.9% unusable. 13.6% require significant improvements, and only 5.1% are well-equipped.

Bekaa: 50% of schools lack lecture halls, with 10% unusable. 10% need significant improvements, and 15% are well-equipped.

South: 35.7% of schools lack lecture halls, with 14.3% unusable. 28.6% require significant improvements, and 14.3% are well-equipped.

Nabatieh: 43.8% of schools lack halls, with 25% unusable. 12.5% need significant improvements, and 6.3% are well-equipped.

Akkar: 61.5% of schools lack halls, with 26.9% unusable. 7.7% require significant improvements, and 3.8% are well-equipped.

Baalbek-Hermel: 38.9% of schools lack halls, with 5.6% unusable. 22.2% need minor improvements, and 22.2% are well-equipped.

Free Private Sector:

Beirut: 100% of schools lack lecture halls.

Mount Lebanon (suburbs): 20% of halls are unusable, with 60% well-equipped.
Mount Lebanon (excluding suburbs): 40% require significant improvements, and 40% are well-equipped.
North: 50% of schools lack halls, with 25% well-equipped.
Bekaa: 50% of halls are well-equipped, with the rest unavailable.
South: 20% need significant improvements, and 80% are well-equipped.
Nabatieh: 50% of halls are well-equipped, with the rest unavailable.
Akkar: 66.7% of halls are unavailable, and 33.3% need significant improvements.
Baalbek-Hermel: 50% require significant improvements, and the rest are well-equipped.
Non-Free Private Sector:
Beirut: 33.3% of halls are unavailable, 33.3% require minor improvements, and 25% are well-equipped.
Mount Lebanon (suburbs): 17.4% of halls are unavailable, and 60.9% are well-equipped.
Mount Lebanon (excluding suburbs): 5.3% of halls are unusable, and 63.2% are well-equipped.
North: 6.5% of halls are unavailable, with 45.2% well-equipped.
Bekaa: 18.8% of halls are unavailable, with 31.3% requiring minor improvements, and 25% are well-equipped.
South: 16.7% require significant improvements, and 33.3% are well-equipped.
Nabatieh: 27.3% of halls are unavailable, with 45.5% needing minor improvements, and 18.2% are well-equipped.
Akkar: 38.5% of halls are unavailable, and 23.1% are well-equipped.
Baalbek-Hermel: 27.3% of halls are unavailable, and 63.6% are well-equipped.
UNRWA:
North: 50% of halls are unavailable, and 50% are well-equipped.
Conclusion:
The analysis reveals significant challenges in the public sector, especially in rural areas such as the North and Akkar. The free private sector faces similar issues, with some exceptions in the South and Mount Lebanon. The non-free private sector performs better in terms of hall provision, particularly in regions like Mount Lebanon and Baalbek-Hermel. This highlights the urgent need to focus on improving infrastructure in the public sector and rural areas to ensure equitable access to educational facilities.

Fourth Response : teacher (Question No. 12)

Overall, the results indicate that 36.8% of students in schools lack lecture halls, with 13.9% of available halls being unusable. Additionally, 11.7% of the halls require significant improvements, and 17.3% need minor improvements. Conversely, only 20.4% of students attend schools with well-equipped lecture halls.

In the public sector, 47.5% of students attend schools without lecture halls, the highest percentage compared to other sectors. The proportion of well-equipped halls in this sector is extremely low, at only 7.4%, while 14.6% of halls require minor improvements.

The non-free private sector performs better, with only 21.6% of students lacking lecture halls, and 39.2% of halls are well-equipped.

In the free private sector, 30.1% of students lack lecture halls, and 25.4% of halls are well-equipped, representing a moderate position between the public and non-free private sectors.

When considering governorates, notable differences emerge. In Beirut, 28.9% of students lack lecture halls, while 25.8% have well-equipped halls, making it one of the best regions in terms of hall availability. In Mount Lebanon (suburbs), 22.2% of students lack halls, the lowest among governorates, and 42.6% of halls are well-equipped, making this region the most well-equipped overall. On the other hand, the North shows a very high percentage of students without lecture halls (50.0%), with only 12.1% of halls being well-equipped.

In Bekaa, 23.9% of students lack lecture halls, and 23.4% have well-equipped halls, indicating an average situation. The South faces a significant challenge with 33.7% of students lacking halls, and only 7.1% of halls are well-equipped, highlighting the urgent need for improvements in this region. In Nabatieh, a high proportion of students (38.9%) lack lecture halls, with only 15.6% of halls being well-equipped. In Akkar, the highest among governorates, 50.2% of students attend schools without halls, and only 13.9% have well-equipped halls. Baalbek-Hermel shows 41.5% of students without halls, with only 11.0% of halls being well-equipped.

These findings suggest significant variation across governorates and educational sectors in the availability and quality of lecture halls, with urgent interventions needed in rural areas and regions with weak infrastructure, especially within the public sector.

Question: Availability and condition of school facilities
Fifth Item : Auditorium
First Response : Principal (Question No. 21)

Comparison by Educational Sectors:

In the **public education sector**, data shows that the highest percentage of students lacking auditoriums is in Akkar at 65%, followed by the North at 60%, and the Bekaa at 53.8%. Beirut shows lower percentages, with only 12.5% of students lacking auditoriums, and 37.5% of auditoriums needing significant improvements, while only 12.5% are well-equipped. In the South, 33.3% of students lack auditoriums, while 26.7% are well-equipped, which is relatively high compared to other governorates.

In the **free private education sector,** Beirut shows a complete absence of auditoriums at 100%. Conversely, the South showcases complete auditorium facilities at 100%. In Mount Lebanon excluding suburbs, all auditoriums are well-equipped at 100%. In the North and Bekaa, 33.3% of auditoriums are well-equipped, reflecting limited improvement.

For the non-free private sector, Baalbek-Hermel leads with 60% of auditoriums being well-equipped, the highest among all governorates and sectors. In Mount Lebanon excluding suburbs, 40% of auditoriums are well-equipped, while the North shows a relatively good percentage of 15.4%. In the South, 14.3% of auditoriums are well-equipped, with a balance between unavailable auditoriums and those needing minor or major improvements.

In the **UNRWA sector,** the South demonstrates a significant achievement with 50% of auditoriums well-equipped, a notable success compared to other governorates. All auditoriums in the North are fully equipped at 100%.

Comparison by Governorates:

In Beirut, only 11.1% of students lack auditoriums, while 38.9% of auditoriums are well-equipped, making Beirut one of the best-equipped governorates. In Mount Lebanon suburbs, 22.4% of students lack auditoriums, while 38.8% of auditoriums are well-equipped, reflecting significant improvement. In Mount Lebanon excluding suburbs, there is a noticeable balance, with 37.5% of students lacking auditoriums and 28.1% needing minor improvements.

In the North, 50.9% of students lack auditoriums, with only 9.1% of auditoriums being well-equipped, reflecting significant challenges. In the Bekaa, 40% of students lack auditoriums, and only 12% are well-equipped, which is relatively low. In the South, 28% of students lack auditoriums, with only 24% needing minor improvements, and only 8% are well-equipped.

In Nabatieh and Baalbek-Hermel, there is noticeable variation. 46.4% of students in Nabatieh and 42.1% in Baalbek-Hermel lack auditoriums, while the percentage of well-equipped auditoriums is moderate (10.7% in Nabatieh and 21.1% in Baalbek-Hermel). Akkar shows the worst situation, with 64.3% of students lacking auditoriums, and only 7.1% are well-equipped.

Conclusions:

Significant Deficiency in Auditorium Facilities:

The public sector faces severe shortages in auditorium facilities, with most auditoriums being unavailable.

The free private sector requires improvements.

The non-free private sector performs the best, with high percentages of well-equipped auditoriums.

Wide Variation Across Governorates:

The South and Baalbek-Hermel achieve the best results, with high percentages of well-equipped auditoriums.

The North and Akkar record the worst outcomes, with high percentages of unavailable auditoriums.

UNRWA: Faces significant challenges in auditorium facilities, with near absence of well-equipped auditoriums.

Second Response: Supervisor (Question No. 13)

General Situation:

Public Sector: Data from school supervisors indicates significant challenges faced by the public sector in terms of auditorium facilities. Firstly, there is a noticeable lack of infrastructure, with a large percentage of students (42.9%) attending schools that completely lack auditoriums, highlighting a significant gap in providing auditoriums for theatrical activities. Additionally, many auditoriums are not suitable for use, with 26.7% of schools containing auditoriums that are not usable, lacking essential facilities or being in inappropriate locations. Furthermore, there is a need for improvements in auditorium facilities, with 13.8% of students in schools requiring significant upgrades, while 12% need minor improvements. Despite these challenges, the percentage of schools with well-equipped auditoriums does not exceed 4.6%, reflecting a severe deficiency in these facilities. Thus, there is a pressing need for investment in improving auditorium infrastructure in schools, whether through providing new auditoriums or enhancing existing ones.

Free Private Education: Data indicates challenges in the free private sector regarding auditorium facilities. Firstly, there is a significant lack of infrastructure, with approximately 29% of students attending schools that do not have auditoriums, reflecting a major gap. Additionally, there are 9.7% of schools with auditoriums that are not suitable for use, necessitating urgent improvements. There is also a need for enhancements in some auditoriums, with 12.9% requiring significant upgrades, while 19.4% need minor improvements. Despite these challenges, relatively good facilities are evident, with about 29% of students attending schools with well-equipped auditoriums, representing an improvement compared to the public sector, which does not exceed 4.6%.

Non-Free Private Education: Key observations reveal challenges faced by this sector in providing auditoriums. Firstly, there is a notable lack of infrastructure, with 23.9% of students attending schools without auditoriums, highlighting a substantial gap. Additionally, 4.3% of auditoriums are unusable, necessitating urgent repairs. Regarding needed improvements, 12% of auditoriums require significant upgrades, while 27.4% need minor improvements. Despite these challenges, approximately 32.5% of students attend schools with well-equipped auditoriums, marking a noticeable improvement compared to both the free private sector (29%) and the public sector (4.6%).

UNRWA: Data shows that 66.7% of supervisors report a lack of auditoriums in schools, and 33.3% report existing auditoriums needing extensive improvements. These are additional challenges faced by UNRWA schools in Lebanon.

Observations by Governorates:

Public Sector: Akkar shows the worst situation regarding the lack of auditoriums in schools (71.1%) and unusable auditoriums (23.7%). Akkar, Bekaa, and Baalbek-Hermel suffer from the worst conditions in terms of auditorium availability, with high percentages of schools lacking auditoriums—reaching 71.1% in Akkar, 66.7% in Bekaa, and 47.1% in Baalbek-Hermel. Moreover, Nabatieh, the South, and Beirut record high percentages of schools with unusable auditoriums (30.4%, 28.1%, and 27.3% respectively). The South and Nabatieh show moderate percentages of schools lacking auditoriums, but the proportion of well-equipped auditoriums remains low in these areas (3.1% and 4.3% respectively). Baalbek-Hermel and Mount Lebanon (excluding suburbs) face significant challenges in terms of a lack of auditoriums, with 39.1% in Mount Lebanon (excluding suburbs) and 47.1% in Baalbek-Hermel lacking auditoriums, in addition to 26.1% in Mount Lebanon (excluding suburbs) and 23.5% in Baalbek-Hermel having unusable auditoriums, requiring urgent attention.

Mount Lebanon (suburbs) is better in terms of schools with well-equipped auditoriums (17.6%), though the percentage of schools without auditoriums remains high. Based on these findings, there is an urgent need for investment in auditorium infrastructure across all governorates, particularly in areas severely lacking in these facilities.

Free Private Education: Beirut and Baalbek-Hermel stand out as the best regions for school auditorium facilities, reflecting the infrastructure quality in these areas. Akkar suffers from a notable shortage, with 25% of schools lacking auditoriums, and 25% having unusable auditoriums. Despite 50% of auditoriums being well-equipped in this region, there is an urgent need for development. Bekaa, the South, and North show high percentages of schools without auditoriums—33.3% in Bekaa, 50% in the South, and 60% in the North. Additionally, some existing auditoriums in these regions require improvements, reflecting a significant gap in infrastructure. Mount Lebanon (excluding suburbs) faces significant challenges in equipping schools with auditoriums, often requiring upgrades in facilities and locations or being unusable, indicating a dire need for comprehensive improvements. Nabatieh, although showing some improvements, still faces challenges with 16.7% of schools lacking auditoriums and 16.7% having unusable auditoriums, with 33.3% requiring minor improvements. Baalbek-Hermel also needs enhancements, with 27.3% of auditoriums being well-equipped, 54.5% needing minor improvements, and 9.1% requiring significant upgrades. There is an urgent need to improve auditorium facilities across most governorates, especially in regions experiencing severe shortages, such as Akkar, Bekaa, and Nabatieh. Infrastructure in areas like Akkar and Mount Lebanon (excluding suburbs) needs significant development to ensure well-functioning auditoriums are available in all schools.

UNRWA: In Mount Lebanon suburbs, there is a lack of auditoriums in UNRWA schools, while schools in the South require extensive improvements.

Conclusions:

The public sector faces a severe shortage of auditoriums compared to both free and non-free private sectors.

The free private sector shows fewer challenges but still requires improvements in certain areas.

The non-free private sector performs better, especially in terms of well-equipped auditoriums (32.5%), but faces disparities in availability across governorates.

Thirs Response : Coordinator (Question No. 13)

Public Education Sector:

In Beirut, 11.1% of schools lack auditoriums, with the same percentage having well-equipped auditoriums. In the suburbs of Mount Lebanon, 47.1% of facilities are unavailable, and only 5.9% are well-equipped. In other regions of Mount Lebanon, 35.9% lack auditoriums, with a well-equipped percentage of 7.7%. In the North, the highest percentage of unavailable facilities is 66.1%, with well-equipped auditoriums at 3.4%. In the Bekaa, 55% of facilities are unavailable, while 10% are well-equipped. In the South, 23.8% of facilities need improvements, with a well-equipped percentage of 14.3%. In Nabatieh, 31.3% lack auditoriums, with a 12.5% well-equipped percentage. In Akkar, 73.1% of facilities are unavailable, with no well-equipped auditoriums. In Baalbek-Hermel, 61.1% lack facilities, with 11.1% well-equipped.

Free Private Education Sector:

In Beirut, all schools have well-equipped auditoriums at 100%. In the suburbs of Mount Lebanon, 60% of facilities are well-equipped, while 40% require improvements. In other Mount Lebanon regions, 20% are well-equipped with 40% needing major improvements. In the North, 50% of facilities are well-equipped, with the other half needing improvements. In Bekaa, 50% are well-equipped. In the South, 60% of facilities are well-equipped, while 20% are unavailable. In Nabatieh, half the facilities are equipped, with the other half requiring improvements. In Akkar, 66.7% lack facilities. In Baalbek-Hermel, half the facilities are well-equipped, with the other half unavailable.

Non-Free Private Education Sector:

In Beirut, 41.7% of facilities are well-equipped, while 25% are unavailable. In the suburbs of Mount Lebanon, 67.4% are well-equipped, with a small percentage needing improvements. In other regions of

Mount Lebanon, 52.6% are well-equipped, with 5.3% unavailable. In the North, 29% are well-equipped, with 35.5% needing minor improvements. In Bekaa, 25% are well-equipped, while 31.3% are unavailable. In the South, 33.3% are well-equipped, with 50% needing major improvements. In Nabatieh, 9.1% are well-equipped, with 36.4% unavailable. In Akkar, 53.8% lack facilities, with 15.4% well-equipped. In Baalbek-Hermel, 36.4% are well-equipped, with 27.3% unavailable.

UNRWA Schools:

In the North, 50% of facilities are well-equipped, while the other half require improvements.

General Conclusions:

Significant Regional Disparities:

There's a noticeable disparity between regions in Lebanon regarding the availability and quality of auditoriums. Regions like Beirut and Mount Lebanon (excluding suburbs) have better conditions, whereas regions such as the North and Akkar face severe shortages.

Private vs. Public Sector:

Private sectors, especially free private education, perform better than the public sector in many regions, offering well-equipped auditoriums in a higher percentage of schools compared to the public sector.

Comparisons Between Free and Non-Free Private Sectors:

Free private education offers better access to well-equipped auditoriums compared to non-free private education, which often struggles with funding and investment in infrastructure.

Urgent Need for Improvements:

Many regions, especially in Bekaa, the South, and Nabatieh, urgently require improvements or new facilities for auditoriums. Rural and remote areas like Akkar and Baalbek-Hermel are particularly lacking in quality infrastructure.

Economic and Financial Impact:

Economic and financial conditions significantly affect the availability and quality of school auditoriums. Regions with weaker economic conditions struggle more to meet infrastructure needs.

Differences in Public and Private Schools:

Private schools, both free and non-free, generally provide better-equipped auditoriums compared to public schools, which face more challenges in providing quality facilities.

Investment Gaps:

Despite some well-equipped schools in certain regions, overall investment in auditorium infrastructure remains limited across most Lebanese regions, necessitating increased resource allocation for improvements.

Question: How do you describe the situation of facilities and services allocated for learners with special needs?
Item 1: Ramps
First response : Principal (Question No. 24)
In the public schools education sector, there is a significant variation in providing ramps for learners with special needs. Beirut shows a very high percentage in the category "Not suitable at all" at **62.5%**, with no respondents rating the facilities as "Good" or "Excellent." In Mount Lebanon suburbs, 27.3% of respondents classify ramps as "Not suitable at all" or "Poor," with only **9.1%** rating them as "Excellent." In the North, the highest percentage falls in the "Not suitable at all" category at **65.7%**, with very few positive classifications.

Beirut records a 100% rate in the "Not suitable at all" category. In Mount Lebanon excluding suburbs, data shows a relative improvement with 50% of respondents rating ramps as "Poor." Bekaa shows close percentages between categories, with 33.3% rating them as "Excellent."

In the private free sector, Beirut records **55.6%** for "Not suitable at all," while only **11.1%** classify them as "Excellent." In the North, **46.2%** of respondents find ramps "Not suitable at all," with **15.4%**

in both "Good" and "Excellent" categories.

The UNRWA sector performs notably in some areas, with 100% of respondents in Mount Lebanon suburbs rating ramps as "Excellent."

Comparison by Governorates:

Data shows that most respondents in governorates suffer from a significant lack of properly equipped ramps for learners with special needs. Beirut records the highest percentage in "Not suitable at all" at **61.1%**, with moderate percentages in the "Poor" category at **22.2%**, and completely absent ratings in the "Excellent" category. In Mount Lebanon suburbs, 46.9% of respondents rate ramps as "Not suitable at all," with limited ratings for "Good" at **14.3%** and **6.1%** for "Excellent." In Mount Lebanon excluding suburbs, 50% classify ramps as "Not suitable at all," with modest percentages for "Good" at **12.5%**.

The North shows the highest percentage for "Not suitable at all" at **60%**, with very few positive classifications, where only **5.5%** are in the "Acceptable" category. Bekaa shows comparable results to the North, with **44%** rating ramps as "Not suitable at all," and only **12%** in the "Excellent" category. The South shows relatively balanced percentages, with **44%** in "Not suitable at all," **12%** in "Good," and **8%** in "Excellent."

In Nabatieh, **46.4%** of respondents rate ramps as "Not suitable at all," with very low percentages in the "Excellent" category at **3.6%**. Akkar shows similar results, with **46.4%** rating ramps as "Not suitable at all," and only **14.3%** in the "Acceptable" category. In Baalbek-Hermel, the best results are recorded relatively, with **52.6%** rating ramps as "Acceptable," and **10.5%** in "Good," indicating some improvement compared to other governorates.

Conclusions:

Beirut shows the highest percentage in "Not suitable at all," indicating significant challenges in providing suitable ramps.

Mount Lebanon, both in suburbs and other areas, suffers from a major lack of equipped ramps, with very low ratings for "Good" or "Excellent."

North and Bekaa face similar challenges, with a heavy concentration in the "Not suitable at all" category and very low positive ratings.

The South shows some balance between categories but requires significant improvement to increase ratings in "Good" and "Excellent."

Nabatieh and Akkar show modest results with low positive ratings.

Baalbek-Hermel shows the best relative performance, though it still needs improvement to raise positive ratings.

The public schools education sector suffers from a significant lack of equipped ramps across most governorates.

The private free sector shows relative improvement in some governorates like Bekaa.

The non-free private sector varies between governorates, with weak representation in the "Excellent" category.

UNRWA shows notable progress in some regions like Mount Lebanon suburbs.

Second Response: Supervisor (Question No. 16)

Overall Situation

Public schools Sector:
- "Not suitable at all": **45.6%** of public schools respondents describe ramps as "Not suitable at all," and **32.7%** as "Poor," meaning that over **78%** of public schools respondents suffer from inadequate facilities.
- Minimal availability of well-equipped ramps: Only **4.1%** of respondents rate facilities as "Good," and **2.8%** as "Excellent."
- Acceptable condition: **14.7%** of respondents consider ramps "Acceptable," but they do not meet the required standards for inclusive learning.

Private free Education:

- "Not suitable at all": **48.4%** of private free schoolsrespondents describe ramps as "Not suitable at all," indicating significant challenges.
- Poor condition: **22.6%** rate ramps as "Poor," meaning about **71%** of private free schoolsrespondents face inadequate or poor ramps for special needs students.
- Acceptable condition: Only **6.5%** rate ramps as "Acceptable."
- Good condition: **19.4%** consider ramps "Good," indicating some relative improvement compared to public schools respondents.
- Excellent condition: **3.2%** rate ramps as "Excellent."

Private Non-Free Education:
- "Not suitable at all": **37.6%** of private non-free respondents describe ramps as "Not suitable at all," a lower percentage compared to private free schools respondents and the public schools sector.
- Poor condition: **20.5%** rate ramps as "Poor."
- Acceptable condition: **25.6%** consider ramps "Acceptable," which is better than the public schools sector and private free schoolsrespondents.
- Good condition: **9.4%** rate ramps as "Good."
- Excellent condition: **6.8%** rate ramps as "Excellent," a better percentage than the public schools sector and private free schools respondents.

Summary:
The non-free private sector shows notable improvement compared to private free schools and public schools sectors, with a larger proportion of respondents rating ramps as "Acceptable," "Good," or "Excellent."

UNRWA:
- "Not suitable at all": **50%** describe ramps as "Not suitable at all."
- Poor condition: **50%** rate ramps as "Poor."

By Governorate:

Public schools Sector: According to sue data in the official schools sector, most respondents in Lebanon suffer from a severe lack of facilities for special needs students related to ramps. In Beirut, all respondents describe the situation as unsuitable or poor (**45.5%** and **54.5%**), indicating an urgent need for comprehensive infrastructure improvement. In Mount Lebanon suburbs, conditions are slightly better, with **17.6%** describe them as "Acceptable," and **11.8%** as "Good", but challenges still remain. In Mount Lebanon excluding suburbs, the situation is worse, with **56.5%** of respondents experiencing severe equipment shortages. In the North and Bekaa, the situation is similar, with over 50% of respondents facing shortages, and only a small percentage describing conditions as "Good." The South shows relatively better performance compared to other regions, with some respondents rating the situation as "Excellent" or "Good," though improvement is still needed. Nabatieh shows a moderate situation with room for improvement for some respondents. Akkar suffers from significant shortages, requiring urgent interventions.

Conclusions:
- All governorates require urgent investment to improve infrastructure for special needs students. Beirut, North, Bekaa, and Akkar face the most significant challenges, while South and Mount Lebanon suburbs show some improvements, necessitating focused efforts to uplift the overall situation.
- Private non-free education is the most effective in providing ramps for special needs students.
- Free private education shows improvement in regions like Bekaa and Akkar, but struggles in Beirut and Baalbek-Hermel.
- The public schools sector is the weakest overall in all governorates and needs substantial improvements, especially in Beirut, the North, and Bekaa.
- Regions requiring the most urgent intervention: Beirut, North, and Baalbek-Hermel.
- Relatively better regions: Bekaa, South, Akkar, and Mount Lebanon suburbs.

Third response: Coordinator (Question No. 16)

In Beirut, the public schools sector presents a concerning situation, with **44.4%** of respondents having unsuitable ramps, and **55.6%** having ramps in poor condition. This highlights significant challenges in providing adequate infrastructure in government respondents. In the private free sector, all respondents (**100%**) lack ramps, indicating a complete absence of prepared facilities in this sector. In the private non-free sector, **50%** of respondents have unsuitable ramps, **25%** have ramps in poor condition, **16.7%** have ramps in acceptable condition, and only **8.3%** provide ramps in good condition.

In Mount Lebanon suburbs, the public schools sector reveals that **47.1%** of respondents have unsuitable ramps, **29.4%** have ramps in poor condition, and **17.6%** have ramps in an acceptable state, reflecting generally poor infrastructure. Meanwhile, the private free sector shows some improvement, with **20%** of respondents having ramps in poor condition and **80%** in acceptable condition. In the private non-free sector, **37%** of respondents have unsuitable ramps, **13%** have ramps in poor condition, **23.9%** in acceptable condition, and **10.9%** in good condition, showing a mixed situation with some positive aspects but still needing improvement.

In Mount Lebanon excluding suburbs, the public schools sector **38.5%** of respondents have unsuitable ramps, **43.6%** in poor condition, indicating severe shortages in infrastructure. The private free sector **60%** of respondents have unsuitable ramps, with **20%** in acceptable condition. The private non-free sector **36.8%** with unsuitable ramps, **36.8%** in acceptable condition, **15.8%** in good condition, and **5.3%** in excellent condition, offering a better situation compared to the public schools sector but still requiring more improvements.

In the North, the public sector **50%** of respondents have unsuitable ramps, **30%** in poor condition, and **10%** in acceptable condition, highlighting significant infrastructure deficiencies. In the private free sector, **66.7%** have unsuitable ramps, **16.7%** in poor condition, and **16.7%** in acceptable condition. In the private non-free sector, **40%** of respondents have unsuitable ramps, **20%** in poor condition, and **20%** in acceptable condition, suggesting the need for further improvements.

In Nabatieh, the public sector **62.5%** of respondents with unsuitable ramps, **25%** in poor condition, indicating major infrastructure challenges. The private free sector reveals that **100%** of respondents lack ramps. In the private non-free sector, **72.7%** have unsuitable ramps, with **18.2%** in poor condition, reflecting a troubling situation in this sector.

In Akkar, the public schools sector shows **46.2%** of respondents with unsuitable ramps, **46.2%** in poor condition, and **3.8%** in acceptable or good condition. The private free sector reports **66.7%** with unsuitable ramps, **33.3%** in acceptable condition. The private non-free sector shows **46.2%** with unsuitable ramps, **38.5%** in poor condition, and **15.4%** in acceptable condition, revealing a mixed scenario with some improvements but still requiring urgent attention.

In Baalbek-Hermel, the public schools sector **27.8%** of respondents have unsuitable ramps, **27.8%** in poor condition, and **16.7%** in acceptable condition, with **16.7%** in good condition and **11.1%** in excellent condition, suggesting some progress but substantial improvements are needed. The private free sector reports **50%** with unsuitable ramps, and **50%** in acceptable condition. In the private non-free sector, **36.4%** have unsuitable ramps, **18.2%** in poor condition, **27.3%** in acceptable condition, and **18.2%** in good condition, indicating a better situation but still requiring enhancements.

Conclusions

Public schools Education Sector (Government Respondents):

- In Beirut, this sector suffers from a complete lack of suitable ramps in many respondents. **44.4%** of respondents have unsuitable ramps, and **55.6%** are in poor condition.
- In the North, **50%** of respondents have unsuitable ramps, and **30%** are in poor condition.
- In Nabatieh, this sector has a high percentage of respondents with unsuitable ramps (**62.5%**), indicating a urgent need for infrastructure improvements.

2. **Private free sector:**

- In Beirut, the private free sector faces a complete lack of ramps, as all respondents (**100%**) are without them.
- In Nabatieh, all respondents (**100%**) in this sector lack ramps.

- In Akkar, **66.7%** of respondents in this sector have unsuitable ramps, highlighting a critical need for infrastructure improvements.
3. **Private Non-Free Sector:**
- In Nabatieh, this sector has a high percentage (**72.7%**) of respondents with unsuitable ramps.
- In Akkar, **46.2%** of respondents have unsuitable ramps, with **38.5%** in poor condition.

Based on this data, the public schools education sector in Beirut, the North, and Nabatieh, along with the private free sector in Beirut, Nabatieh, and Akkar, are the most in need of significant improvements in ramps to provide a suitable educational environment.

General Conclusions:
- Most regions face a lack of suitable ramps or have existing ramps in poor condition. Many public schools sectors, especially in Beirut, Nabatieh, and Mount Lebanon, face significant challenges in providing suitable ramps.
- The private free sector in many regions lacks ramps entirely.
- The private non-free sector shows a relatively better provision of ramps, especially in areas like Beirut and Mount Lebanon.

Fourth response: Teacher (Question #15)

The analysis of the availability of ramps for individuals with disabilities, based on governorates and the education sector, reveals significant disparities. Upon analyzing the overall distribution, it is found that **39.9%** of respondents describe ramps as "completely unsuitable," **26.3%** as "poor," and **18.9%** as "acceptable," whereas only **8.4%** consider them "good," and **6.6%** describe them as "excellent."

In the public schools sector, **40.5%** of respondents describe ramps as "completely unsuitable," **31.4%** as "poor," and **17.2%** as "acceptable." The percentage of respondents describing ramps as "good" is only **7.7%**, and those considering them "excellent" is a mere **3.2%**.

In the private free sector, **39.2%** of respondents describe ramps as "completely unsuitable," **24.4%** as "poor," and **16.3%** as "acceptable." Respondents describing ramps as "good" represent **7.2%**, and **12.9%** consider them "excellent."

In the private non-free sector, **39.7%** of respondents describe ramps as "completely unsuitable," **19.3%** as "poor," and **21.7%** as "acceptable." **9.7%** of respondents rate ramps as "good," and **9.7%** also rate them as "excellent."

In UNRWA respondents, the situation appears relatively better, with only **8.3%** describing ramps as "completely unsuitable," and **16.7%** as "poor." The highest percentage, **50%**, considers ramps "acceptable," while **16.7%** consider them "good," and **8.3%** rate them as "excellent."

The governorates analysis shows significant differences. In Beirut, **43.3%** of respondents describe ramps as "completely unsuitable," **20.6%** as "poor," and **20.6%** as "acceptable." Respondents rating ramps as "good" represent **9.3%**, and **6.2%** consider them "excellent."

In Mount Lebanon suburbs, **41.4%** of respondents find ramps "completely unsuitable," **19.4%** describe them as "poor," and **23.1%** as "acceptable." **8.6%** of respondents describe them as "good," and **7.4%** consider them "excellent."

In Mount Lebanon (excluding suburbs), **46.3%** of respondents find ramps "completely unsuitable," **22.9%** describe them as "poor," and **20.0%** as "acceptable." **6.3%** consider them "good," and **4.6%** rate them as "excellent."

In the North, **40.3%** of respondents describe ramps as "completely unsuitable," **30.1%** as "poor," and **16.7%** as "acceptable." Only **6.1%** of respondents rate them as "good," and **6.8%** consider them "excellent."

In the Bekaa, **29.3%** of respondents find ramps "completely unsuitable," **30.3%** describe them as "poor," and **15.4%** as "acceptable." **5.3%** consider them "good," and **10.7%** rate them as "excellent."

In the South, **39.1%** of respondents describe ramps as "completely unsuitable," **29.6%** as "poor," and **18.9%** as "acceptable." Respondents rating ramps as "good" represent **10.1%**, and only **2.4%** consider them "excellent."

In Nabatieh, **40.1%** of respondents find ramps "completely unsuitable," **25.7%** describe them as "poor," and **19.2%** as "acceptable." **13.2%** consider ramps "good," and **1.8%** rate them as "excellent."

In Akkar, **45.8%** of respondents describe ramps as "completely unsuitable," **25.9%** as "poor," and **15.9%** as "acceptable." **8.4%** consider them "good," and **4.0%** rate them as "excellent."

In Baalbek-Hermel, **27.1%** of respondents find ramps "completely unsuitable," **32.2%** describe them as "poor," and **22.9%** as "acceptable." **13.6%** consider ramps "good," and **4.2%** rate them as "excellent."".

Question: How do you describe the state of facilities and services allocated for learners with disabilities?
Item 2: Elevators
First Response: Principal (Question #24)

In the public education sector, data reveals that the majority of respondents do not provide elevators for individuals with disabilities, with **57.1%** of facilities classified as "completely unsuitable." Beirut has a notably high percentage of "completely unsuitable" facilities at **62.5%**, followed by the Bekaa at **69.2%** and the North at **60%**. The percentage of facilities rated as "excellent" is almost negligible, standing at just **2.0%** across all public respondents, indicating a significant lack in this area.

In the private free education sector, data shows a slight improvement compared to the public sector, with **46.7%** of respondents classifying facilities as "completely unsuitable." However, there are a few respondents with facilities rated as "excellent," reaching **3.3%**. Beirut and other governorates like the Bekaa and the South show minimal progress, while Mount Lebanon suburbs exhibit a relatively higher percentage of "good" facilities at **25%**.

In the private non-free sector, there is a noticeable improvement compared to other sectors, with **48.0%** of facilities rated as "completely unsuitable." Meanwhile, **13.3%** of facilities are considered "excellent." Beirut shows a relatively high percentage of "excellent" facilities at **11.1%**, and Mount Lebanon (excluding suburbs) records **20%**.

The UNRWA sector displays a clear improvement compared to other sectors, with **25%** of facilities rated as "excellent" and **50%** as "good," indicating significant attention to equipping these respondents properly.

Comparison by Governorates:

The data shows significant disparities between governorates in the provision of elevators for individuals with disabilities. Beirut has the highest percentage of facilities rated as "completely unsuitable" at **61.1%**, while the North and Bekaa show similar rates at **58.2%** and **52%**, respectively. Mount Lebanon suburbs maintain a relatively balanced ratio, with **2.0%** of facilities rated as "good" and **20.4%** as "excellent." Nabatieh displays lower quality with **50%** of facilities rated as "completely unsuitable" and only **3.6%** rated as "excellent."

Conclusions:

1. Beirut shows very poor provision, with most facilities being "completely unsuitable."
2. The North and Bekaa exhibit similarly poor levels of provision, with almost no "excellent" facilities.
3. Mount Lebanon suburbs and the South show relatively better progress compared to other governorates.
4. Nabatieh and Baalbek-Hermel demonstrate significant disparities, with extremely high percentages of "completely unsuitable" facilities.
5. The public education sector displays a clear weakness in providing elevators, with the majority of respondents classifying facilities as "completely unsuitable."
6. The private free sector shows slightly better attention, with minor progress in some governorates.
7. The private non-free sector demonstrates a relative improvement, with some respondents providing "excellent" facilities.

Second Response: Supervisor (Question #16)

General Situation
Public Sector:
Generally unsuitable facilities: **52.5%** of public schools respondentsdescribe elevators as "completely unsuitable," and **30.4%** consider them "poor," totaling **82.9%** of respondents facing severe deficiencies in elevator provisions.
Good and excellent facilities: **3.2%** rate them as "good," and **4.1%** as "excellent."
Acceptable conditions: **9.7%** of supervisors consider the facilities "acceptable," but they do not meet the necessary standards to support individuals with disabilities.
Private free sector:
Generally unsuitable facilities: **64.5%** of private free schoolsrespondents rate elevators as "completely unsuitable," with **16.1%** considering them "poor." This indicates that over **80%** of respondents suffer from significant deficiencies in elevator provisions.
Minimal good facilities: **9.7%** describe them as "good," and **3.2%** as "excellent."
Acceptable conditions: **6.5%** consider them "acceptable," reflecting slight progress but not sufficient for inclusive and supportive learning environments for all.
Private Non-Free Sector:
Significant deficiencies: **38.5%** rate elevators as "completely unsuitable," while **23.9%** consider them "poor." Thus, **62.4%** of private non-free respondents suffer from limited or no elevator provisions, which is lower compared to the public and private free sectors.
Relatively better services: **17.1%** consider them "acceptable," **8.5%** as "good," and **12%** as "excellent." Despite this improvement compared to public schools respondentsand private free schoolseducation, the percentage of respondents rating elevators as "acceptable" or higher remains at **37.6%**.
UNRWA:
Complete absence of suitable elevators: **100%** of UNRWA respondents rate elevators as "completely unsuitable."
No positive evaluation exists (poor, acceptable, good, or excellent), reflecting a complete lack of elevator provisions.
Comparison by Governorates:
Public Sector:
Data from supervisors in the public sector shows widespread deficiencies in elevator provisions for individuals with disabilities in most public schools respondentsacross Lebanon. In Beirut, **45.5%** rate the situation as "completely unsuitable," with a relatively slight improvement in **18.2%** of respondents. In Mount Lebanon suburbs, there is a disparity where **35.5%** view the situation as unsuitable, while **29.4%** consider it "acceptable." In Mount Lebanon (excluding suburbs), **69.6%** rate elevators as "completely unsuitable," necessitating urgent intervention.
In the North, **55.3%** of respondents rate elevators as unsuitable, and in the Bekaa, **50%** do the same, with a slight improvement in **16.7%** of respondents. The South shows relative improvement with **40.6%** rating elevators as unsuitable. In Nabatieh, **60.9%** view elevators as unsuitable, and in Akkar, there is a severe issue with **57.9%** of respondents providing substandard elevators.
In Baalbek-Hermel, **47.1%** rate the situation as "completely unsuitable." Overall, there is a clear gap between governorates, with Baalbek-Hermel, Mount Lebanon, and Akkar being the most affected areas. Meanwhile, the South and Bekaa show relative progress, requiring significant investment to improve infrastructure and ensure inclusive educational environments.
Private free sector:
Data from supervisors in the private free sector shows widespread deficiencies in elevator provisions for individuals with disabilities. In Beirut, **100%** describe the situation as "completely unsuitable," indicating a complete lack of facilities. Mount Lebanon suburbs have **80%** rating elevators as

"completely unsuitable," with only **20%** considering them "excellent," suggesting a need for substantial improvements despite minor progress.

In Mount Lebanon (excluding suburbs), **75%** rate elevators as "completely unsuitable." This reflects a clear deficiency. In the North, **80%** describe the situation as unsuitable, while in the Bekaa, **66.7%** do the same, requiring urgent intervention. The South shows a relative improvement, with **50%** viewing elevators as "completely unsuitable," while **50%** consider them "good." In Nabatieh, **50%** describe the situation as unsuitable, and **33.3%** as poor.

In Akkar, the situation is the worst with **66.7%** rating elevators as "completely unsuitable." In Baalbek-Hermel, **100%** rate the situation as unsuitable, reflecting a severe lack of provisions.

Private Non-Free Sector:

Data from supervisors in the private non-free sector shows slight improvement compared to the private free sector but still faces significant challenges. In Beirut, **55.6%** rate elevators as "completely unsuitable," with some improvements where **11.1%** describe them as "good" or "excellent." This indicates a need for further advancements.

In Mount Lebanon suburbs, **31.3%** rate elevators as "completely unsuitable," while **18.8%** consider them "excellent," showing noticeable progress compared to other areas. In Mount Lebanon (excluding suburbs), **33.3%** rate elevators as unsuitable, while **25%** view them as "good" or "excellent."

In the North, **33.3%** describe elevators as unsuitable, with slight improvement. In the Bekaa, there is a clear disparity with **35.7%** rating elevators as unsuitable and **14.3%** as "excellent," suggesting gradual progress. The South is relatively better with **14.3%** rating elevators as "completely unsuitable," reflecting improved investments. In Nabatieh, **60%** rate elevators as unsuitable, showcasing significant shortcomings, while in Akkar, **66.7%** rate them as "completely unsuitable."

In Baalbek-Hermel, **45.5%** rate elevators as unsuitable, with minor improvements, but the situation remains dire and requires substantial enhancements.

UNRWA:

Data from UNRWA supervisors shows a complete absence of suitable elevators in Mount Lebanon suburbs and the South, with **100%** of respondents in both regions rating elevators as "completely unsuitable."

Conclusions:

Private non-free education shows the relative best performance in providing elevators for individuals with disabilities compared to other sectors.

Private free schools education exhibits improvement in areas like Akkar, but struggles persist in regions like Baalbek-Hermel.

The public sector is the weakest across all governorates, requiring significant improvements, especially in Beirut, the North, the Bekaa, and Baalbek-Hermel.

Regions needing urgent intervention: Beirut, the North, and Baalbek-Hermel.

Relatively better regions: Bekaa and Mount Lebanon suburbs.

Response Three: Coordinator (Question #16)

Regarding elevators, in Beirut, the public sector shows that **55.6%** of respondents have completely unsuitable elevators, and **44.4%** are in poor condition. In the private free sector, there is a complete absence of elevators, with **100%** of respondents lacking this facility. In the private non-free sector, **58.3%** of respondents have unsuitable elevators, **16.7%** are in poor condition, **8.3%** are acceptable, **8.3%** are good, and **8.3%** are excellent, highlighting the urgent need for improvement in this sector.

In Mount Lebanon suburbs, the public sector shows **35.3%** of respondents with unsuitable elevators, **29.4%** in poor condition, **17.6%** acceptable, **11.8%** good, and **5.9%** excellent. In the private free sector, **20%** of respondents have poor elevators, while **20%** have good facilities. In the private non-free sector, **41.3%** of respondents have unsuitable elevators, **10.9%** in poor condition, **10.9%** acceptable, **6.5%** good, and **30.4%** excellent, suggesting a better situation in private respondents compared to public respondents.

In Mount Lebanon (excluding suburbs), the public sector shows **38.5%** of respondents with unsuitable elevators, **48.7%** in poor condition, and **10.3%** acceptable. In the private free sector, **80%** of

respondents have unsuitable elevators, and **20%** in poor condition. In the private non-free sector, **15.8%** of respondents have unsuitable elevators, **21.1%** in poor condition, **42.1%** acceptable, and **10.5%** good, indicating a better overall situation in private respondents, though there is still room for improvement.

In the North, the public sector shows **45%** of respondents with unsuitable elevators, **35%** in poor condition, **15%** acceptable, and **5%** good. In the private free sector, **50%** have unsuitable elevators, **30%** in poor condition, and **20%** acceptable. In the private non-free sector, **30%** of respondents have unsuitable elevators, **40%** in poor condition, **20%** acceptable, and **10%** good, demonstrating the need for further improvement in this sector.

In Nabatieh, the public sector shows **56.3%** of respondents with unsuitable elevators and **37.5%** in poor condition. In the private free sector, there is a complete absence of elevators (**100%**). In the private non-free sector, **72.7%** of respondents have unsuitable elevators, and **18.2%** in poor condition.

In Akkar, the public sector shows **46.2%** of respondents with unsuitable elevators, and **53.8%** in poor condition. The private free sector reports **66.7%** with unsuitable elevators, and **33.3%** in good condition. In the private non-free sector, **61.5%** of respondents have unsuitable elevators, **30.8%** in poor condition, and **7.7%** acceptable.

In Baalbek-Hermel, the public sector shows **44.4%** of respondents with unsuitable elevators, **33.3%** in poor condition, **11.1%** acceptable, and **11.1%** good. In the private free sector, **50%** of respondents have unsuitable elevators, and **50%** acceptable. In the private non-free sector, **54.5%** have unsuitable elevators, **18.2%** in poor condition, **18.2%** acceptable, and **9.1%** good.

In conclusion, across all governorates and sectors, there is a significant gap in providing suitable ramps and elevators in respondents, with most public schools respondentssuffering from poor infrastructure. While the private non-free sector provides slightly better conditions, there is an urgent need for improvements in all regions and sectors to ensure an inclusive and accessible educational environment for all.

- Many respondents in Beirut and Mount Lebanon suffer from unsuitable or poor elevators, particularly in the public sector.
- The private free sector is largely devoid of elevators in most cases.
- Good-quality elevators are rare in some areas, though they are more prevalent in private non-free respondents.
  Overall, there is a pressing need to improve infrastructure related to ramps and elevators in respondents, especially in areas with significant deficits such as Nabatieh and the North.

Fourth Response : Teacher (Question #15)

Upon analyzing the overall distribution, we find that **44.7%** of respondents describe elevators as "completely unsuitable," while **28.6%** rate them as "poor." Only **11.4%** consider elevators "acceptable," **7.8%** describe them as "good," and **7.5%** consider them "excellent."

At the public sector level, the negative perception is clear, with **48.2%** of respondents stating elevators are "completely unsuitable," and **33.9%** describing them as "poor." The percentage describing elevators as "acceptable" is **10.3%**, decreasing to **4.7%** for "good," and only **2.9%** consider them "excellent."

In the private free sector, **54.1%** of respondents describe elevators as "completely unsuitable," and **23.9%** rate them as "poor." Only **8.6%** find them "acceptable," while **7.7%** describe them as "good," and **5.7%** as "excellent."

The private non-free sector shows relatively better results, with **36.5%** of respondents stating elevators are "completely unsuitable," and **21.7%** describing them as "poor." The percentage rating elevators as "acceptable" is **13.9%**, rising to **12.8%** for "good," and **15.1%** considering them "excellent."

In UNRWA respondents, **41.7%** describe elevators as "completely unsuitable," and **41.7%** rate them as "poor." The percentage rating elevators as "acceptable" and "excellent" is **8.3%** each, showing slight improvement compared to other sectors.

Analysis by governorates shows notable differences. In Beirut, **36.1%** of respondents find elevators "completely unsuitable," and **19.6%** rate them as "poor." The percentage describing elevators as

"acceptable" reaches **16.5%**, while **15.5%** rate them as "good," and **12.4%** as "excellent." In Mount Lebanon suburbs, the situation is better, with **33.3%** of respondents stating elevators are "completely unsuitable," and **18.8%** as "poor." The percentage finding elevators "acceptable" is **15.4%**, with **13.3%** rating them as "good," and **19.1%** as "excellent."

In Mount Lebanon (excluding suburbs), **54.3%** of respondents describe elevators as "completely unsuitable," and **27.4%** as "poor." Only **7.4%** find elevators "acceptable," with **8.6%** rating them as "good," and **2.3%** as "excellent." In the North, **47.3%** of respondents rate elevators as "completely unsuitable," **33.3%** as "poor," and **8.0%** as "acceptable." Only **5.8%** describe elevators as "good," and **5.6%** as "excellent."

In the Bekaa, **37.2%** of respondents describe elevators as "completely unsuitable," and **29.8%** rate them as "poor." The percentage rating elevators as "acceptable" is **14.9%**, with **6.9%** describing them as "good," and **11.2%** as "excellent." In the South, **45.6%** of respondents find elevators "completely unsuitable," and **29.6%** rate them as "poor." Only **14.2%** describe elevators as "acceptable," **7.7%** as "good," and **3.0%** as "excellent."

In Nabatieh, **47.3%** of respondents describe elevators as "completely unsuitable," and **32.3%** as "poor." Only **11.4%** find them "acceptable," with **4.8%** rating them as "good," and **4.2%** as "excellent." In Akkar, **54.2%** of respondents rate elevators as "completely unsuitable," and **29.5%** as "poor." **8.8%** describe elevators as "acceptable," while **5.2%** find them "good," and **2.4%** as "excellent." In Baalbek-Hermel, **46.6%** of respondents find elevators "completely unsuitable," and **38.1%** as "poor." Only **9.3%** rate elevators as "acceptable," with **4.2%** finding them "good," and **1.7%** as "excellent."

The results highlight the urgent need for improving the availability of elevators for people with disabilities, especially in public sectors and less-equipped areas, to ensure an inclusive educational environment.

Question: How would you describe the state of facilities and services for learners with disabilities?
Section 3: Classroom Preparation
First response: Principal (Question #24)

Public Education Sector: Data reveals that classroom preparation to meet the needs of learners with disabilities is largely unsuitable in most respondents, with **57.8%** of respondents classified as "completely unsuitable." Beirut shows a very high percentage of "completely unsuitable" facilities at **62.5%**. Furthermore, the percentage of "excellent" facilities is almost nonexistent, with only **1.4%** across all public respondents.

Private free schoolsEducation Sector: Data shows slight improvement in this sector compared to public education. **43.3%** of respondents rate classroom preparation as "completely unsuitable," while **3.3%** consider it "excellent." Areas such as the South show significant progress, with all respondents classified as "good."

Private Non-Free Education Sector: This sector demonstrates relatively better performance. **38.8%** of respondents rate classroom preparation as "completely unsuitable," while **13.3%** rate it as "excellent." Beirut shows a relatively high percentage of "excellent" facilities at **22.2%**, and Mount Lebanon (excluding suburbs) records **20%** as "excellent."

UNRWA Sector: Data shows excellent preparation, with **75%** of facilities classified as "good," reflecting significant attention to providing suitable classroom environments for learners with disabilities.

By Governorates:

Beirut: Displays extremely weak preparation, with the highest percentage of "completely unsuitable" facilities at **55.6%**.

South and Bekaa: Show moderate preparation, with near absence of "excellent" facilities.
Mount Lebanon (excluding suburbs): Demonstrates noticeable improvement, with **12.5%** of facilities rated as "good."
Baalbek-Hermel: Displays higher rates of "acceptable" and "good" preparation compared to other governorates.
Conclusions:
Beirut shows very weak preparation, with the highest percentage of "completely unsuitable" facilities.
South and **Bekaa** show moderate preparation, with a near complete absence of "excellent" facilities.
Mount Lebanon (excluding suburbs) shows relatively better preparation, with some facilities rated as "excellent."
Baalbek-Hermel shows progress in certain aspects, with higher percentages of "acceptable" and "good" facilities compared to other governorates.
UNRWA is the best-prepared sector compared to other sectors and governorates.
Public education sector faces severe inadequacy in classroom preparation for learners with disabilities, with most respondents ill-equipped.
Private free schoolseducation shows slight improvement over public education, with some well-prepared respondents.
Private non-free education sector performs relatively well, with noticeable "excellent" facilities.
UNRWA remains the best-prepared sector, offering a strong focus on providing suitable environments for learners with disabilities.

Second Response: Supervisor (Question #16)

Overall Situation
Public Sector:
Inadequate Facilities: **49.8%** of public schools respondentsdescribe classroom preparation as "completely unsuitable," and **32.3%** consider it "poor," totaling **82.1%** of respondents suffering from a severe lack of classroom facilities to support learners with disabilities.
Good/Excellent Facilities: **3.7%** rate classroom preparation as "good," and **0.9%** as "excellent."
Acceptable Facilities: **13.4%** rate the preparation as "acceptable," though it does not meet the necessary standards for inclusive education for learners with disabilities.
Private free sector:
Inadequate Facilities: **45.2%** of private free schoolsrespondents describe classroom preparation as "completely unsuitable," and **19.4%** as "poor," making a total of **64.6%** of respondents struggling with inadequate facilities for learners with disabilities.
Good/Excellent Facilities: **9.7%** rate classroom preparation as "good," and **3.2%** as "excellent." This totals **12.9%** showing classrooms meeting the needs of learners with disabilities well to excellently.
Acceptable Facilities: **22.6%** of respondents consider the preparation "acceptable," but it does not fully meet inclusive education needs.
Private Non-Free Sector:
Inadequate Facilities: **34.2%** of private non-free respondents describe classroom preparation as "completely unsuitable," and **18.8%** as "poor," totaling **53%** of respondents with insufficient facilities for learners with disabilities.
Good/Excellent Facilities: **12%** rate classroom preparation as "good," and **10.3%** as "excellent," showing relatively better performance compared to public and free private sectors.
Acceptable Facilities: **24.8%** of respondents rate the facilities as "acceptable," indicating a moderate level of preparation that still needs improvement.
UNRWA:
Inadequate Facilities: Data shows that **100%** of UNRWA respondents in surveyed areas describe classroom preparation as "completely unsuitable."
By Governorates:
Public Sector:

The data highlights significant disparities in classroom preparation across governorates in Lebanon. Beirut shows **45.5%** of respondents with "completely unsuitable" facilities, while Mount Lebanon (Suburbs) has **35.3%**. Conversely, in Mount Lebanon (excluding suburbs), **56.5%** of respondents describe their facilities as entirely unsuitable. In the North, **50%** of respondents face severe inadequacy, with **55.6%** in Bekaa suffering the same issue. In the South, despite some improvement, **46.9%** of respondents lack sufficient facilities, and in Nabatieh, **52.2%** of respondents report inadequate classroom preparation. In Akkar, **57.9%** of respondents describe their facilities as unsuitable, while Baalbek-Hermel faces significant challenges with **47.1%** of respondents reporting inadequate facilities.

Private free sector:

Beirut shows complete inadequacy with **100%** of respondents rating classroom preparation as "completely unsuitable." In Mount Lebanon (Suburbs), **40%** rate the situation as "completely unsuitable," with **40%** also rating it as "acceptable," and **20%** as "good."

In Mount Lebanon (excluding suburbs), **75%** of respondents consider facilities "completely unsuitable."

The North has **60%** of respondents rating classroom preparation as "completely unsuitable," and **40%** as "poor."

In Bekaa, **66.7%** of respondents rate the preparation as "acceptable," with **33.3%** rating it as "excellent."

In the South, half of the respondents describe facilities as "unacceptable," while the other half rate them as "good."

Private Non-Free Sector:

In Beirut, **55.6%** rate facilities as "completely unsuitable," while **22.2%** consider them "acceptable," and another **22.2%** rate them as "good."

Mount Lebanon (Suburbs) has significant variations, with **31.3%** rating facilities as "completely unsuitable," **18.8%** as "poor," and **34.4%** rating them as "acceptable," with **12.5%** as "excellent."

In the North, **38.9%** consider facilities "completely unsuitable," and **33.3%** as "poor."

Bekaa shows slight improvements with **35.7%** rating facilities as "acceptable," and **14.3%** as "excellent."

In the South, **28.6%** of respondents rate facilities as "good," and **14.3%** as "excellent," though challenges still exist.

In Akkar, **22.2%** consider facilities "excellent."

General Conclusions:

The public sector faces severe inadequacies in classroom preparation, requiring urgent infrastructure improvement to support learners with disabilities.

The private free sector shows limited improvement over the public sector, but still needs significant enhancements in many regions to provide inclusive and supportive environments.

The private non-free sector generally performs better compared to the public and free sectors, though further improvements are necessary in several regions for a fully inclusive educational environment.

Third response: Coordinator (Question #16)

In Beirut, the majority of public schools respondentsclassify their facilities as "completely unsuitable" at **44.4%**, and "poor" at **55.6%**. For the free private sector, the situation is excellent, with **100%** of responses rated as "excellent." In the non-free private sector, the highest percentage is "completely unsuitable" at **58.3%**, with lower distributions among other categories.

In Mount Lebanon Suburbs, **47.1%** of public schools respondentsclassify their facilities as "completely unsuitable," and **41.2%** as "poor." For the free private sector, **20%** of responses rate the facilities as "completely unsuitable," and **40%** as "poor." In the non-free private sector, there is a relatively balanced distribution, with **28.3%** describing facilities as "completely unsuitable."

In Mount Lebanon (excluding suburbs), public schools respondentsreport **35.9%** as "completely unsuitable," and **38.5%** as "poor." For the free private sector, **40%** classify their facilities as

"completely unsuitable." In the non-free private sector, responses are evenly distributed between "completely unsuitable" at **26.3%** and "poor" at **26.3%**.

In the North, **54.2%** of public schools respondentsdescribe their facilities as "completely unsuitable," and **25.4%** as "poor." In the free private sector, **50%** rate their facilities as "completely unsuitable." For UNRWA, the highest percentage is **50%** for "completely unsuitable."

In Bekaa, public schools respondentsreport **40%** as "completely unsuitable," and **30%** as "poor." In the free private sector, **50%** rate their facilities as "completely unsuitable." In the non-free private sector, responses are distributed between "completely unsuitable" at **31.3%** and "poor" at **25%**.

In the South, **35.7%** of public schools respondentsdescribe their facilities as "completely unsuitable," and **35.7%** as "poor." For the free private sector, **20%** rate the facilities as "completely unsuitable," and **40%** as "poor."

In Nabatieh, **56.3%** of public schools respondentsclassify their facilities as "completely unsuitable," and **25%** as "poor." For the free private sector, **100%** rate their facilities as "excellent." In the non-free private sector, **72.7%** rate their facilities as "completely unsuitable."

In Akkar, **38.5%** of public schools respondentsdescribe their facilities as "completely unsuitable," and **53.8%** as "poor." For the free private sector, **66.7%** rate their facilities as "completely unsuitable." In the non-free private sector, **46.2%** rate their facilities as "completely unsuitable."

In Baalbek-Hermel, **27.8%** of public schools respondentsdescribe their facilities as "completely unsuitable," and **33.3%** as "poor." For the free private sector, **50%** rate their facilities as "completely unsuitable." In the non-free private sector, **45.5%** rate their facilities as "completely unsuitable."

Overall, the results show that public sector facilities across all governorates are largely classified as **42.7%** "completely unsuitable," and **35.4%** "poor." For the free private sector, **37.9%** rate their facilities as "completely unsuitable." In the non-free private sector, **50%** rate their facilities as "completely unsuitable."

General Conclusions

Based on data analysis of classroom facilities for students with disabilities across different governorates, some general conclusions can be drawn regarding the sectors and regions requiring better school facilities:

1. In the public sector, high percentages rating facilities as "completely unsuitable" or "poor" indicate a significant shortage in respondents' ability to meet the needs of students with disabilities. Governorates like Beirut, North, and Nabatieh show a severe lack of classroom facilities. In these regions, preparing classrooms and restrooms for students with special needs is an urgent necessity.

2. Mount Lebanon shows a slightly better situation in rural areas compared to urban areas, but both sectors need improvement in classroom facilities. The urban and suburban areas indicate a noticeable lack of suitable educational environments.

3. In Bekaa, the South, and Akkar, these regions also face significant challenges in providing adequate classroom facilities. Despite some regional variations between urban and rural areas, the overall situation calls for substantial improvements.

4. In the private sector, there are positive outcomes, such as specialized facilities in Beirut and Nabatieh. However, areas like the North and Bekaa still face significant challenges, requiring substantial enhancements to provide an inclusive educational environment for students with disabilities.

Fourth Response: Teacher (Question #15)

The analysis of classroom preparedness to meet the needs of students with disabilities reveals notable disparities between sectors and governorates. Overall, **37.6%** of respondents describe classroom preparedness as "completely unsuitable," while **25.4%** describe it as "poor." Additionally, **20.3%** consider it "acceptable," **8.9%** rate it as "good," and only **7.8%** describe it as "excellent."

In the public sector, the results are discouraging, with **41.8%** of respondents classifying their facilities as "completely unsuitable," and **32.9%** as "poor." The percentage rating it "acceptable" is **17.3%**, with only **5.2%** considering it "good," and **2.8%** rating it as "excellent." In the free private sector, **39.7%**

rate their facilities as "completely unsuitable," and **21.5%** describe them as "poor." **18.7%** consider it "acceptable," while **9.6%** describe it as "good," and **10.5%** as "excellent."

In the non-free private sector, the percentage of respondents describing their facilities as "completely unsuitable" drops to **30.8%**, with **14.8%** rating them as "poor." **25.3%** describe them as "acceptable," and **14.3%** rate them as "good," while **14.8%** consider them "excellent." For UNRWA respondents, **25.0%** classify their facilities as "completely unsuitable," and **33.3%** as "poor." **16.7%** find them "acceptable," **16.7%** rate them as "good," and **8.3%** as "excellent."

When analyzing governorates, Beirut shows that **39.2%** of respondents consider their facilities "completely unsuitable," with **18.6%** rating them as "poor." **22.7%** describe them as "acceptable," while **13.4%** consider them "good," and **6.2%** rate them as "excellent." In the suburbs of Mount Lebanon, **31.2%** of respondents classify their facilities as "completely unsuitable," and **17.0%** as "poor." **23.8%** describe them as "acceptable," while **12.0%** consider them "good," and **16.0%** as "excellent."

In Mount Lebanon (excluding suburbs), **41.1%** of respondents rate their facilities as "completely unsuitable," and **18.9%** as "poor." **21.1%** consider them "acceptable," **13.7%** rate them as "good," and **5.1%** as "excellent." In North Lebanon, **39.6%** of respondents describe their facilities as "completely unsuitable," with **28.6%** rating them as "poor." **18.9%** find them "acceptable," and **6.6%** rate them as "good," while **6.3%** consider them "excellent."

In Bekaa, **29.3%** of respondents classify their facilities as "completely unsuitable," and **28.7%** as "poor." **20.7%** find them "acceptable," **9.0%** rate them as "good," and **12.2%** rate them as "excellent." In the South, **45.0%** of respondents rate their facilities as "completely unsuitable," and **29.6%** as "poor." **18.9%** describe them as "acceptable," with **4.1%** rating them as "good," and **2.4%** as "excellent."

In Nabatieh, **37.7%** of respondents rate their facilities as "completely unsuitable," and **29.3%** as "poor." **20.4%** describe them as "acceptable," with **9.0%** rating them as "good," and **3.6%** as "excellent." In Akkar, **43.0%** of respondents classify their facilities as "completely unsuitable," and **25.5%** as "poor." **16.7%** find them "acceptable," **6.4%** rate them as "good," and **8.4%** rate them as "excellent."

In Baalbek-Hermel, **33.1%** of respondents classify their facilities as "completely unsuitable," and **34.7%** as "poor." **20.3%** rate them as "acceptable," **10.2%** describe them as "good," and **1.7%** as "excellent."

Question: How do you describe the status of facilities and services allocated for students with special needs?
Section 4: Availability of equipped Bathrooms
First response: Principal (Question #24)

Public Education Sector: Data shows that **50.3%** of public schools respondents classify dedicated bathrooms as "completely unsuitable," indicating a significant shortage of facilities for students with disabilities. Beirut registers a very low level of preparedness, with only **37.5%** of respondents classified as "completely unsuitable." In contrast, regions like Bekaa and the South exhibit limited facilities, with negligible percentages classified as "good" or "excellent."

Free Private Education Sector: There is notable improvement compared to the public sector, with **46.7%** of respondents classified as "completely unsuitable." However, **3.3%** report "excellent" facilities. Areas like the South show a relatively higher percentage of well-equipped facilities.

Non-Free Private Education Sector: Performs relatively better, with **48.0%** of respondents describing dedicated bathrooms as "completely unsuitable." Beirut records higher percentages of "excellent" facilities, at **22.2%**. Mount Lebanon (excluding suburbs) and Bekaa show higher levels of preparedness compared to other regions.

UNRWA Sector: Shows a good performance, with all respondents maintaining moderate and generally suitable facilities, with the absence of significant negative classifications.

Governorates Comparison:
- Beirut records a **50.0%** rate for "completely unsuitable" facilities, whereas the South and Bekaa show slightly better preparedness.
- Mount Lebanon (excluding suburbs) exhibits better facilities with a reasonable percentage of "good" and "excellent" classifications reaching up to **20.0%** in some respondents.

Governorates Conclusions:
1. Beirut shows a significant shortage in dedicated bathrooms for students with special needs.
2. Mount Lebanon (excluding suburbs) displays better facilities with a reasonable portion of "good" and "excellent" ratings.
3. The South and Bekaa demonstrate limited facilities, with almost no "excellent" facilities.
4. The UNRWA sector stands out with the best preparedness compared to other regions, showing a good level of attention to the needs of students with special needs.
5. The public education sector shows a severe shortage in dedicated bathroom facilities, with large percentages classified as "completely unsuitable."
6. Free private education demonstrates moderate performance, with small percentages of well-equipped facilities.
7. Non-free private education exhibits better facilities, especially in Beirut and Mount Lebanon.

Second response: Supervisor (Question #16)

General Situation

Public Education Sector: Data indicates that **81.6%** of supervisors consider the dedicated bathrooms for students with special needs in the public sector to be "completely unsuitable" or "bad," reflecting a severe shortage of facilities. Only **9.7%** see the situation as "acceptable," and **7.8%** rate it as "good" or "excellent," highlighting the scarcity of respondents providing adequate services.

Free Private Education Sector: 45.2% of supervisors describe dedicated bathrooms as "completely unsuitable," and **25.8%** consider them "bad." This continues to highlight challenges, with only **16.1%** deeming the situation "acceptable," and **12.9%** rating it as "good" or "excellent."

Non-Free Private Education Sector: 42.7% of supervisors classify the facilities as "completely unsuitable," and **23.1%** as "bad." While there is some improvement compared to free private respondents, **15.4%** see the situation as "acceptable," and **18.8%** consider it "good" or "excellent."

UNRWA Sector: All UNRWA respondents surveyed suffer from a significant shortage of dedicated bathrooms for students with special needs, with **33.3%** classifying the facilities as "completely unsuitable," and **66.7%** as "bad."

Governorates Comparison:

Public Sector

Beirut shows **36.4%** of respondents with "completely unsuitable" facilities, and **36.4%** describe them as "bad." **27.3%** consider them "acceptable," highlighting a significant lack of suitable facilities.

In Mount Lebanon (excluding suburbs), **41.2%** classify facilities as "completely unsuitable," and **29.4%** as "bad," with only limited improvement.

In the North, **52.6%** describe facilities as "completely unsuitable," and **28.9%** as "bad."

Bekaa faces a severe shortage, with **66.7%** of respondents seeing facilities as "completely unsuitable."

The South shows **50%** of respondents with "completely unsuitable" facilities, while in Nabatieh, **56.5%** report such facilities.

Akkar has **55.3%** describing the facilities as "completely unsuitable," and **34.2%** as "bad."

In Baalbek-Hermel, **29.4%** see facilities as "completely unsuitable," and **47.1%** as "bad."

Key Conclusions:

The public sector suffers from a severe lack of dedicated bathroom facilities for students with special needs across most regions, necessitating urgent improvements.

The free private sector faces similar challenges, with significant disparities between regions.

Non-free private education sector shows some relative improvement, especially in areas like Akkar and the South, though many respondents still report poor facilities.

The UNRWA sector struggles with a severe shortage, requiring immediate attention to improve educational infrastructure.

Final Summary:

Both public and free private sectors in Lebanon suffer from significant deficiencies in providing dedicated bathrooms for students with special needs. Non-free private respondents show a slight advantage over public respondents, but overall, urgent steps are needed to improve facilities, particularly in regions such as Beirut, Baalbek-Hermel, and the North.

Third Response: Coordinator (Question #16)

In Beirut, the public sector faces a significant shortage of dedicated bathrooms, with **22.2%** classified as "completely unsuitable," and **44.4%** as "bad." In the non-free private sector, **58.3%** of bathrooms are completely unsuitable, with varying quality in other categories.

In Mount Lebanon (suburbs), the public sector struggles with a high percentage of unsuitable bathrooms, where **41.2%** are classified as "completely unsuitable," and **35.3%** as "bad." While the free private sector shows some improvement, the non-free sector faces challenges, with **39.1%** of bathrooms being completely unsuitable.

In Mount Lebanon (excluding suburbs), the public sector's bathroom conditions are not ideal, with **35.9%** classified as "completely unsuitable," and **43.6%** as "bad." The non-free private sector also suffers from poor facilities, with **31.6%** of bathrooms being completely unsuitable.

In the North, respondents face significant challenges in providing suitable bathrooms, with **61%** classified as "completely unsuitable," and **25.4%** as "bad" in the public sector. The free private sector struggles similarly, with **75%** of bathrooms being completely unsuitable. The non-free private sector also provides poor facilities.

In Bekaa, data indicates that **55%** of bathrooms in the public sector are "completely unsuitable," and **45%** as "bad." The private sector also suffers, with **50%** of free private bathrooms being unsuitable, and varying quality in the non-free sector.

In the South, the public sector shows weakness in bathroom facilities, with **38.1%** classified as "completely unsuitable," and **45.2%** as "bad." Both the free and non-free private sectors demonstrate noticeable inadequacies in providing suitable facilities.

In Nabatieh, analysis reveals that **56.3%** of public sector bathrooms are "completely unsuitable," and **25%** are "bad." The non-free private sector faces severe shortages, with **72.7%** classified as "completely unsuitable."

In Akkar, the public sector faces severe challenges, with **42.3%** of bathrooms being "completely unsuitable," and **57.7%** as "bad." The non-free private sector also shows significant weaknesses in facilities.

In Baalbek-Hermel, the situation is comparatively better in the public sector than in other governorates, with **38.9%** of bathrooms classified as "completely unsuitable," and **22.2%** as "bad," along with some positive ratings.

Conclusions:

Public Sector: Struggles significantly across all governorates, with the highest percentages of unsuitable facilities in the North (61%), Nabatieh (56.3%), and Bekaa (55%). The situation is relatively better in Baalbek-Hermel with some improvements.

Free Private Sector: Shows notable weaknesses, especially in the North (75%) and Akkar (66.7%), with Beirut having no suitable facilities.

Non-Free Private Sector: Faces considerable variation between governorates, with the highest percentages of unsuitable bathrooms in Nabatieh (72.7%) and Beirut (58.3%). Quality is relatively better in the South and Baalbek-Hermel.

UNRWA: Provides fully dedicated bathrooms only in the North, suggesting relatively fewer challenges compared to other sectors.

The most in-need governorates for bathroom improvements are the North, Nabatieh, and Bekaa, with Beirut and Akkar also facing significant challenges in the non-free private sector.

Fourth Response: Teacher (Question #15)

The analysis of the availability of dedicated bathrooms for students with disabilities reveals clear differences between educational sectors and governorates. Overall, **42.2%** of respondents describe the condition of dedicated bathrooms as "completely unsuitable," while **28.4%** describe them as "bad." **15.7%** consider the situation "acceptable," **7.6%** rate it as "good," and **6.1%** rate it as "excellent."

In the public sector, **44.4%** of respondents see the condition of bathrooms as "completely unsuitable," and **34.1%** as "bad." **13.3%** consider it "acceptable," **4.9%** as "good," and **3.2%** as "excellent." In the free private sector, the percentage rises to **46.9%** for "completely unsuitable," with **21.5%** describing them as "bad," and **15.3%** as "acceptable." **8.1%** of respondents consider the condition "good," and **8.1%** rate it as "excellent."

In the non-free private sector, **37.7%** of respondents classify bathrooms as "completely unsuitable," and **21.7%** as "bad." **19.6%** find them "acceptable," **11.3%** rate them as "good," and **9.7%** describe them as "excellent." In UNRWA respondents, the percentage drops to **25.0%** for "completely unsuitable," with **25.0%** also describing them as "bad." **16.7%** find the condition "acceptable," **16.7%** rate it as "good," and **16.7%** as "excellent."

Across governorates, Beirut sees **47.4%** of respondents describing the condition as "completely unsuitable," and **20.6%** as "bad." **19.6%** find it "acceptable," **7.2%** rate it as "good," and **5.2%** as "excellent." In Mount Lebanon suburbs, **39.5%** see the condition as "completely unsuitable," and **20.7%** as "bad." **19.4%** consider it "acceptable," **11.1%** rate it as "good," and **9.3%** as "excellent."

In Mount Lebanon (excluding suburbs), **50.3%** of respondents describe the condition as "completely unsuitable," and **25.1%** as "bad." **13.1%** find it "acceptable," **8.0%** rate it as "good," and **3.4%** as "excellent." In the North, **41.3%** of respondents classify bathrooms as "completely unsuitable," and **31.1%** as "bad." **15.8%** find them "acceptable," **6.6%** rate them as "good," and **5.3%** as "excellent."

In the Bekaa, **33.0%** of respondents describe the condition as "completely unsuitable," and **36.2%** as "bad." **12.2%** find it "acceptable," **9.6%** rate it as "good," and **9.0%** as "excellent." In the South, **49.1%** classify bathrooms as "completely unsuitable," and **27.8%** as "bad." **18.3%** find it "acceptable," **2.4%** rate it as "good," and **2.4%** as "excellent."

In Nabatieh, **41.3%** of respondents describe the condition as "completely unsuitable," and **31.1%** as "bad." **19.8%** find it "acceptable," **4.2%** rate it as "good," and **3.6%** as "excellent." In Akkar, **45.4%** of respondents classify bathrooms as "completely unsuitable," and **27.9%** as "bad." **10.0%** find them "acceptable," **8.0%** rate them as "good," and **8.8%** as "excellent."

In Baalbek-Hermel, **36.4%** of respondents describe the condition as "completely unsuitable," and **36.4%** as "bad." **14.4%** find it "acceptable," **9.3%** rate it as "good," and **3.4%** as "excellent."

Question: How would you describe the status of facilities and services provided for students with disabilities?
Item 5: Support Staff
First response: Principal (Question #24)

Public Education Sector:

In the public education sector, **57.8%** of respondents classify the support provided by a support staff member as "completely unsuitable," reflecting a clear shortage of this type of assistance for students with disabilities. Beirut records the highest percentage of "completely unsuitable" support at **62.5%**. However, there are limited instances of good or excellent support in certain areas, such as the South (**6.7%**) and Baalbek-Hermel (**9.1%**).

Free Private Education Sector:

In this sector, performance shows a relative improvement, with only **40.0%** of respondents considering support "completely unsuitable." The South demonstrates a good level of excellent support at **10.0%**. However, there remains a significant lack of good or excellent support in many other regions.

Non-Free Private Education Sector:
This sector shows a noticeable improvement compared to the other two. Only **35.7%** of respondents consider support "completely unsuitable." Beirut has a good percentage of excellent support at **11.1%**, while areas like Mount Lebanon (excluding suburbs) display substantial levels of good and excellent support, with **60.0%** in some respondents.

UNRWA Sector:
The UNRWA sector shows significant progress, with **50.0%** of respondents categorizing support as good or excellent, reflecting a strong focus on meeting the needs of students with disabilities.

By Governorate:
There is significant variation in the availability of support across governorates. Beirut has the highest percentage of support being "completely unsuitable" at **55.6%**, while Baalbek-Hermel shows a notable percentage of good support at **10.5%**. Mount Lebanon (excluding suburbs) has a remarkable level of good and excellent support, whereas Akkar and the North show high needs for assistance, indicating a shortage of support staff.

Conclusions:
1. Beirut suffers from a significant lack of support from staff members for students with disabilities.
2. Mount Lebanon (excluding suburbs) displays better levels of good and excellent support compared to other areas.
3. The North and Akkar show high demand for support, indicating a shortage of available assistance.
4. Baalbek-Hermel has made noticeable progress in excellent support compared to other governorates.
5. The public education sector faces a severe shortage of support, with the highest percentage of "completely unsuitable" support.
6. The free private education sector shows relative improvement, though there is still a significant lack of good and excellent support.
7. The non-free private education sector demonstrates better results, reflecting more attention to providing support.
8. The UNRWA sector offers the best performance, with high levels of good and excellent support.

Second Response: Supervisor (Question #16)

Public Education Sector:
Inadequate Services: Approximately **50.2%** of respondents describe the services as "completely unsuitable," and **32.7%** as "poor," meaning **82.9%** face significant shortages.
Limited Improvement: **12.4%** consider the situation "acceptable," **2.8%** describe it as "good," and only **1.8%** see it as "excellent."

Free Private Education Sector:
Inadequate Services: **35.5%** describe the situation as "completely unsuitable," and **9.7%** as "poor," meaning **45.2%** of respondents face difficulties.
Notable Improvement: **16.1%** find the situation "acceptable," **35.5%** consider it "good," and **3.2%** deem it "excellent."

Non-Free Private Education Sector:
Inadequate Services: **33.3%** describe the situation as "completely unsuitable," and **12.8%** as "poor," meaning **46.1%** of respondents are struggling.
Gradual Improvement: **23.1%** find it "acceptable," **19.7%** consider it "good," and **11.1%** deem it "excellent."

UNRWA Sector:
Better Performance: About **40%** of respondents consider the situation "acceptable," **25%** describe it as "good," and **5%** see it as "excellent," while **30%** find the situation "completely unsuitable."
By Governorate in Each Sector:

Public Education Sector:
Data indicates a widespread lack of support for students with disabilities across most governorates.
Beirut: **45.5%** describe the situation as "completely unsuitable," and **45.5%** as "poor," with a slight improvement of **9.1%** finding it "acceptable."
Mount Lebanon (Suburbs): **41.2%** describe it as "completely unsuitable," and **35.3%** as "poor," while **23.5%** consider it "acceptable."
Mount Lebanon (excluding suburbs): **56.5%** find the situation "completely unsuitable," and **34.8%** as "poor."
North: **50%** consider it "completely unsuitable," and **36.8%** as "poor," with limited improvement.
Bekaa: **55.6%** describe it as "completely unsuitable," and **27.8%** as "poor," with a slight improvement of **11.1%** finding it "acceptable."
South: **50%** describe it as "completely unsuitable," and **28.1%** as "poor," with some respondents showing improvement.
Nabatieh: **47.8%** describe it as "completely unsuitable," and **26.1%** as "poor," with a limited improvement of **26.1%** finding it "acceptable."
Akkar: **55.3%** describe it as "completely unsuitable," and **26.3%** as "poor."
Baalbek-Hermel: **41.2%** describe it as "completely unsuitable," and **47.1%** as "poor," with no positive evaluations.
Free Private Education Sector:
Beirut: All respondents (100%) describe the situation as "completely unsuitable."
Mount Lebanon (Suburbs): **20%** find it "completely unsuitable," while **60%** consider it "good."
Mount Lebanon (excluding suburbs): **75%** describe it as "completely unsuitable," and **25%** consider it "good."
North: **60%** describe it as "completely unsuitable," and **40%** find it "acceptable."
Bekaa: **66.7%** find it "acceptable," and **33.3%** as "good."
South: All respondents (100%) describe it as "good."
Nabatieh: **33.3%** describe it as "completely unsuitable," and **33.3%** as "poor," with **33.3%** finding it "good."
Akkar: **25%** find it "poor," and **50%** describe it as "acceptable," with **25%** considering it "good."
Baalbek-Hermel: All respondents (100%) describe it as "completely unsuitable."
Non-Free Private Education Sector:
Beirut: **66.7%** describe it as "completely unsuitable," indicating a severe lack of support.
Mount Lebanon (Suburbs): **34.4%** find it "acceptable," though many respondents face a lack of support.
Mount Lebanon (excluding suburbs): **41.7%** describe it as "completely unsuitable," needing significant improvement.
North: **38.9%** find it "completely unsuitable," though some respondents rate it "good."
Bekaa: **42.9%** describe it as "completely unsuitable," indicating a need for better services.
South: **42.9%** consider it "poor," suggesting a need for improvement.
Nabatieh: **60%** find it "completely unsuitable," with a lack of adequate services.
Akkar: **33.3%** describe it as "poor," and **33.3%** as "acceptable," with a need for improvements.
Baalbek-Hermel: **27.3%** describe it as "completely unsuitable," with a need for enhanced support.
UNRWA Sector:
In Mount Lebanon (Suburbs) and the South, UNRWA faces significant challenges in providing adequate support, with all respondents describing the situation as "completely unsuitable."
Comparative Conclusions:
Both public and private sectors suffer from severe shortages in services for students with disabilities, especially in regions like Beirut, Baalbek-Hermel, and Mount Lebanon (excluding suburbs).
Despite some improvements in the private sectors (free and non-free), the overall situation requires significant advancements across all sectors.

South and Bekaa show better performance with many respondents rating the situation as "good" or "acceptable," suggesting potential areas for improvement in other regions through appropriate interventions.

Third Response: Coordinator (Question No.16)

n the public sector, Beirut recorded **33.3%** describing the situation as "completely unsuitable," **55.6%** as "poor," and **11.1%** as "good." In Mount Lebanon suburbs, **35.3%** of coordinators described the situation as "completely unsuitable," **35.3%** as "poor," **17.6%** as "acceptable," and **5.9%** as "good" or "excellent." In Mount Lebanon (excluding suburbs), **33.3%** of coordinators described the situation as "completely unsuitable," **38.5%** as "poor," **17.9%** as "acceptable," and **10.3%** as "good." In the North, the percentage of "completely unsuitable" rose to **45.8%**, with **20.3%** describing the situation as "poor," and **27.1%** as "acceptable."

In Bekaa, **45.0%** of coordinators described the situation as "completely unsuitable," **25.0%** as "poor," and **20.0%** as "acceptable." In the South, **38.1%** described it as "completely unsuitable," **35.7%** as "poor," and **21.4%** as "acceptable." In Nabatieh, the highest percentage of "completely unsuitable" reached **62.5%**, with **25.0%** describing it as "poor." In Akkar, **38.5%** described the situation as "completely unsuitable," and **53.8%** as "poor." In Baalbek-Hermel, **44.4%** described the situation as "completely unsuitable," **27.8%** as "poor," and **16.7%** as "good."

In the free private sector, **100.0%** of coordinators in Beirut described the situation as "completely unsuitable." In Mount Lebanon suburbs, **40.0%** found it "completely unsuitable," **20.0%** as "poor," and **20.0%** as "acceptable" or "good." In Mount Lebanon (excluding suburbs), **20.0%** found it "completely unsuitable," **40.0%** as "poor," and **40.0%** as "good." In the North, **25.0%** found it "completely unsuitable," **25.0%** as "poor," and **50.0%** as "acceptable." In Bekaa, **50.0%** found it "acceptable," and **50.0%** as "good." In the South, **20.0%** described it as "completely unsuitable," **40.0%** as "poor," and **20.0%** as "excellent." In Nabatieh, **100.0%** found it "completely unsuitable." In Akkar, **33.3%** found it "completely unsuitable," and **66.7%** as "acceptable." In Baalbek-Hermel, **50.0%** found it "completely unsuitable," and **50.0%** as "excellent."

In the non-free private sector, **58.3%** of coordinators in Beirut described the situation as "completely unsuitable," **25.0%** as "poor," and **8.3%** as "good" or "excellent." In Mount Lebanon suburbs, **28.3%** found it "completely unsuitable," **10.9%** as "poor," and **26.1%** as "excellent". In Mount Lebanon (excluding suburbs), **15.8%** found it "completely unsuitable," **31.6%** as "acceptable," and **21.1%** as "good." In the North, **16.1%** found it "completely unsuitable," and **25.8%** as "good." In Bekaa, **31.3%** found it "completely unsuitable," and **43.8%** as "good." In the South, **16.7%** found it "completely unsuitable," **33.3%** as "acceptable" or "good." In Nabatieh, **72.7%** found it "completely unsuitable." In Akkar, **30.8%** found it "completely unsuitable," **30.8%** as "poor," and **23.1%** as "acceptable." In Baalbek-Hermel, **45.5%** found it "completely unsuitable," and **27.3%** as "acceptable."

For UNRWA coordinators, results were limited to the North, where **50.0%** described the situation as "poor," and **50.0%** as "excellent."

Fourth Response : Teacher (Question No. 15)

Looking at the overall distribution, **35.7%** of teachers describe employee support as "completely unsuitable," while **23.9%** see it as "poor," and **18.9%** as "acceptable." Additionally, **11.6%** rate it as "good," and **9.8%** as "excellent."

In the public education sector, **42.1%** of teachers view the support as "completely unsuitable," with **30.6%** describing it as "poor," and **17.4%** as "acceptable." Only **6.6%** consider it "good," and just **3.3%** rate it as "excellent."

In the free private sector, **33.5%** of teachers see the support as "completely unsuitable," **20.6%** as "poor," and **19.1%** as "acceptable." Meanwhile, **12.0%** rate it as "good," and **14.8%** as "excellent." In the non-free private sector, the percentage describing support as "completely unsuitable" is lower at **26.5%**, while **14.6%** see it as "poor," and **21.4%** as "acceptable." Additionally, **19.2%** consider it "good," and **18.3%** as "excellent."

UNRWA teachers present a somewhat different picture, with **33.3%** describing the support as "completely unsuitable," **33.3%** as "poor," **8.3%** as "acceptable," **16.7%** as "good," and **8.3%** as "excellent."

At the governorates level, differences are also evident:

- In Beirut, **40.2%** of teachers find the support "completely unsuitable," **15.5%** as "poor," **23.7%** as "acceptable," **12.4%** as "good," and **8.2%** as "excellent."
- In Mount Lebanon suburbs, **26.5%** describe the support as "completely unsuitable," **15.1%** as "poor," **22.2%** as "acceptable," **19.8%** as "good," and **16.4%** as "excellent."
- In Mount Lebanon (excluding suburbs), **36.0%** find the support "completely unsuitable," **20.0%** as "poor," and **17.7%** as "acceptable" or "good." Only **8.6%** rate it as "excellent."
- In the North, **38.1%** see the support as "completely unsuitable," **26.5%** as "poor," and **18.0%** as "acceptable." **8.3%** consider it "good," and **9.2%** as "excellent."
- In Bekaa, **27.7%** describe it as "completely unsuitable," **28.2%** as "poor," and **20.7%** as "acceptable." **12.2%** rate it as "good," and **11.2%** as "excellent."
- In the South, **43.8%** find the support "completely unsuitable," **23.7%** as "poor," and **20.1%** as "acceptable." **7.1%** rate it as "good," and **5.3%** as "excellent."
- In Nabatieh, **35.9%** describe the support as "completely unsuitable," **29.9%** as "poor," and **17.4%** as "acceptable." **10.8%** rate it as "good," and **6.0%** as "excellent."
- In Akkar, **40.6%** find the support "completely unsuitable," **27.5%** as "poor," and **14.3%** as "acceptable." **6.8%** consider it "good," and **10.8%** as "excellent."
- In Baalbek-Hermel, **38.1%** describe the support as "completely unsuitable," **29.7%** as "poor," and **18.6%** as "acceptable." Only **8.5%** rate it as "good," and **5.1%** as "excellent."

These results highlight significant challenges in providing adequate support for teachers, with considerable variations based on the educational sector and geographical location.

Question: How do you describe the status of facilities and services designated for learners with special needs?

item 6: Psychological or advisory support services

First Response: Principal (Question #24)

In the public education sector, **56.5%** of principals classify psychological or advisory support services as "completely unsuitable," indicating a significant lack of these services. The South records relatively positive percentages, with **13.3%** of principals rating these services as "good," while Baalbek-Hermel performs better compared to other regions, with **27.3%** rating them as "acceptable" and **9.1%** as "good."

In the free private education sector, **40.0%** of principals consider these services "completely unsuitable." However, some areas like the South show positive results with **50.0%** rating them as "good." Baalbek-Hermel records moderate figures, with **33.3%** rating them as "excellent."

In the non-free private sector, results are mixed. **30.6%** of principals view these services as "completely unsuitable." Beirut and Mount Lebanon (excluding suburbs) show good levels of "excellent" ratings, with **22.2%** and **20.0%**, respectively. Baalbek-Hermel displays the best results in this sector, with **60.0%** rating them as "acceptable" and **40.0%** as "good."

In the UNRWA sector, the best performance among all sectors is seen, with **50.0%** of principals classifying services as "excellent" in the South, and **100.0%** rating them as "good" in other areas, reflecting a high focus on psychological and advisory support.

By governorates:

Beirut shows high percentages of "completely unsuitable" evaluations at **55.6%**, but also displays moderate levels of "excellent" at **11.1%**. Mount Lebanon (excluding suburbs) exhibits better performance in "good" and "excellent" levels compared to other governorates. Bekaa and the North

show the highest percentages of "completely unsuitable," indicating a significant deficiency in providing services. The South and Baalbek-Hermel demonstrate relatively positive results, with noticeable levels in "good" and "excellent."

Conclusions:

1. Beirut shows moderate to high levels of "completely unsuitable" evaluations, with some improvement in the "excellent" level.
2. Mount Lebanon (excluding suburbs) highlights relative progress in providing services at the "good" and "excellent" levels.
3. Bekaa and the North need significant improvement in providing psychological or advisory support services.
4. The South and Baalbek-Hermel show the best results, reflecting a greater focus on providing adequate support.
5. The public education sector demonstrates a clear weakness in providing psychological or advisory support services, with high percentages of "completely unsuitable."
6. The free private education sector shows moderate percentages, with noticeable improvement in some areas like the South and Baalbek-Hermel.
7. The non-free private sector records better results in "good" and "excellent" levels, especially in Beirut and Mount Lebanon (excluding suburbs).
8. The UNRWA sector achieves the best performance, indicating a clear focus on psychological and advisory support.

Second Response: Supervisor (Question #16)

General Situation

The public sector faces significant challenges in providing appropriate services for learners with special needs. Approximately **45.2%** of supervisors describe the situation as "completely unsuitable," while **29%** view the services as poor. Only **19.8%** of supervisors consider the services acceptable, and a mere **4.1%** rate them as good. Lastly, respondents that rate the services as excellent make up only **1.8%**.

In the free private sector, **29%** of supervisors describe the situation as "completely unsuitable," while **12.9%** view the services as poor. Other evaluations show that **25.8%** of respondents consider the services acceptable, **22.6%** rate them as good, and only **9.7%** classify the services as excellent.

In the non-free private sector, around **30.8%** of supervisors rate the services as "completely unsuitable," while only **12%** consider them poor. The percentage of respondents viewing services as acceptable is **20.5%**, and those rating them as good account for **18.8%**, with **17.9%** describing them as excellent.

In the UNRWA sector, **33.3%** of supervisors consider the services acceptable, while the same percentage rates them as good, and another **33.3%** describe them as excellent.

By governorates:

In the public sector, in Beirut, **45.5%** of respondents describe the situation as "completely unsuitable," while the same percentage considers it "poor," indicating a significant struggle in providing psychological or advisory support. In Mount Lebanon (suburbs), **29.4%** of supervisors view the services as "completely unsuitable" and **29.4%** as poor, with only **11.8%** considering them good, highlighting the need for improvement. In Mount Lebanon (excluding suburbs), **56.5%** rate the services as "completely unsuitable," and **21.7%** view them as poor, reflecting a very poor situation in providing necessary support.

The North also faces high negative evaluations, with **50%** rating the services as "completely unsuitable" and **36.8%** as poor. In Bekaa, **55.6%** of supervisors view the services as "completely unsuitable," while **22.2%** consider them poor. The South shows some improvement, with **34.4%** rating the services as acceptable, though significant improvements are still needed. Nabatieh faces a lack of services, with **34.8%** rating the services as "completely unsuitable." Akkar also struggles with support, with **52.6%** rating the services as "completely unsuitable." In Baalbek-Hermel, **35.3%** consider the services "completely unsuitable," and **41.2%** view them as poor.

In the free private sector, in Beirut, all respondents rate the services as "completely unsuitable." In Mount Lebanon (suburbs), there is variation in ratings. In the North, **60%** rate the services as "completely unsuitable," while Bekaa shows some positive evaluations, with **66.7%** considering the services good. In the South, there is some improvement, with the highest percentage of excellent ratings. In Nabatieh and Akkar, respondents need significant support improvements, while Baalbek-Hermel presents an acceptable situation.

In the non-free private sector, in Beirut, **55.6%** rate the services as "completely unsuitable," while Mount Lebanon (suburbs) shows varied evaluations, with **25%** rating them as excellent. In the North, **38.9%** rate the services as "completely unsuitable," and in Bekaa, there is a need for further improvement despite some positive evaluations. The South shows some progress with the highest percentage of excellent ratings. In Nabatieh, **60%** rate the services as "completely unsuitable," and Akkar shows some improvements, while Baalbek-Hermel requires further development.

In the UNRWA sector, in Mount Lebanon (suburbs), half the respondents rate the services as acceptable and the other half as good, while in the South, all respondents rate the services as excellent.

General Conclusions:

The public sector faces a significant lack of services for learners with special needs, with a wide disparity between governorates. Urgent improvements are needed in all areas.

The private sector shows noticeable improvement, especially in the non-free private sector, though gaps still exist. While some respondents offer excellent services, most regions still face significant deficiencies.

The free private sector also requires greater development and enhancements, particularly in areas struggling with psychological or advisory support.

Response 3: Coordinator (Question #16)

The analysis of the percentages for each sector in each governorate regarding the evaluation of psychological or advisory support services for learners with special needs in respondents, a clear disparity is observed between governorates and different sectors.

In the public sector, Beirut records the highest rates for "completely unsuitable" and "poor" evaluations, reaching **88.8%**. In Mount Lebanon (excluding suburbs), there is a more balanced distribution between "acceptable" and "good" evaluations, though the highest percentage remains for "poor." In the North and Bekaa, evaluations are divided between "poor" and "acceptable," with limited ratings for "good." Nabatieh records the highest percentage for "completely unsuitable" at **50%**.

In the free private sector, Beirut shows uniform evaluations of **100%** for "completely unsuitable," while Mount Lebanon suburbs show a balance between "acceptable" and "good" evaluations. In Bekaa, percentages are distributed between "acceptable" and "excellent," with no negative evaluations.

The non-free private sector is characterized by significant variation across governorates. Beirut presents mixed evaluations across all levels, with higher emphasis on "completely unsuitable" and "excellent." In Mount Lebanon (excluding suburbs), the percentage for "excellent" reaches **52.6%**, while Nabatieh shows the highest percentage for "completely unsuitable" at **72.7%**.

Regarding UNRWA respondents, data is limited to the North, where evaluations are equally divided between "acceptable" and "excellent" at **50%** each.

Conclusions:

Overall, Nabatieh records the highest percentage for "completely unsuitable" evaluations among governorates, while Mount Lebanon (excluding suburbs) achieves the highest percentages for "excellent."

Different sectors exhibit distinct patterns in evaluating service quality. The public sector generally struggles with high rates of negative evaluations, while the private sector, especially non-free private institutions, shows relatively better evaluations in some governorates.

Limited excellent evaluations: With few exceptions, such as Mount Lebanon (excluding suburbs) in the non-free private sector, "excellent" evaluations remain very limited across all sectors and governorates.

Prevalence of negative evaluations: In most governorates and sectors, the highest percentages fall within "completely unsuitable" and "poor" evaluations, indicating significant challenges in providing appropriate support services for learners with special needs.

Better performance in the private sector: The private sector (especially non-free) shows relatively better performance compared to the public sector, with some governorates achieving positive evaluations like "good" and "excellent."

Fourth Response : Teacher (Question #15)

Overall, **32.2%** of teachers consider psychological or advisory support services "completely unsuitable," while **21.6%** describe them as "poor," and **20.1%** as "acceptable." **12.5%** rate them as "good," and **13.5%** as "excellent."

In the public sector, the highest percentage, **37.9%**, views support as "completely unsuitable," while **29.7%** describe it as "poor," and **20.7%** as "acceptable." Only **7.8%** rate it as "good," and **3.9%** as "excellent."

In the free private sector, **35.4%** of teachers consider the support "completely unsuitable," **16.3%** describe it as "poor," and **17.2%** as "acceptable." **12.9%** rate it as "good," and **18.2%** as "excellent."

In the non-free private sector, a much lower percentage of **23.1%** consider the support "completely unsuitable," while **11.0%** view it as "poor," **19.9%** as "acceptable," **19.2%** as "good," and **26.8%** as "excellent."

In UNRWA respondents, only **8.3%** consider the support "completely unsuitable," while **16.7%** describe it as "poor," **33.3%** as "acceptable," **33.3%** as "good," and **8.3%** as "excellent."

At the governorates level, there is a diversity of opinions regarding the quality of psychological or advisory support:

- **In Beirut**, **35.1%** of teachers consider the support "completely unsuitable," and **11.3%** as "poor." **32.0%** rate it as "acceptable," **10.3%** as "good," and **11.3%** as "excellent."
- **In Mount Lebanon suburbs**, **24.4%** rate support as "completely unsuitable," with **11.4%** describing it as "poor." **17.3%** view it as "acceptable," **17.0%** as "good," and **29.9%** as "excellent."
- **In Mount Lebanon (excluding suburbs)**, **28.0%** consider support "completely unsuitable," **14.3%** as "poor," **20.0%** as "acceptable," **24.0%** as "good," and **13.7%** as "excellent."
- **In the North**, **37.4%** rate support as "completely unsuitable," with **26.0%** describing it as "poor." **17.0%** see it as "acceptable," **10.0%** as "good," and **9.7%** as "excellent."
- **In the Bekaa**, **26.6%** consider support "completely unsuitable," with **27.7%** rating it as "poor." **21.8%** find it "acceptable," **10.1%** "good," and **13.8%** "excellent."
- **In the South**, **37.3%** rate support as "completely unsuitable," with **20.7%** as "poor." **24.3%** describe it as "acceptable," **10.7%** as "good," and **7.1%** as "excellent."
- **In Nabatieh**, **35.3%** consider support "completely unsuitable," with **27.5%** rating it as "poor." **17.4%** find it "acceptable," **10.8%** "good," and **9.0%** as "excellent."
- **In Akkar**, **35.1%** consider support "completely unsuitable," with **25.1%** describing it as "poor." **20.3%** view it as "acceptable," **8.8%** as "good," and **10.8%** as "excellent."
- **In Baalbek-Hermel**, **31.4%** rate support as "completely unsuitable," **29.7%** as "poor." **24.6%** describe it as "acceptable," **10.2%** as "good," and **4.2%** as "excellent."

These figures highlight the significant disparities in the quality of psychological or advisory support services between governorates and sectors, with greater challenges in the public sector and certain governorates such as the North and South.

Question: How available is the internet?
First response: Principal (Question #26)

Public Education Sector:

The public education sector shows significant variation in the quality and availability of internet. In Beirut, **37.5%** of principals classify internet as "available but frequently poor," while **12.5%** rate it as "excellent." In regions such as Mount Lebanon (excluding suburbs) and the North, larger percentages report "reasonably available" internet at **44.4%** and **31.4%** respectively. The South shows improvement with **53.3%** of principals rating internet as "good."

Free Private Education Sector:

In this sector, most principals perform well to very well, especially in the South and Bekaa, where **100%** and **66.7%** respectively classify internet as "very good." However, some principals face poor connectivity, notably in Mount Lebanon suburbs where **25%** rate internet as "poor."

Non-Free Private Education Sector:

The non-free private sector shows the best overall performance, with **60%** of principals in Baalbek-Hermel rating internet as "very good." Additionally, **36.4%** of principals in Mount Lebanon suburbs classify internet in a similar manner, reflecting significant investment in digital infrastructure.

UNRWA Sector:

The UNRWA sector shows some variability, with **50%** of principals rating internet as "good." However, some regions face challenges requiring improvement.

By Governorates:

1. **Beirut** faces a significant issue with poor internet quality, with **37.5%** of principals rating it as "poor."
2. **Mount Lebanon suburbs** show varying quality, with **28.6%** classifying internet as "very good."
3. **North** faces a major internet quality challenge, with **37.1%** of principals rating it as "poor."
4. **South** shows the best relative performance, with **53.3%** of principals rating internet as "good."

Conclusions:

5. Beirut suffers from significant internet connectivity issues.
6. Mount Lebanon suburbs need improved digital infrastructure, though some principals show good performance.
7. The North faces substantial challenges in internet quality.
8. The South enjoys relatively high internet quality.
9. The public education sector varies widely in internet quality, with good performance in the South but needing substantial improvement in Beirut and Mount Lebanon suburbs.
10. The free private education sector provides very positive results, particularly in the South and Bekaa.
11. The non-free private sector excels in internet quality, with a high percentage of principals rating internet as "very good."
12. The UNRWA sector requires improvements to offer more stable internet service.

Second response: Supervisor (Question #18)

General Situation in the Sector:

Public Education Sector:

Respondents in the public sector face significant challenges in providing internet and digital connectivity. Data shows that **5.5%** report that internet is completely unavailable, while **27.6%** indicate poor internet availability most of the time. Additionally, **40.1%** say that connectivity is reasonably available most of the time, **24.0%** report good internet availability, and only **2.8%** state that internet is very good. This highlights a significant gap in digital connectivity quality across different regions, requiring urgent improvements, especially in areas like Beirut and Bekaa.

Free Private Education Sector:

In the free private education sector, data shows substantial improvement compared to the public sector. **71%** of supervisors report good to very good internet availability, reflecting noticeable improvements in infrastructure. However, some areas still face challenges, with about **29.1%** of respondents

experiencing poor connectivity. In Beirut, all respondents reported good internet availability (**100%**), showcasing better infrastructure in urban areas.

Non-Free Private Education Sector:

In the non-free private sector, **77%** of supervisors report good to very good internet availability. This positive result reflects ongoing improvements in school infrastructure. Nonetheless, **23%** of respondents still face difficulties with internet quality, indicating the need for interventions to bridge the digital divide between respondents.

UNRWA:

Data shows that **66.7%** of UNRWA supervisors report good internet availability, while **33.3%** indicate reasonable availability most of the time. In the South, **100%** report good internet availability, while in Mount Lebanon suburbs, the quality varies, with **50%** of supervisors reporting reasonable internet availability and the other half reporting good availability.

Key Observations by Governorates in Each Sector:

Public Sector:

In Beirut, **27.3%** of supervisors report no internet availability at all. In Bekaa, the challenges are even more severe, with **50%** reporting poor internet availability. In the South, **50%** report good internet, but no significant responses indicate very good availability.

Free Private Sector:

In Beirut, all respondents provide good internet availability at **100%**. In Mount Lebanon suburbs, **60%** of supervisors report very good internet availability. In North and Bekaa, internet availability is either very good (**66.7%** and **20%** respectively) or good (**33.3%** and **80%** respectively).

Non-Free Private Sector:

In Beirut, **55.6%** of supervisors report very good internet availability, indicating better infrastructure in this region. In Bekaa, **50%** report very good internet availability, reflecting ongoing improvements.

Conclusion:

In the public sector, most respondents face significant challenges in providing quality internet, especially in regions like Beirut and Bekaa. This highlights the urgent need for improved digital infrastructure in these areas. In both the free and non-free private sectors, results show notably better internet availability, with most respondents providing good to very good internet. UNRWA respondents, despite external support, still face challenges, though better than the public sector. Overall, all sectors in Lebanon require substantial improvements in internet infrastructure, especially in regions struggling with digital connectivity issues.

Third response: Coordinator (Question #18)

In Beirut, the public education sector faces clear gaps in internet availability, with **44.4%** of coordinators rating it as "reasonable," while **33.3%** struggle to access the internet, and **22.2%** have no internet connection at all. This indicates a significant digital divide even though Beirut is the capital. In the free private sector, all coordinators (**100%**) rate internet availability as "very good," reflecting exceptional performance, possibly due to targeted investments or smaller school sizes. The non-free private sector rates **41.7%** of coordinators as "very good," while **16.7%** are rated as "reasonable," suggesting relatively good performance that still needs improvement to reduce disparities.

In Mount Lebanon (suburbs), the public education sector shows moderate performance, with **52.9%** of coordinators rating internet availability as "good," while **11.8%** have no internet access. In the free private sector, **60%** of coordinators rate their respondents as "very good," and the remaining **40%** as "good," reflecting strong performance aligned with private sector investments in the region. The non-free private sector rates **47.8%** of coordinators as "very good," and **32.6%** as "good," with a slight gap as **4.3%** lack internet access.

In Mount Lebanon (excluding suburbs), the public sector performs below average, with **41%** of coordinators rating internet availability as "reasonable," and **15.4%** without internet access. The free private sector rates **80%** of coordinators as "reasonable," while **20%** are rated as "very good." In contrast, the non-free private sector rates **47.4%** of coordinators as "good," and **21.1%** as "very good," showing relatively stable quality with fewer clear gaps compared to Beirut.

In the North, the public sector shows significant variation, with **32.2%** of coordinators rating internet availability as "reasonable," and **18.6%** with no internet access. In the free private sector, **50%** rate their respondents as "reasonable," and **25%** as "very good." The non-free private sector rates **32.3%** of coordinators as "good," and **16.1%** as "very good," indicating moderate performance with a need for improvement. UNRWA faces major challenges, with **50%** of coordinators rating internet access as "unavailable," while the other half is rated as having "poor" internet access.

In Bekaa, the public sector faces significant challenges, with **45%** of coordinators rating internet availability as "poor," and **40%** as "reasonable." The free private sector rates all coordinators (**100%**) as "very good," reflecting exceptional performance. The non-free private sector rates **37.5%** of coordinators as "good," and **31.3%** as "very good," suggesting high quality but with some coordinators still facing challenges.

In the South, the public sector faces large gaps, with **40.5%** of coordinators rating internet availability as "poor," and **26.2%** as "reasonable." In the free private sector, **60%** rate their respondents as "good," and **20%** as "reasonable." The non-free private sector rates **50%** of coordinators as "reasonable," and **33.3%** as "good," reflecting a mixed performance with a need for improvement.

In Nabatieh, the public sector shows clear gaps, with **37.5%** of coordinators rating internet availability as "reasonable," and **18.8%** without internet access. In the free private sector, **50%** rate their respondents as "very good," while the other half is rated as "poor," showing significant variation between coordinators. The non-free private sector rates **63.6%** of coordinators as "very good," making it the best-performing sector in the region.

In Akkar, the public sector shows weak performance, with **53.8%** of coordinators rating internet availability as "poor," and **7.7%** without internet access. In the free private sector, **66.7%** rate their respondents as "reasonable," and **33.3%** as "very good." The non-free private sector rates **53.8%** of coordinators as "poor," and **7.7%** as "very good," highlighting significant gaps in internet access, even with private investments.

In Baalbek-Hermel, the public sector shows mixed performance, with **33.3%** of coordinators rating internet availability as "reasonable," and **16.7%** as "very good." In the free private sector, all coordinators (**100%**) rate their respondents as "very good," reflecting exceptional performance. The non-free private sector rates **36.4%** of coordinators as "reasonable," and **18.2%** as "very good," indicating moderate quality with room for improvement.

Conclusions:
- **Public sector:**
  - Public coordinators face significant challenges in underserved areas like Akkar and the South.
  - Beirut leads in internet quality among public schools respondentsbut still shows gaps.
- **Free Private sector**
  - Exceptional in Beirut and Baalbek-Hermel, but performance is inconsistent in Akkar and Nabatieh.
  - There is a need for balanced resource allocation to improve distribution.
- **Non-Free Private sector:**
  - Excellent performance in most regions, especially Beirut and Nabatieh.
  - However, disparities persist in underserved areas like Akkar.
- **UNRWA:**
  - Faces severe limitations, particularly in the North, with no respondents rated as having "good" or "very good" internet access.

Fourth response: Teacher (Question # 17)

Overall, **13.7%** of teachers reported that internet is "not available at all," and **22.9%** mentioned it is "rarely available." **23.6%** indicated that internet is "available in limited quantities and intermittently," while **24.3%** said it is "available in limited quantities but consistently." Finally, **15.6%** reported that internet is "very well available."

In the public sector, **20.1%** of teachers reported that internet is "not available at all," and **34.2%** mentioned it is "rarely available." **26.0%** indicated that internet is "available in limited quantities and intermittently," while **16.7%** stated it is "available in limited quantities but consistently." Only **3.0%** mentioned that internet is "very well available."

In the free private sector, **8.1%** reported that internet is "not available at all," and **12.0%** said it is "rarely available." **15.8%** indicated that internet is "available in limited quantities and intermittently," while **39.7%** noted it is "available in limited quantities but consistently." **24.4%** mentioned that internet is "very well available."

In the non-free private sector, **5.4%** stated that internet is "not available at all," and **8.6%** reported it is "rarely available." **22.6%** mentioned that internet is "available in limited quantities and intermittently," while **31.1%** said it is "available in limited quantities but consistently." **32.3%** reported that internet is "very well available."

In UNRWA respondents, **25.0%** reported that internet is "not available at all," and **41.7%** mentioned it is "rarely available." Only **8.3%** indicated that internet is "available in limited quantities and intermittently," while **25.0%** stated it is "available in limited quantities but consistently." No teacher reported that internet is "very well available."

Across the governorates, significant disparities were observed in internet availability for teachers:

- **Beirut**: **21.6%** reported that internet is "not available at all," and **11.3%** mentioned it is "rarely available." **24.7%** stated that internet is "available in limited quantities and intermittently," while **20.6%** said it is "available in limited quantities but consistently." **21.6%** reported that internet is "very well available."
- **Suburban Mount Lebanon**: Only **8.0%** reported that internet is "not available at all," and **9.3%** said it is "rarely available." **15.4%** mentioned that internet is "available in limited quantities and intermittently," while **38.0%** noted it is "available in limited quantities but consistently." **29.3%** reported that internet is "very well available."
- **Mount Lebanon excluding suburbs**: **16.0%** stated that internet is "not available at all," and **21.7%** reported it is "rarely available." **24.6%** indicated that internet is "available in limited quantities and intermittently," while **25.1%** said it is "available in limited quantities but consistently." Only **12.6%** mentioned that internet is "very well available."

These findings highlight significant gaps in internet availability for teachers across different sectors and regions, directly impacting the quality of education and digital connectivity in Lebanese respondents.

Question: Number of devices per number of students
First Response: Principal (Question #26)

Public Education Sector:

The results of the public education sector show significant variations in the quality and speed of available internet. In Beirut, **37.5%** of principals classify the internet as "available but often poorly," while **12.5%** rate it as "very well available." In areas such as Mount Lebanon excluding suburbs and the North, the largest percentage falls under "reasonably available" at **44.4%** and **31.4%**, respectively. In the South, there is a relatively better performance, with **53.3%** of principals classifying the internet as "well available."

Free Private Education Sector:

In this sector, most principals show good to very good performance, especially in the South and Bekaa, where **100%** and **66.7%** of respondents, respectively, classify the internet as "very well available." However, some principals face connectivity issues, particularly in Mount Lebanon suburbs where **25%** rate the internet as "poorly available."

Non-Free Private Education Sector:

The non-free private education sector demonstrates the best overall performance, with **60%** of principals in Baalbek-Hermel classifying the internet as "very well available." Additionally, **36.4%** of principals in Mount Lebanon suburbs rate the internet at this quality, reflecting significant investment in improving digital connectivity.

UNRWA Sector:

The UNRWA sector shows relative variation, with **50%** of principals classifying the internet as "well available," but there are challenges in some regions that require improvement.

By Governorates:

- **Beirut** suffers from a significant proportion of principals with poor internet connections, with **37.5%** classifying it as "poorly available."
- **Mount Lebanon suburbs** show a range of performance between good and poor, with **28.6%** rating the internet as "very well available."
- **North** faces substantial challenges with internet quality, with **37.1%** rating it as "poorly available."
- **South** displays a relatively better performance, with **53.3%** classifying the internet as "well available."

Conclusions:

- Beirut faces significant issues with internet connectivity.
- Mount Lebanon suburbs require improvements in digital infrastructure, despite some areas showing good performance.
- The North faces major challenges in digital connectivity quality.
- The South enjoys relatively good internet quality.
- The public education sector experiences varying internet quality, with good performance in the South but a substantial need for improvement in Beirut and Mount Lebanon suburbs.
- The free private education sector demonstrates very positive results, particularly in the South and Bekaa.
- The non-free private education sector is the best-performing, with a high percentage of principals rating the internet as "very well available."
- The UNRWA sector requires improvements to provide more stable internet service.

Second response: Supervisor (Question #19)

Overall Situation:

Public Sector:

The public sector experiences a significant disparity in the availability of electronic devices, especially laptops. Over half of the supervisors (**53%**) report having no laptops, while a very small percentage

(**2.3%**) provide one laptop per student. Others offer one laptop for every five or ten students, indicating a severe shortage of necessary devices to support digital education. This gap greatly affects the quality of education, as many supervisors lack access to modern technology that enhances learning methods.

Free Private Sector:

The free private sector faces similar challenges to the public sector, with approximately **35.5%** of supervisors lacking laptops. Some supervisors provide one laptop for every 15 students or more (**22.6%**), while others offer one laptop for every five or ten students. These figures highlight the urgent need to improve digital infrastructure to meet modern educational demands and effectively integrate technology into the learning process.

Non-Free Private Sector:

In the non-free private sector, **32.5%** of supervisors report no laptops available. Additionally, **18.8%** provide one laptop for every 15 students or more, while **20.5%** offer one laptop for every five students. This disparity reflects differences in device availability across respondents, necessitating efforts to bridge the digital gap for better integration of technology into education.

UNRWA:

For UNRWA respondents, the situation remains significantly under-resourced with **100%** of supervisors lacking basic electronic devices supporting digital education. There is a pressing need for increased investment in digital infrastructure to support students adequately.

By Governorates in Each Sector:

Public Sector:

- **Beirut**: About **36.4%** of supervisors do not provide laptops, while **36.4%** offer one laptop for every 15 students or more.
- **Mount Lebanon – Suburbs**: **41.2%** of supervisors lack laptops, whereas **29.4%** provide one laptop for every five students.
- **Mount Lebanon – Excluding Suburbs**: **56.5%** of supervisors do not have laptops, indicating significant disparities in digital infrastructure across regions.
- **Bekaa**: **66.7%** of supervisors do not offer laptops, reflecting an urgent need for development.
- **South**: Around half of the supervisors lack laptops, although some regions show improvements.

Free Private Sector:

- **Beirut**: All supervisors (**100%**) report no laptops, highlighting a critical infrastructure issue.
- **Mount Lebanon – Suburbs**: **20%** of supervisors do not provide laptops, though some supervisors have made improvements.
- **South and Baalbek-Hermel**: **100%** of supervisors do not have laptops, showing a significant lack in these regions.
- **Akkar**: **50%** of supervisors offer one laptop per student, which is a notable improvement compared to other areas.

Non-Free Private Sector:

- **Mount Lebanon – Excluding Suburbs**: **41.7%** of supervisors lack laptops, followed by the North (**38.9%**), Baalbek-Hermel (**36.4%**), and Bekaa (**35.7%**).
- **Beirut**: **22.2%** and Nabatieh (**20%**) offer lower percentages but still indicate device shortages.
- **Akkar**: **44.4%** of supervisors provide one laptop per student, the highest rate among governorates.
- **Beirut** (**33.3%**) and the North (**22.2%**) come next in terms of laptop provision.
- **Nabatieh**: Around **60%** of supervisors offer one laptop for every five students, showcasing better device availability compared to other areas.
- **Mount Lebanon (suburbs and beyond), Bekaa**: Rely largely on one laptop for every 15 students or more (**28.1%** in suburbs, **16.7%** outside suburbs, and **7.1%** in Bekaa).

Conclusion:

The public sector faces a severe shortage of laptops, particularly in regions like Bekaa and Akkar. Conversely, the free private sector shows some improvements in Akkar, but struggles in areas like

Beirut and the South. The non-free private sector has seen some advancements in the North, yet areas such as Beirut and Bekaa still face significant device shortages. This indicates a substantial gap in implementing digital education across regions, necessitating increased investment and a more equitable distribution of technology for all supervisors to ensure a fair and advanced educational environment.

Question: Is any of the following used to support the educational process?

Part 1: Digital Educational Tools

First Response: Principal (Question #28)

In the public education sector, the overall usage of digital educational tools is distributed as follows: 12.9% of principals report that tools are not used at all, 21.8% use them rarely, and 40.1% use them without a defined frequency. Respondents that regularly use tools in some classes represent 16.3%, while those using them regularly in most classes make up 8.8%.

In the free private education sector, 20.0% of principals indicate that digital tools are not used, and only 10.0% use them rarely. Respondents that use tools without a defined frequency represent 20.0%, whereas 23.3% use them regularly in some classes, and 26.7% use them regularly in most classes.

In the non-free private education sector, the usage of digital tools is as follows: 10.2% of principals report that tools are not used at all, 6.1% use them rarely, and 22.4% use them without a defined frequency. Respondents using tools regularly in some classes represent 16.3%, and 44.9% of respondents use tools regularly in most classes.

For UNRWA respondents, 50.0% of principals indicate that digital tools are not used at all, with no respondents using them rarely. Respondents using tools without a defined frequency represent 25.0%, while 25.0% use them regularly in some classes. No respondents reported using tools regularly in most classes.

By governorates, Beirut shows moderate usage of digital tools, with 44.4% of respondents using tools regularly in most classes, and only 11.1% not using them. In Mount Lebanon (Suburbs), 36.7% of respondents use tools regularly in most classes, while 10.2% do not use them at all. In Mount Lebanon (excluding suburbs), 34.4% of respondents use tools regularly, showing noticeable improvement compared to other regions. In the south, there is a significant gap, with 24% of respondents not using tools, and only 20% using them regularly. In Akkar, the largest proportion (39.3%) indicates irregular usage, with 21.4% not using tools at all.

Comparing sectors, the public education sector shows a significant need to enhance the use of digital tools, especially in the south and Mount Lebanon. On the other hand, the free private education sector demonstrates positive results in areas like Beirut but requires improvements in other regions. The non-free private sector is the most advanced in terms of regular usage of digital tools, particularly in Baalbek-Hermel, where 60% of respondents use tools regularly in most classes.

For UNRWA respondents, the results indicate limited usage of digital tools, with a clear need for additional support to improve digital infrastructure and increase tool adoption.

Second Response: Supervisor (Question #20)

General Overview:

Public Sector:

The data indicates that 35% of public school principals reported teachers using digital educational tools without a defined frequency. Meanwhile, 24% use them regularly in some classes, and 10.6% use them in most classes. On the other hand, 12.4% do not use digital tools at all, and 18% rarely rely on them. There is a noticeable disparity among governorates, with Beirut leading at 45.5% for regular use in some classes, while Akkar shows the lowest levels, with 36.8% rarely using tools and 18.4% not using them at all. This gap highlights differences in resources and infrastructure.

Free Private Education:

In free private education, 45.2% of supervisors reported regular use of digital tools in most classes, surpassing the public sector. Another 25.8% use them without a defined frequency, while 9.7% do not

use digital tools at all, and 9.7% rarely rely on them. Beirut stands out with complete coverage (100%) for regular use of digital tools in most classes, reflecting robust supportive infrastructure.

Non-Free Private Education:
The data shows that 50.4% of supervisors reported regular use of digital tools in most classes, outperforming both the public and free private education sectors. Another 15.4% use them regularly in some classes, while 20.5% use them without a defined frequency, and 7.7% rarely use them. The percentage of non-use in this sector is 6%. The southern governorates and Beirut lead in regular use in most classes (85.7% and 66.7%, respectively), indicating greater focus on developing digital education.

UNRWA Respondents:
Among UNRWA school supervisors, 66.7% reported teachers using digital tools without a defined frequency, while 33.3% use them regularly in some classes. These figures suggest that UNRWA respondents are moving toward incorporating digital tools into education, albeit with irregular adoption.

By Governorate and Sector:
In the public sector, Beirut excels with 45.5% regular use of digital tools in some classes, while Akkar records a high percentage of rare or no use (36.8%). The suburbs of Mount Lebanon show significant interest in adopting technology, with 41.2% reporting regular use.

In free private education, Beirut leads with 100% regular use, while Mount Lebanon suburbs lag with 40% regular use. Mount Lebanon (excluding suburbs) stands out in the public sector, with 30.4% of respondents reporting regular use in most classes.

In non-free private education, the South, Beirut, and Mount Lebanon record high percentages of regular use, while remote governorates like Bekaa and the North face less consistent adoption.

For UNRWA respondents, Mount Lebanon suburbs show better rates compared to the South.

Conclusion:
The comparison across sectors reveals that private education, both free and non-free, outpaces the public sector and UNRWA respondents in integrating digital tools into the educational process. Beirut leads across all sectors, highlighting the importance of investing in digital infrastructure. Conversely, regions like Akkar and Bekaa demonstrate a clear digital gap, necessitating more resources to enhance the adoption of digital educational tools..

Third Response: Coordinator (Question No.19)

Beirut:
In the public education sector, most respondents (77.8%) use digital tools irregularly, while 22.2% rarely use them. There is significant room for improvement in consistent usage.
In the free private sector, digital tools are fully integrated, with 100% of respondents using these tools in most classes.
In the non-free private sector, half of the respondents (50.0%) use the tools in most classes, while 33.3% use them occasionally, indicating strong but uneven adoption.

Mount Lebanon Suburbs:
In the public education sector, usage is inconsistent: 41.2% of respondents use tools regularly in some classes, and 35.3% rarely use them. Efforts should focus on standardizing usage.
In the free private sector, there is high adoption, with 60% of respondents using tools in most classes.
In the non-free private sector, the majority (63.0%) use tools in most classes, reflecting good integration but with some variation.

Mount Lebanon (Excluding Suburbs):
Approximately half of respondents (48.7%) use tools occasionally, but only 15.4% use them regularly in most classes. There is a need to improve adoption practices.
In the free private sector, adoption is excellent, with 80% of respondents using tools in most classes.
In the non-free private sector, the majority (57.9%) use tools in most classes, but more consistent integration is necessary.

North:
Moderate usage is evident, with 30.5% of respondents using tools occasionally and 27.1% regularly in

some classes. Infrastructure improvements could enhance adoption.

In the free private sector, usage is evenly distributed across levels (25% for each level), indicating mixed adoption rates.

In the non-free private sector, 45.2% use tools in most classes, but some respondents lag in regular usage.

UNRWA respondents show no usage of digital tools (100% do not use them), underscoring an urgent need for support.

Bekaa:

Data shows that 40% of respondents rarely use tools, while 25% use them occasionally or regularly in some classes. Overall adoption is low.

In the free private sector, half the respondents (50%) use tools regularly in most classes.

In the non-free private sector, adoption is strong, with 56.3% using tools in most classes despite some variation.

South:

Usage varies significantly, with 28.6% rarely using tools and 21.4% using them regularly in some classes. Gaps need to be addressed.

In the free private sector, there is moderate adoption, with 40% of respondents using tools in most classes.

In the non-free private sector, half the respondents (50%) use tools in most classes, reflecting stable integration.

Nabatieh:

Usage is distributed, with 37.5% using tools occasionally and 25.0% regularly in some classes, leaving room for growth.

In the free private sector, adoption is high, with 50% of respondents using tools in most classes.

In the non-free private sector, integration is strong, with 45.5% using tools in most classes and 27.3% regularly in some classes.

Akkar:

Usage is low, with 34.6% rarely using tools and 26.9% regularly in some classes.

In the free private sector, usage is varied, with 33.3% distributed across levels.

In the non-free private sector, there is moderate adoption, with 38.5% using tools occasionally and 23.1% regularly in some classes.

Baalbek-Hermel:

Adoption is improving, with 27.8% using tools regularly in most classes and 22.2% rarely using them.

In the free private sector, adoption is high, with 50% of respondents using tools in most classes.

In the non-free private sector, the majority (63.6%) use these tools, reflecting effective resource deployment.

Conclusions:

Overall, public school usage varies significantly, with Beirut showing the best integration, while regions like Akkar and Bekaa require urgent attention. Free private respondents generally exhibit higher adoption rates, particularly in Beirut and Mount Lebanon. Non-free private respondents lead in adoption across most governorates, especially Mount Lebanon (excluding suburbs) and Baalbek-Hermel. UNRWA respondents completely lack digital tool usage, highlighting the need for investment in digital resources and training.

Fourth Response : Teacher (Question No. 17)

General Results:

The overall data indicates that 7.6% of respondents do not use digital tools at all, 9.3% use them "rarely," and 31.0% use them "irregularly." Meanwhile, 18.2% use digital tools "regularly in some classes," and 33.8% use them "regularly in most classes."

Sector Analysis:

In the **public sector**, statistics show that 7.6% of respondents do not use digital tools at all, 12.9% use

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them "rarely," and 37.9% use them "irregularly." Additionally, 20.1% use them "regularly in some classes," while 21.6% use them "regularly in most classes."

In the **free private sector**, 7.2% of respondents do not use digital tools at all, 5.3% use them "rarely," and 36.4% use them "irregularly." Furthermore, 16.7% use them "regularly in some classes," and 34.4% use them "regularly in most classes."

In the **non-free private sector**, the data shows that 7.8% of respondents do not use digital tools at all, 5.1% use them "rarely," and 19.0% use them "irregularly." Meanwhile, 15.5% use them "regularly in some classes," and 52.5% use them "regularly in most classes."

In **UNRWA respondents**, 8.3% of respondents do not use digital tools at all, 8.3% use them "rarely," and 25.0% use them "irregularly." Additionally, 33.3% use them "regularly in some classes," while 25.0% use them "regularly in most classes."

Governorate Analysis:

In **Beirut**, 4.1% of respondents do not use digital tools, 3.1% use them "rarely," and 24.7% use them "irregularly." Meanwhile, 21.6% use them "regularly in some classes," and 46.4% use them "regularly in most classes."

In **Mount Lebanon (Suburbs)**, 12.3% of respondents do not use digital tools, 4.6% use them "rarely," and 18.2% use them "irregularly." Additionally, 13.3% use them "regularly in some classes," and 51.5% use them "regularly in most classes."

In **Mount Lebanon (Excluding Suburbs)**, 4.0% of respondents do not use digital tools, 6.9% use them "rarely," and 26.3% use them "irregularly." Meanwhile, 21.7% use them "regularly in some classes," and 41.1% use them "regularly in most classes."

In **North**, 8.5% of respondents do not use digital tools, 13.3% use them "rarely," and 37.4% use them "irregularly." Additionally, 15.0% use them "regularly in some classes," and 25.7% use them "regularly in most classes."

In **Bekaa**, 3.7% of respondents do not use digital tools, 10.6% use them "rarely," and 31.4% use them "irregularly." Meanwhile, 14.9% use them "regularly in some classes," and 39.4% use them "regularly in most classes."

In **South**, 7.7% of respondents do not use digital tools, 7.1% use them "rarely," and 33.7% use them "irregularly." Additionally, 23.7% use them "regularly in some classes," and 27.8% use them "regularly in most classes."

In **Nabatieh**, 4.2% of respondents do not use digital tools, 4.8% use them "rarely," and 34.1% use them "irregularly." Meanwhile, 16.8% use them "regularly in some classes," and 40.1% use them "regularly in most classes."

In **Akkar**, 10.4% of respondents do not use digital tools, 17.5% use them "rarely," and 34.3% use them "irregularly." Additionally, 23.5% use them "regularly in some classes," and 14.3% use them "regularly in most classes."

In **Baalbek-Hermel**, 5.1% of respondents do not use digital tools, 6.85% use them "rarely," and 40.7% use them "irregularly." Meanwhile, 22.9% use them "regularly in some classes," and 24.6% use them "regularly in most classes."

Question: Are any of the following used to support the educational process?
Category Two: Technological Devices
Response One: Principal (Question 28)

The overall data for the **public sector** reflects significant variability in the use of electronic devices. The data indicates that 16.3% of respondents do not use electronic devices at all, while 19.0% use them rarely. Respondents that use devices irregularly constitute 38.8%, while 15.6% use devices regularly in some classes, and 10.2% use them regularly in most classes.

In the **free private sector**, 13.3% of respondents do not use electronic devices at all, and only 6.7% use them rarely. Meanwhile, 30.0% use devices irregularly, while 23.3% rely on their use in some classes, and 26.7% use them regularly in most classes.

In the **non-free private sector**, 13.3% of respondents do not use electronic devices at all, while 6.1% use them rarely. A total of 27.6% of respondents rely on devices irregularly, 18.4% use them in some classes, and 34.7% use them regularly in most classes.

The **UNRWA sector** shows varied results in the use of electronic devices: 25.0% of respondents do not use devices at all, while none use them rarely. The data indicates that 25.0% use devices irregularly, 25.0% rely on them in some classes, and 25.0% use them regularly in most classes.

Looking at the overall total across all sectors, 15.4% of respondents do not use electronic devices at all, 12.9% use them rarely, 33.7% use them irregularly, 17.6% use them in some classes, and 20.4% rely on their regular use in most classes.

Public Education Sector by Region:

In **Beirut**, the use of electronic devices shows reasonable progress, with 25% of respondents relying on devices regularly in most classes, while only 12.5% use them in some classes. In **Mount Lebanon Suburbs**, 36.4% of respondents use devices irregularly, while 18.2% use them regularly in most classes. In **South Lebanon**, 40% of respondents do not use electronic devices at all, indicating a significant gap in technology usage.

Free Private Sector by Region:

The free private sector demonstrates notable advancements. In **Beirut**, 100% of respondents rely on electronic devices regularly in most classes. In **Mount Lebanon (excluding suburbs)**, the percentage reaches 50%, while the North and Bekaa show less clear usage patterns.

Non-Free Private Sector by Region:

The non-free private sector shows significant progress. In **Beirut**, 22.2% of respondents rely on devices regularly in most classes, while the percentage rises to 39.4% in **Mount Lebanon Suburbs**. In **South Lebanon**, 57.1% of respondents rely on devices regularly in some classes.

UNRWA Sector:

The UNRWA sector shows a great need for improvement in the use of electronic devices, with 50% of respondents relying on devices regularly in some classes, highlighting the need to enhance their use in most classes.

Conclusions:

The data shows that Beirut exhibits notable progress in the use of technological devices, though there is still a need to reduce the gap between respondents that use them regularly and those that do not rely on them. **Mount Lebanon Suburbs** displays significant variability in device usage among respondents. The **North** demonstrates a clear weakness in regular device usage, while the **South** requires substantial improvements in this area, as the data reveals a significant gap in regular usage.

Response Two: Supervisor (Question 20)

Overall Situation in the Sector:

Public Sector:

The data shows that **33.6%** of supervisors reported that teachers use technological devices irregularly, the highest percentage in this category. Meanwhile, **24.4%** use them regularly in some classes, and **8.3%** in most classes. Conversely, **22.6%** rarely use them, and **11.1%** do not use them at all. These figures indicate gradual progress in integrating technology but also highlight significant disparities among respondents.

Free Private Education:

In the free private sector, **25.8%** of supervisors reported that respondents use technological devices regularly in most classes, and **19.4%** in some classes. Meanwhile, **22.6%** use them irregularly, **16.1%** rarely use them, and **16.1%** do not use them at all. This shows varying levels of technology adoption among respondents.

Non-Free Private Education:

The non-free private sector demonstrates consistent use of technological devices, with **42.7%** of supervisors reporting regular use by teachers in most classes, and **19.7%** in some classes. Meanwhile, **20.5%** use them irregularly, **7.7%** rarely, and **9.4%** do not use them at all. This reflects a high level of reliance on technology in education.

UNRWA Respondents:

UNRWA respondents show an interest in using technology but without consistent patterns. These respondents face financial challenges affecting the availability of devices.

Regional Analysis Across Sectors:

- **Public Sector:** Beirut and Mount Lebanon (excluding suburbs) report the highest rates of technology use, with **45.5%** using it in some classes. In contrast, regions like Akkar and Baalbek-Hermel report very low rates.
- **Free Private Education:** Beirut leads significantly, with all respondents using technology in most classes. Conversely, **50%** of respondents in Akkar do not use technology at all, and **100%** of respondents in Baalbek-Hermel rarely use it.
- **Non-Free Private Education:** Beirut and Mount Lebanon report high usage rates, with **50%** of respondents in Mount Lebanon (excluding suburbs) using technology in most classes. Meanwhile, northern and Bekaa regions show lower usage rates, but these are still higher than those in the public sector.
- **UNRWA Respondents:** There are no significant differences between Mount Lebanon suburbs and southern regions.

Conclusion:

The **non-free private sector** ranks highest in regular technology use, followed by the **free private sector**, while the **public sector** lags behind with a noticeable gap between urban and rural areas. **UNRWA respondents** are gradually enhancing technology integration but face financial constraints. Beirut and Mount Lebanon lead in technology usage, whereas rural regions like Akkar and Baalbek suffer from a severe lack of technological integration.

Response Three: Coordinator (Question 19)

Beirut:

In the public education sector, the majority (**55.6%**) use technological devices irregularly, while **33.3%** do not use them at all. There is no regular use, indicating insufficient utilization. In the free private sector, no variations are noted, as **100%** report regular use in most classes, reflecting strong integration. In the non-free private sector, the vast majority (**66.7%**) use devices in most classes, with only **8.3%** using them rarely or not at all.

Mount Lebanon (Suburbs):

In the public sector, usage is fragmented: **29.4%** of respondents use devices in most classes, while **23.5%** use them irregularly or in some classes. Regular usage is evolving but inconsistent. In the free private sector, there is high adoption, with **60%** of respondents using devices in most classes, though **20%** show irregular use. In the non-free private sector, **67.4%** of respondents use devices in most classes, indicating strong integration with limited irregular use (**8.7%**).

Mount Lebanon (Non-Suburbs):

Usage is largely irregular (**48.7%**), with only **2.6%** of respondents using devices in most classes, indicating significant room for improvement. In the free private sector, adoption is excellent, with **80%** of respondents using devices in most classes. In the non-free private sector, over half (**52.6%**) of respondents use devices in most classes, though **15.8%** show irregular use.

North:

Usage varies, with **30.5%** of respondents using devices irregularly and only **10.2%** using them in most classes. Investment in consistent usage is needed. In the free private sector, adoption is balanced, with equal percentages (**25%**) across all usage levels. In the non-free private sector, adoption is moderate, with **29.0%** using devices in most classes, though **22.6%** use them irregularly. In UNRWA respondents, half (**50%**) use devices in most classes, reflecting limited but improving adoption.

Bekaa:

Usage is low but improving, with **40%** of respondents using devices irregularly and only **10%** using them in most classes. In the free private sector, usage is evenly split, with **50%** of respondents using devices in most classes and **50%** not using them at all. In the non-free private sector, adoption is strong, with **43.8%** of respondents using devices in most classes, though **31.3%** show irregular use.

South:
Usage is fragmented, with **26.2%** using devices rarely and only **14.3%** using them in most classes. Focus on consistent adoption is needed. In the free private sector, there is significant variation, with **40%** of respondents using devices in most classes and **40%** rarely using them. In the non-free private sector, half (**50%**) of respondents use devices in some classes, while **33.3%** use them in most classes.

Nabatiyeh:
Usage is largely irregular (**37.5%**) or rare (**25%**), with no significant regular use. In the free private sector, adoption is strong, with **50%** of respondents using devices in most classes. In the non-free private sector, stable usage is observed, with **36.4%** using devices in most classes and **18.2%** irregularly.

Akkar:
Usage is low, with **30.8%** not using devices and **30.8%** using them in some classes only, while only **3.8%** use them in most classes, reflecting substantial underutilization. In the free private sector, adoption is moderate, with **66.7%** of respondents using devices in some classes. In the non-free private sector, usage is fragmented, with **30.8%** of respondents using devices in some classes and **30.8%** using them irregularly, while only **7.7%** use them in most classes.

Baalbek-Hermel:
Usage is rare, with **44.4%** not using devices and only **16.7%** using them in most classes, necessitating focused intervention. In the free private sector, half (**50%**) of respondents use devices in most classes, while the other half show no usage at all. In the non-free private sector, adoption is strong, with **54.5%** using devices in most classes, though **36.4%** remain irregular users.

General Conclusions:
- The **public education sector** shows largely irregular usage across all regions, with some progress in Beirut, Mount Lebanon (suburbs), and the South. Regions like Akkar and Baalbek-Hermel require urgent attention.
- **Free private respondents** generally exhibit high adoption rates, particularly in Beirut, Mount Lebanon (non-suburbs), and Nabatiyeh, though inconsistencies remain, especially in Akkar and the South.
- **Non-free private respondents** show strong integration, especially in Beirut, Mount Lebanon (suburbs), and Bekaa, but need focused improvement in regions like Akkar and the North.
- **UNRWA respondents** lack sufficient adoption, with only **50%** of users leveraging digital devices, highlighting the need for greater investment and infrastructure improvements.

Fourth Response : Teacher (Question No. 17)

According to overall results, 11.3% of respondents do not use technological devices at all, 11.6% use them rarely, 29.0% use them without a specific pattern, 18.5% use them regularly in some classes, and 29.6% use them regularly in most classes.

When analyzing usage by education sector, in the public sector, 11.7% of respondents do not use technological devices, 13.5% use them rarely, 35.3% use them without a specific pattern, 20.7% use them regularly in some classes, and 18.8% use them regularly in most classes. In the free private sector, 8.6% of respondents do not use technological devices, 14.4% use them rarely, 34.4% use them without a specific pattern, 17.2% use them regularly in some classes, and 25.4% use them regularly in most classes. In the non-free private sector, data shows that 11.3% of respondents do not use technological devices, 7.7% use them rarely, 17.3% use them without a specific pattern, 15.5% use them regularly in some classes, and 48.1% use them regularly in most classes. In UNRWA respondents, 16.7% do not use technological devices, 16.7% use them rarely, 50.0% use them without a specific pattern, 16.7% use them regularly in some classes, and 0.0% use them regularly in most classes.

Analyzing usage by governorates reveals notable disparities. In Beirut, 8.2% of respondents do not use technological devices, 5.2% use them rarely, 24.7% use them without a specific pattern, 16.5% use them regularly in some classes, and 45.4% use them regularly in most classes. In Mount Lebanon (suburbs), 13.9% of respondents do not use technological devices, 6.2% use them rarely, 17.0% use them without a specific pattern, 15.4% use them regularly in some classes, and 47.5% use them

regularly in most classes. In Mount Lebanon (excluding suburbs), 9.7% of respondents do not use technological devices, 8.6% use them rarely, 20.6% use them without a specific pattern, 23.4% use them regularly in some classes, and 37.7% use them regularly in most classes.

In the North governorate, 13.1% of respondents do not use technological devices, 15.5% use them rarely, 31.8% use them without a specific pattern, 18.2% use them regularly in some classes, and 21.4% use them regularly in most classes. In the Bekaa governorate, 4.8% of respondents do not use technological devices, 13.3% use them rarely, 34.6% use them without a specific pattern, 14.9% use them regularly in some classes, and 32.4% use them regularly in most classes. In the South governorate, 12.4% of respondents do not use technological devices, 14.8% use them rarely, 29.6% use them without a specific pattern, 22.5% use them regularly in some classes, and 20.7% use them regularly in most classes.

In Nabatieh governorate, data indicates that 4.2% of respondents do not use technological devices, 6.6% use them rarely, 34.1% use them without a specific pattern, 21.0% use them regularly in some classes, and 34.1% use them regularly in most classes. In Akkar governorate, 17.1% of respondents do not use technological devices, 15.1% use them rarely, 36.7% use them without a specific pattern, 17.1% use them regularly in some classes, and 13.9% use them regularly in most classes. In Baalbek-Hermel, 8.5% of respondents do not use technological devices, 14.4% use them rarely, 35.6% use them without a specific pattern, 22.0% use them regularly in some classes, and 19.5% use them regularly in most classes.

Question: Is any of the following used to support the educational process?
Item Three: National Electronic Book
Response One: Principal (Question 28)

Public Education Sector:
The public education sector shows a variety of usage of the national electronic book among respondents. In Beirut, 50% of respondents do not use the electronic book at all, while 25% use it regularly in most classes. In the North, 54.3% of respondents do not use the electronic book, with a significant decrease in the percentage using it regularly. In the Bekaa, 38.5% of respondents do not use it, and only 7.7% use it regularly.

Free Private Education Sector:
The free private education sector shows varied usage of the electronic book. In Beirut, all respondents use the electronic book regularly in most classes. In the South, 100% of respondents do not use the electronic book, indicating a significant gap in this sector.

Non-Free Private Education Sector:
In the non-free private education sector, Beirut shows that 66.7% of respondents do not use the electronic book, while 11.1% use it regularly in most classes. In the North, the majority (61.5%) do not use the book, with a decline in regular usage rates.

UNRWA Sector:
In the UNRWA sector, 50% of respondents in the South use the national electronic book regularly in some classes, while the remaining respondents are spread between intermittent use and non-usage.

By Governorates:
In Beirut, 55.6% of respondents do not use the electronic book, while only 11.1% use it regularly in most classes. In Mount Lebanon Suburbs, 36.7% of respondents do not use the book, with regular usage in 20.4% of respondents. In the North, 54.5% of respondents do not use the electronic book, reflecting a significant gap. In the South, the rates are close between non-usage and regular usage in some classes, with 36% of respondents not using the electronic book at all.

Conclusions:

1. Beirut faces a significant gap in the use of the electronic book, despite a small percentage of respondents using it regularly.
2. Mount Lebanon Suburbs show variation among respondents in the use of the electronic book, with moderate rates of regular usage.
3. The North struggles with a large gap in the use of the electronic book, with most respondents not using it at all.
4. The South presents clear challenges, with a notable percentage of respondents not using the electronic book.

Second response: Supervisor (Question 20)

General Situation:

Public Sector:

The data indicates that 38.2% of supervisors reported that teachers do not use the national electronic book at all, while 24% use it rarely. Additionally, 17.5% use it without a defined frequency, 15.2% in some classes, and only 5.1% rely on it regularly in most classes.

Free Private Sector:

48.4% of supervisors reported using the electronic book regularly, while 6.5% use it rarely. 16.1% rely on it without a defined frequency, 12.9% in some classes, and 16.1% use it regularly in most classes.

Non-Free Private Sector:

The data indicates that 38.5% of supervisors confirmed that the electronic book is not used, while 16.2% use it rarely. Additionally, 13.7% use it without a defined frequency, 16.2% in some classes, and 15.4% rely on it in most classes.

UNRWA:

Specific details for the UNRWA sector were not mentioned directly, but general trends reflect a similar variation to other sectors.

By Governorates in Each Sector:

Public Sector:
- Beirut: 36.4% do not use the electronic book, and 36.4% use it rarely.
- Mount Lebanon Suburbs: 35.3% do not use it, and 11.8% use it rarely.
- North: 50% do not use the book.
- Bekaa: 22.2% do not use it, and 27.8% use it rarely.

Free Private Sector:
- Beirut: 100% use it without a defined frequency.
- North: 80% do not use it.
- South: 50% do not use it, and 50% rely on it in most classes.

Non-Free Private Sector:
- Beirut: 22.2% do not use it, and 33.3% rely on it in some classes.
- Mount Lebanon: 31.3% do not use it, and 12.5% use it regularly.
- North: 38.9% do not use it, and 16.7% use it in most classes.

Conclusion:

The public sector faces significant challenges in the use of the electronic book compared to the non-free private sector.

Regions like North, Bekaa, Akkar, and Baalbek show high rates of non-usage, while South and Nabatieh record higher usage rates.

The free private sector in Beirut and Mount Lebanon showcases high usage rates, while the North registers lower percentages.

Third Response: Coordinator (Question 19)

In Beirut, the public education sector shows that 22.2% of teachers do not use the electronic book at all, 22.2% use it rarely, and 33.3% use it but without a specific frequency. Meanwhile, 22.2% use it regularly in most classes. There is a moderate distribution of usage. In the free private sector, all teachers in private respondents (free) in Beirut use the electronic book, with 100% reporting its usage.

In the non-free private sector, 33.3% do not use the book at all, 16.7% use it rarely, and 25% use it regularly in most classes.

In Mount Lebanon suburbs, the public education sector shows that 17.6% of teachers do not use the book at all, 29.4% use it rarely, and 29.4% use it sometimes, while 23.5% use it regularly in some classes. The use of the book is moderate but less consistent compared to Beirut. In the free private sector, 40% of respondents use the book rarely, while 60% use it regularly in most classes. In the non-free private sector, 30.4% do not use the book, while 26.1% use it regularly in most classes.

In Mount Lebanon excluding suburbs, 23.1% do not use the book, 17.9% use it rarely, and 35.9% use it sometimes, while only 7.7% use it regularly in most classes. In the free private sector, 20% do not use the book at all, while 40% use it regularly. In the non-free private sector, 21.1% do not use the book, and 31.6% use it sometimes, while only 5.3% use it regularly.

In the North, usage is clear, with 35.6% not using the book, 15.3% using it rarely, and 20.3% using it sometimes. Meanwhile, 18.6% use it regularly in some classes, and 10.2% use it regularly in most classes. In the free private sector, 75% of teachers do not use the book, while 25% use it regularly. In the non-free private sector, a large proportion (51.6%) do not use it, while 19.4% use it sometimes. In UNRWA, 50% of teachers use the book regularly in most classes, with the remaining 50% using it sometimes.

In Bekaa, the public education sector shows that 20% of teachers do not use the book at all, 20% use it rarely, and 30% use it sometimes, while 15% use it regularly in some classes, and another 15% use it regularly in most classes. For the free private sector, 50% of teachers do not use the book rarely, while the other 50% use it regularly. In the non-free private sector, 31.3% do not use it, while 25% use it.

In the South, data shows that 33.3% of teachers do not use the book, 11.9% use it rarely, and 26.2% use it sometimes, while 21.4% use it regularly in some classes, and only 7.1% use it regularly in most classes. For the free private sector, 20% of teachers do not use the book rarely, while 40% use it sometimes, and 20% use it regularly in most classes.

In Nabatieh, usage shows that 37.5% of teachers do not use the book, 18.8% use it rarely, while 37.5% use it sometimes. For the free private sector, there is strong adoption, with 50% of teachers using the book regularly in most classes, while the other 50% use it sometimes.

In Akkar, usage is low, with 46.2% of teachers not using the book, 23.1% using it rarely, and 11.5% using it sometimes, while only 19.2% use it regularly in some classes.

For Baalbek-Hermel, usage is rare, with 44.4% of teachers not using the book, 16.7% using it rarely, 16.7% using it sometimes, and only 11% using it regularly.

Conclusion:

Southern and northern governorates (South, North, Nabatieh, Akkar) show higher percentages of teachers not using the electronic book at all, with a significant portion of respondents reporting limited or irregular usage across sectors.

Beirut displays a balanced pattern with a moderate percentage of teachers using the electronic book regularly, especially in the private sector.

Free private respondents show higher adoption rates, with most teachers using the book regularly, especially in Beirut and Mount Lebanon.

Public schools respondents exhibit a diverse usage pattern, with some governorates reaching close to 50% not using the book (Akkar and Baalbek-Hermel), while others show more consistent adoption (like Beirut and Mount Lebanon suburbs).

Fourth Response: Teacher (Question 18)

 The general results indicate that 32.0% of teachers do not use the national electronic book at all, 15.0% rarely use it, 24.1% use it without a defined frequency, 13.8% use it regularly in some classes, and 15.0% use it regularly in most classes.

Usage Analysis by Education Sector:
- **Public Sector**: 26.6% of teachers do not use the national electronic book, 16.2% rarely use it, 28.2% use it without a defined frequency, 15.0% use it regularly in some classes, and 13.9% use it regularly in most classes.

- **Free Private Sector**: 42.6% of teachers do not use the national electronic book, 15.3% rarely use it, 22.0% use it without a defined frequency, 12.9% use it regularly in some classes, and 7.2% use it regularly in most classes.
- **Non-Free Private Sector**: 37.0% of teachers do not use the national electronic book, 12.8% rarely use it, 18.7% use it without a defined frequency, 12.2% use it regularly in some classes, and 19.3% use it regularly in most classes.
- **UNRWA**: 33.3% of teachers do not use the national electronic book, 25.0% rarely use it, 16.7% use it without a defined frequency, 16.7% use it regularly in some classes, and 8.3% use it regularly in most classes.

Governorate Breakdown:
- **Beirut**: 34.0% of teachers do not use the national electronic book, 13.4% rarely use it, 16.5% use it without a defined frequency, 18.6% use it regularly in some classes, and 17.5% use it regularly in most classes.
- **Mount Lebanon Suburbs**: 29.6% of teachers do not use the national electronic book, 8.6% rarely use it, 23.1% use it without a defined frequency, 11.4% use it regularly in some classes, and 27.2% use it regularly in most classes.
- **Mount Lebanon (excluding suburbs)**: 28.0% of teachers do not use the national electronic book, 14.3% rarely use it, 23.4% use it without a defined frequency, 18.9% use it regularly in some classes, and 15.4% use it regularly in most classes.
- **North**: 36.2% of teachers do not use the national electronic book, 18.4% rarely use it, 24.3% use it without a defined frequency, 11.4% use it regularly in some classes, and 9.7% use it regularly in most classes.
- **Bekaa**: 25.0% of teachers do not use the national electronic book, 17.6% rarely use it, 25.5% use it without a defined frequency, 16.5% use it regularly in some classes, and 15.4% use it regularly in most classes.
- **South**: 30.8% of teachers do not use the national electronic book, 17.2% rarely use it, 24.9% use it without a defined frequency, 12.4% use it regularly in some classes, and 14.8% use it regularly in most classes.
- **Nabatieh**: 25.1% of teachers do not use the national electronic book, 15.0% rarely use it, 26.3% use it without a defined frequency, 17.4% use it regularly in some classes, and 16.2% use it regularly in most classes.
- **Akkar**: 43.8% of teachers do not use the national electronic book, 14.3% rarely use it, 22.7% use it without a defined frequency, 11.6% use it regularly in some classes, and 7.6% use it regularly in most classes.
- **Baalbek-Hermel**: 26.3% of teachers do not use the national electronic book, 16.9% rarely use it, 30.5% use it without a defined frequency, 15.3% use it regularly in some classes, and 11.0% use it regularly in most classes.

Conclusion:

There is a notable variation in the use of the national electronic book across different governorates, with some regions like Akkar and Baalbek-Hermel showing high non-use rates, while Beirut and Mount Lebanon suburbs exhibit more consistent usage. Additionally, free private teachers show higher adoption rates compared to non-free private and public sectors.

Question: How do you describe each of the following to support the educational process?
Point One: The proficiency of most teachers in technological skills
Response One: Principal (Question No. 29)
In the public education sector, the percentages show that 3.4% of teachers are completely unsuitable, 41.5% need development, 32.7% are at an acceptable level, 17.0% are good, and 5.4% are very good.

In the free private education sector, the percentages vary, where 3.3% are completely unsuitable, 23.3% need development, 20.0% are acceptable, 36.7% are good, and 16.7% are very good. In the non-free private education sector, 6.1% are completely unsuitable, 15.3% need development, 43.9% are acceptable, 34.7% are good, and 0% are very good. In the UNRWA sector, evaluations show that 0% are completely unsuitable, 25.0% need development, 25.0% are acceptable, 50.0% are good, and 0% are very good.

In the overall total for all sectors, 2.2% of teachers are completely unsuitable, 26.9% need development, 24.7% are acceptable, 29.0% are good, and 17.2% are very good.

When comparing educational sectors, it appears that the public education sector faces significant challenges in technological skills, with notable gaps in the north and Akkar regions. The free private education sector shows relatively balanced performance with superiority in the south. The non-free private education sector excels, especially in Beirut and Mount Lebanon excluding suburbs. The UNRWA sector requires improvements, but it presents positive indicators, especially in the south.

At the governorates level, Beirut shows that 50% of respondents rate proficiency as "acceptable," and 25% describe it as "good." In Mount Lebanon (suburbs), percentages indicate that 36.4% need development, and 36.4% are at a good level. The north faces a significant shortage, with 60% considering skills needing development. In the south, performance is notable, with 20% considering proficiency as "very good" and 26.7% as "good." In Akkar, 50% need development, and 45% are at an acceptable level.

Conclusions:

1. The public education sector requires significant efforts to develop technological skills, especially in the north and Akkar.
2. The free private education sector makes progress in the south but needs improvements in other areas.
3. The non-free private education sector excels, particularly in Beirut and Mount Lebanon excluding suburbs.
4. UNRWA needs improvements, with some positive indicators in the south.
5. At the governorates level, intensive training is clearly needed in the north and Akkar, while the south shows relatively advanced performance. Beirut and Mount Lebanon suburbs require more efforts to improve teachers' technological skills.

Second Response: Supervisor (Question No. 21)

General Situation:

Public Sector:

The public sector faces a noticeable weakness in technological proficiency, where 32.7% of supervisors reported that teachers need development, and 31.3% fall into the "acceptable" category. In contrast, the percentage of "very good" is low (4.6%), indicating challenges in teacher training. The most affected areas are the north, Baalbek-Hermel, and Akkar.

Free Private Sector:

The free private sector shows good performance overall, with 64.5% of supervisors rating teachers' technological skills as "good," and 19.4% as "very good." Meanwhile, 3.2% consider them entirely unsuitable. Percentages varied by region: in Beirut, 100% of supervisors rated teachers' proficiency as "very good"; in Nabatieh, Akkar, and Baalbek, 100% rated it as "good." In Mount Lebanon suburbs, there is a relatively balanced distribution between categories, indicating a stable but slightly varied situation.

Non-Free Private Sector:

This sector performs the best, with 37.6% of supervisors rating teachers' technological proficiency as "very good," and 41.9% rating it as "good." In contrast, 13.7% considered it "acceptable," and only 6.8% indicated a need for development.

UNRWA:

Technological proficiency in UNRWA shows variation in ratings, with 33.3% categorized as "acceptable," and 66.7% as "good." This indicates a stable training environment.

By Region in Each Sector:

Public Sector:

In Beirut, 18.2% of teachers need to improve their technological skills, while 36.4% rate their proficiency as "acceptable." The percentage of teachers rated as "very good" is only 9.1%, indicating a clear gap in technological proficiency. In Mount Lebanon suburbs, a significant portion of teachers, 29.4%, require development, with 35.3% rating them as "acceptable." The percentage of teachers rated as "very good" is 11.8%, reflecting the need for more training and improvement in this region. In the north and Beka'a, the north shows the greatest need for technological skill development, with 47.4% requiring improvement, while 31.6% rate proficiency as "acceptable." In Beka'a, 44.4% of teachers need development, while 50% rate their skills as "acceptable," indicating relative improvement compared to the north. In Baalbek-Hermel, this region is the most affected, with 41.2% of teachers needing development, with very low ratings for "good" and "very good."

Free Private Sector:

In Beirut, all supervisors rated teachers' technological proficiency as "very good." In Mount Lebanon suburbs, proficiency is evenly distributed, with 20% considering teachers' skills as unsuitable, 60% rating them as good, and 20% as very good. In the south, ratings were balanced between "acceptable" and "very good," with equal percentages of 50% for each category. In Nabatieh, Akkar, and Baalbek-Hermel, 100% of supervisors rated teachers as "good," reflecting high or extremely positive self-assessments of teachers in these areas.

Non-Free Private Sector:

In Beirut, data shows a relatively balanced evaluation, with 22.2% of teachers needing development, 44.4% rating proficiency as "acceptable," and 33.3% as "very good." In Mount Lebanon suburbs, technological proficiency is "very good" for 43.8% of teachers, the highest among regions. In the north, high percentages of teachers needing development were observed, with 11.1%, compared to Beka'a. In the south, technological proficiency is "very good" for 71.4% of teachers, the highest among regions. In Nabatieh, an extremely positive evaluation is observed, with 80% of teachers rated as "good" and 20% as "very good." In Akkar, 33.3% of supervisors reported that teachers need development.

UNRWA:

Technological proficiency in UNRWA shows variation, with 100% rated as "acceptable" and 100% rated as "good." This indicates stable training.

Conclusion:

Comparing educational sectors, there is a significant disparity in technological proficiency levels. The non-free private sector stands out as the highest-performing sector, with 37.6% of supervisors rating teachers' proficiency as "very good," reflecting a relatively advanced level compared to other sectors. On the other hand, the public sector shows low levels of technological proficiency, with 32.7% of supervisors reporting a need for teacher development and 31.3% rating them as "acceptable," indicating major challenges in training within this sector.

In the free private sector, there are improvements in performance in some regions, with high percentages of teachers rated as "very good," especially in Beirut. Meanwhile, UNRWA maintains a stable but not high-performance level, with proficiency ratings concentrated between "acceptable" and "good."

Regionally, areas such as the north, Baalbek-Hermel, and Akkar are in urgent need of technological skill development within the public sector. Conversely, the free private sector has shown more positive evaluations in most regions, especially in Nabatieh, Akkar, and Baalbek, where 100% rated teachers as "good."

Overall, the non-free private sector demonstrates the lowest percentage of teachers needing development, with noticeable variation across regions, while the public sector struggles with a clear gap in technological proficiency, necessitating increased focus on training and skill improvement in this area.

Third response: Coordinator (Question No. 20)

In **Beirut**, the majority of coordinators (55.6%) describe teachers' technological skills as "acceptable." Meanwhile, 33.3% rate them as "good," and only 11.1% feel they need development. No teachers are rated as having "unsuitable" or "very good" skills.

In the free private sector, 100% of coordinators rate teachers' skills as either "good" or "very good," with no lower categories chosen. In the non-free private sector, the evaluations are relatively diverse, with 58.3% rating skills as "acceptable," 25% as "good," 8.3% as needing development, and 8.3% as "unsuitable."

In **Mount Lebanon suburbs**, 47.1% of coordinators rate teachers' skills as "good," while 41.2% consider them "acceptable," and only 11.8% feel they need development. In the free private sector, 40% of coordinators rate skills as "good," and 40% as "very good," showing a relatively high level of proficiency. In the non-free private sector, a significant percentage (65.2%) rate skills as "acceptable," with 23.9% rating them as "good."

In **Mount Lebanon (excluding suburbs)**, 38.5% of coordinators feel that teachers' skills need development, 30.8% rate them as "acceptable," and 28.2% as "good." In the free private sector, 40% of teachers' skills are rated as "acceptable," while 60% are rated as "good," showing a positive trend in proficiency. In the non-free private sector, skills are considered "acceptable" (36.8%) or "good" (36.8%) by most coordinators.

In **the north**, 52.5% of coordinators feel that teachers' skills need development, while 25.4% rate them as "acceptable," and 16.9% as "good." Only 3.4% consider their skills "unsuitable." In the free private sector, 25% of coordinators rate teachers' skills as "acceptable," while 50% rate them as "good." In the non-free private sector, 41.9% consider skills "good," and 29% "acceptable."

In **Beka'a**, a large number of coordinators (45%) rate teachers' skills as "acceptable," with 35% saying they need development, and 20% rating them as "good." In the free private sector, all coordinators (100%) rate teachers' technological skills as "good." In the non-free private sector, 56.3% rate skills as "good," while 18.8% rate them as "acceptable."

In **the south**, most coordinators (52.4%) feel that teachers' skills need development, while 26.2% rate them as "acceptable." Only 16.7% consider their skills "good," and 4.8% as "very good." In the free private sector, 60% rate skills as "good," with 20% in each of the categories "development needed" and "acceptable." In the non-free private sector, 50% of coordinators rate skills as "good," and 33.3% as "acceptable."

In **Nabatieh**, 43.8% of coordinators feel teachers' skills need development, with 25% rating them as "acceptable," and only 6.3% as "good." In the free private sector, half of the coordinators (50%) rate skills as "good," while the other half as "very good." In the non-free private sector, 63.6% rate skills as "needing development," and 27.3% rate them as "good."

In **Akkar**, 53.8% of coordinators believe teachers' skills need development, while 30.8% rate them as "acceptable," and 11.5% as "good." In the free private sector, 66.7% rate skills as "good," and 33.3% as "very good." In the non-free private sector, 38.5% consider skills "unsuitable," with 30.8% saying they need development.

In **Baalbek-Hermel**, a large number (44.4%) rate teachers' skills as "needing development," with 16.7% rating them as "acceptable," and 11.1% as "good." In the free private sector, 50% rate skills as "good," and the other half as "very good." In the non-free private sector, 63.6% rate skills as "acceptable," and 27.3% as "good."

General Conclusions:

Public schools respondents show a significant gap in technological proficiency, with many teachers in rural and underserved areas needing development (especially in the north, south, and Akkar). This is less common in urban areas such as Beirut and Mount Lebanon.

Free private respondents generally report high proficiency in technological skills, with many teachers rating their skills as "good" or "very good."

For non-free private respondents, teachers show a range of proficiency levels, but a significant percentage rate their skills as "good" or "acceptable."

UNRWA data also indicates balanced ratings, with 50% rating skills as "good" and the remaining 50% as "very good," suggesting a stable level of technological proficiency.

- **Beirut** and **Mount Lebanon suburbs** show a good level of technological proficiency among teachers.
- **North** and **Beka'a** show lower rates of technological proficiency, with a mixed distribution of ratings.
- **South** and **Nabatieh** display a mix of ratings between "good" and "acceptable" for technological skills.

Fourth Response: Teacher (Question No. 19)

Overall, 31.5% of teachers are described as having "good" technological skills, 25.2% are considered "acceptable," 21.7% need development, 19.8% are "very good," and 1.7% are considered "unsuitable at all."

Analyzing skills by sector, in the public schools sector, 31.0% of teachers need development, 32.9% are rated as "acceptable," 26.1% are "good," 7.0% are "very good," and 3.0% are "unsuitable at all." In the free private sector, 20.6% need development, 18.2% are "acceptable," 35.4% are "good," and 25.8% are "very good." In the non-free private sector, 7.8% need development, 15.5% are "acceptable," 38.3% are "good," and 38.0% are "very good." In the UNRWA sector, 25.0% need development, 25.0% are "acceptable," and 50.0% are "good."

When analyzing skills by governorates, in Beirut, 15.5% need development, 21.6% are "acceptable," 50.5% are "good," and 12.4% are "very good." In Mount Lebanon (suburbs), 11.7% need development, 13.9% are "acceptable," 34.6% are "good," and 39.5% are "very good." In Mount Lebanon (excluding suburbs), 14.3% need development, 20.0% are "acceptable," 37.1% are "good," and 27.4% are "very good."

In the north, 26.9% need development, 30.8% are "acceptable," 26.7% are "good," and 12.9% are "very good." In Beka'a, 17.0% need development, 29.8% are "acceptable," 31.4% are "good," and 19.1% are "very good." In the south, 21.9% need development, 32.0% are "acceptable," 30.2% are "good," and 13.6% are "very good."

In Nabatieh, 15.6% need development, 25.7% are "acceptable," 44.3% are "good," and 13.8% are "very good." In Akkar, 36.7% need development, 29.5% are "acceptable," 17.9% are "good," and 13.1% are "very good." Finally, in Baalbek-Hermel, 31.4% need development, 20.3% are "acceptable," 28.8% are "good," and 17.8% are "very good."

Question: How would you describe the following to support the educational process

Item Two: Availability of training and technical support for teachers in using technology

Response One: Principal (Question No. 29)

In the overall public education sector, the results showed that 12.9% described training and support as "unsuitable at all," 43.5% deemed it "needing development," while 25.2% described it as "acceptable," 14.3% as "good," and 4.1% as "very good." In the private free sector, 10.0% of respondents rated support as "unsuitable at all," 23.3% needing development, 16.7% "acceptable," 33.3% "good," and 16.7% "very good." In the non-free private sector, results were better, with no percentage rating it as "unsuitable at all," 8.2% needing development, 18.4% "acceptable," 40.8% "good," and 32.7% "very good." The UNRWA sector showed that 25.0% viewed support as "needing development," while 50.0% rated it as "good," and 25.0% as "very good."

For the overall educational sectors, the results showed that 7.9% rated support as "unsuitable at all," 28.7% needing development, 21.9% "acceptable," 26.2% "good," and 15.4% "very good."

In the public education sector, results varied by regions. In Beirut, 37.5% described support as "acceptable," and 12.5% as "very good." In Mount Lebanon suburbs, 45.5% deemed support "needing development," while in the north, 54.3% viewed it similarly, reflecting a significant challenge.

In the private free sector, the south showed positive results, with 100% of respondents considering training and support "suitable," while in Mount Lebanon suburbs, evaluations were balanced with 25% in each category.

In the non-free private sector, Beirut showed positive results, with 44.4% of respondents describing support as "very good." In Mount Lebanon (excluding suburbs), 50% of respondents rated support as "good," and 40% as "very good."

In the UNRWA sector, evaluations were largely positive, with 50% of respondents rating support as "very good," and 25% as "good" in the south.

Governorates Insights:
- In Beirut, 37.5% rated support as "acceptable," and 12.5% as "very good."
- In Mount Lebanon suburbs, 45.5% rated support as "needing development," and 36.4% as "good."
- In the north, 54.3% consider support needing significant improvement.
- In the south, 26.7% described support as "good."

Conclusions:
1. Beirut shows balanced rates between "acceptable" and "very good."
2. Mount Lebanon suburbs suffer from significant disparity, with a noticeable need for technical support development.
3. The north faces major challenges in providing training and technical support.
4. The south exhibits relatively positive performance, with a large percentage of respondents rating support as "good."
5. The public education sector suffers from significant disparity in technical support, especially in the north where urgent improvement is needed.
6. The private free sector shows relatively balanced performance, with positive results in the south.
7. The non-free private sector displays the best results, particularly in Beirut and Mount Lebanon (excluding suburbs).
8. The UNRWA sector indicates positive indicators but requires comprehensive improvement in technical support across all regions.

Response Two: Supervisor (Question No. 21)

General Situation:

Public sector: The majority of supervisors were distributed between "needing development" (39.2%) and "acceptable" (32.3%). Meanwhile, 17.5% rated it as "good," with a small percentage for "very good" (3.2%), and 7.8% considered it "unsuitable at all," reflecting a weakness in providing training and technical support.

Private free sector: Performance is better than the public sector, with 48.4% of supervisors rating the situation as "good," and 22.6% as "very good," indicating relative stability, with only 6.5% rating it as "unsuitable."

Private non-free sector: Shows a clear superiority, with the "very good" category reaching the highest percentage (40.2%) compared to other sectors, and 37.6% as "good." The "needing development" category was only 6.8%, and 0.9% considered it "unsuitable," indicating high-quality education provided.

UNRWA: Evaluations leaned towards "good" (66.7%) and "acceptable" (33.3%), reflecting a relatively improved provision of training and stable support in the educational sector.

Regarding regions within each sector:
- Beirut: Balanced performance in the public sector between "acceptable" (45.5%) and "good" (27.3%), with a weak "very good" category (9.1%).
- Mount Lebanon suburbs: The situation is acceptable in the public sector (52.9%), while in the private free sector (40% good, 20% very good) and in the non-free private sector (34.4% good, 40.6% very good).

- Mount Lebanon excluding suburbs: The highest percentage in the public sector is "acceptable" at 34.8%, and in the private free sector, the situation is better (50% good, 50% very good), while in the non-free private sector, 50% rated it "very good," and 41.7% "good."
- Bekaa: The situation is acceptable in the public sector (44.4%), while in the private free sector, it is much better (66.7% good, 33.3% very good), and in the non-free private sector, the percentage is split between "good" and "acceptable" (35.7%).
- North: The highest rank is in the "needing development" category (52.6%) in the public sector, reflecting significant challenges. In the private free sector, 60% needed development, while 40% were good. In the non-free private sector, 44.4% were good.
- South: The non-free private sector shows high performance (71.4% "very good"), while in the free private sector, 50% rated it "very good," and 50% "unsuitable at all." In the public sector, 40.6% were acceptable.
- Nabatieh: The free private sector showed good performance (66.7% good, 16.7% very good), with excellent stability in the non-free private sector (60% good, 40% very good), and a decline in the public sector (30.4% good, 39.1% acceptable).
- Akkar: Evaluations in the public sector focused on needing development (50%) and "acceptable" (23.5%), reflecting the need for educational support improvement. Meanwhile, the private sector showed improvement, with 50% good in the free private sector and 44.4% very good in the non-free private sector.
- Baalbek-Hermel: The public sector suffers from noticeable weaknesses, with "needing development" at 52.9%, while in the private free sector, 100% rated it good, and in the non-free private sector, 36.4% rated it very good, and 63.6% good.

For UNRWA respondents, all supervisors in Mount Lebanon suburbs reported good support, and all in the south rated it acceptable.

Conclusion:

The non-free private sector stands out as the best-performing, especially in the south and Nabatieh, while the public sector faces significant weaknesses, particularly in rural areas like the north and Baalbek-Hermel. The free private sector shows relatively stable performance compared to the public sector, and UNRWA plays a positive role as a reliable supporter in the regions it serves. These disparities highlight the urgent need to support the public sector and improve technological skills and infrastructure in the most affected areas.

Response Three: Coordinator (Question No. 20)

In the public sector, Beirut showed that 22.2% of coordinators rated training and technical support as "good," while 55.6% considered it "acceptable." This indicates reliance on moderate resources with room for improvement in support mechanisms. In Mount Lebanon (suburbs), responses were evenly distributed between "acceptable" (35.3%) and "good" (35.3%), with 17.6% indicating a need for development, reflecting mixed perceptions and potential for further training. In Mount Lebanon (excluding suburbs), the majority (53.8%) reported a "need for development," while only 10.3% rated support as "good," suggesting significant gaps in support. In the North, nearly half of the coordinators (49.2%) indicated a "need for development," and 18.6% rated support as "unsuitable at all," highlighting a severe shortage in training. In Bekaa, 60% identified a "need for development," with only 5% rating support as "good." In the South, mixed feedback showed that 38.1% rated support as "acceptable," and another 38.1% saw a need for development, indicating moderate support with notable gaps. In Nabatieh, half of the coordinators (50%) rated support as needing development, with 18.8% considering it "acceptable." In Akkar, a concerning 50% noted a "need for development," and 23.1% rated support as "unsuitable at all," underscoring significant challenges in this governorate. In Baalbek-Hermel, one-third of coordinators (33.3%) indicated a "need for development," while 22.2% rated support as "good," reflecting clear inconsistencies in consistency.

In the free private sector, Beirut showed varied responses, with all distributed between "good" and "very good," indicating high-quality training in this sector. In Mount Lebanon (suburbs), 40% rated support as "good" or "very good," suggesting relatively strong systems. In Mount Lebanon (excluding

suburbs), responses leaned towards "very good" (60%), reflecting robust training mechanisms. In the North, most coordinators (75%) rated support as "very good," showcasing superior provision. In Bekaa, comments were evenly split between "good" and "very good," suggesting consistent support. In the South, responses were mixed, with only 20% rating support as "very good," while others noted moderate or insufficient efficiency. In Nabatieh, evaluations were split between "acceptable" and "very good," reflecting varying perceptions of support. In Akkar, the majority (66.7%) rated support as "very good," demonstrating commendable performance. In Baalbek-Hermel, responses were divided, with 50% considering support "unsuitable at all" and 50% "very good," reflecting disparities in access.

In the non-free private sector, most coordinators rated support as "good" (33.3%) or "very good" (41.7%), highlighting high resource quality in urban private institutions. In Mount Lebanon (suburbs), nearly half (47.8%) rated support as "very good," showcasing reliable systems. In Mount Lebanon (excluding suburbs), responses leaned towards "good" (31.6%) and "very good" (42.1%), suggesting relatively strong performance. In the North, the majority (41.9%) rated support as "good," with substantial appreciation for existing supportive systems. In Bekaa, half (50%) rated support as "very good," indicating well-established programs. In the South, the highest ratings were in this sector, with 66.7% considering support "very good," reflecting exemplary systems. In Nabatieh, responses varied, with 45.5% rating support as "acceptable," highlighting fewer high ratings. In Akkar, feedback was less positive, with only 7.7% rating support as "very good," while many chose "acceptable." In Baalbek-Hermel, nearly half (45.5%) rated support as "very good," indicating strong but inconsistent training.

In UNRWA, responses were divided, with 50% rating support as "unsuitable at all," and 50% "very good" in North Lebanon, reflecting disparities in service delivery.

General Conclusions

Quality of training and technical support appears highest in the non-free and free private sectors, with consistent ratings of "good" or "very good." The public sector faces significant challenges, particularly in regions like Akkar, North, and Bekaa, where "need for development" and "unsuitable at all" are prevalent. Urban areas like Beirut and Mount Lebanon generally have better infrastructure and more effective support systems, while rural and peripheral areas show critical gaps.

2. The free private sector shows better performance overall compared to the public sector, with high ratings for "good" and "very good."

3. The non-free private sector consistently outperforms other sectors, with most responses rating support as "good" or "very good."

4. UNRWA exhibits significant variation, with equal proportions of "unsuitable at all" and "very good," highlighting differences in service delivery.

Response Four: Teacher (Question No. 19)

Regarding the general results, 24.0% of teachers described the level of support and training they receive as "good," and 21.7% considered it "acceptable." Additionally, 27.5% see a need for development, 19.6% rated it as "very good," while 7.2% rated it as "unsuitable at all."

In the public sector, 38.5% believe that support needs development, and 27.4% described it as "acceptable." Meanwhile, 18.3% rated it as "good," 4.5% as "very good," and 11.2% rated it as "unsuitable at all." In the free private sector, 25.4% identified a need for development, 13.4% rated it as "acceptable," 26.8% as "good," 29.2% as "very good," and 5.3% rated it as "unsuitable at all."

In the non-free private sector, results were relatively positive, with only 11.0% seeing a need for development, 15.7% rating it as "acceptable," 31.7% as "good," and 40.0% as "very good," with just 1.7% considering it "unsuitable at all." In the UNRWA sector, 41.7% said support needs development, 8.3% rated it as "acceptable," 33.3% as "good," 8.3% as "very good," and another 8.3% rated it as "unsuitable at all."

By governorate:

- In Beirut, 23.7% believe support needs development, 20.6% rated it as "acceptable," 38.1% as "good," 13.4% as "very good," and 4.1% rated it as "unsuitable at all."

- In Mount Lebanon (suburbs), 14.5% see a need for development, 15.4% rated it as "acceptable," 28.7% as "good," and 39.2% as "very good," with 2.2% considering it "unsuitable at all."
- In Mount Lebanon (excluding suburbs), 18.3% identified a need for development, 20.6% rated it as "acceptable," 34.3% as "good," 23.4% as "very good," and 3.4% rated it as "unsuitable at all."

In the North, 33.0% see a need for development, 22.8% rated it as "acceptable," 18.7% as "good," 14.1% as "very good," and 11.4% rated it as "unsuitable at all." In Bekaa, 25.0% believe support needs development, 22.3% rated it as "acceptable," 25.0% as "good," 17.6% as "very good," and 10.1% rated it as "unsuitable at all."

In the South, 34.9% see a need for development, 23.1% rated it as "acceptable," 18.3% as "good," 15.4% as "very good," and 8.3% rated it as "unsuitable at all." In Nabatieh, 20.4% believe support needs development, 31.7% rated it as "acceptable," 28.1% as "good," 14.4% as "very good," and 5.4% rated it as "unsuitable at all."

In Akkar, 39.8% see a need for development, 21.5% rated it as "acceptable," 17.9% as "good," 10.0% as "very good," and 10.8% rated it as "unsuitable at all." In Baalbek-Hermel, 38.1% see a need for development, 20.3% rated it as "acceptable," 16.1% as "good," 22.0% as "very good," and 3.4% rated it as "unsuitable at all."

How would you describe the support for the educational process?
Section Three: Availability of Maintenance and Update of Electronic Devices
Response One: Principal (Question No. 29)

Overall, 31.3% of respondents see maintenance and updates as "unsuitable at all," and 38.8% believe it "needs improvement." Additionally, 20.4% rate it as "acceptable," while only 6.8% see it as "good," and 2.7% describe it as "very good."

In the free private education sector, the situation is relatively better, with only 6.7% considering maintenance "unsuitable at all," and 23.3% indicating it "needs improvement." Meanwhile, 20.0% rate it as "acceptable," 36.7% as "good," and 13.3% as "very good."

The non-free private education sector receives the best evaluation, with no respondents rating maintenance as "unsuitable at all." Only 11.2% believe it "needs improvement," while 17.3% rate it as "acceptable," 36.7% as "good," and 34.7% as "very good."

When combining data from all educational sectors, 17.2% of respondents describe maintenance and updates as "unsuitable at all," 27.6% see it "needs improvement," 19.4% rate it as "acceptable," 20.8% as "good," and 15.1% as "very good."

In the public education sector, there are significant disparities. In Beirut, half of the respondents rate maintenance as "unsuitable at all," while only 12.5% see it as "very good." In Mount Lebanon suburbs, 36.4% rate it as "acceptable," and 27.3% indicate a need for improvement. In the North, 45.7% of respondents see maintenance as "needs improvement," indicating significant challenges.

In the free private education sector, the South demonstrates outstanding performance with 100% of respondents rating maintenance and updates as "appropriate." Conversely, Beirut shows a balanced evaluation, leaning towards positive results.

The non-free private sector enjoys very positive evaluations. In Beirut, 55.6% of respondents rate maintenance as "very good," and in Mount Lebanon excluding suburbs, 30% describe it as "very good."

In the UNRWA sector, there is significant variation. In the South, 50% of respondents rate maintenance as "good," while 25% see it as "needs improvement."

By governorate:

- In Beirut, half of the respondents consider maintenance "unsuitable at all," while 33.3% describe it as "very good."
- In Mount Lebanon suburbs, 34.7% of respondents rate maintenance as "good," and only 8.2% consider it "unsuitable."
- In the North, 45.7% of respondents see maintenance as "needs improvement."
- In the South, there is a noticeable balance with 32% rating maintenance as "acceptable," and 12% as "very good."

Conclusions:
1. Public education faces significant disparities, with a pressing need for improvement in maintenance in the North and Mount Lebanon suburbs.
2. Free private education shows positive results in the South but requires enhancements in other regions.
3. Non-free private education is the most positively rated sector, especially in Beirut.
4. The UNRWA sector requires better digital infrastructure across all regions.

At the governorates level:
1. Beirut faces significant disparities in device maintenance and updates.
2. Mount Lebanon suburbs show moderate to good evaluations with a need for improvement in maintenance.
3. The North suffers from a significant lack of maintenance and updates for technical devices.
4. The South demonstrates relatively good performance with a noticeable balance in evaluations between "acceptable" and "very good."

Response Two: Supervisor (Question No. 21)

Overall Situation:

Public Education:

The data reflects significant challenges in maintaining and updating electronic devices in public respondents. Approximately 24.4% of supervisors consider the situation "unsuitable at all," indicating a severe lack or complete absence of maintenance. Additionally, 34.6% believe the situation "needs improvement," showing a need for enhancement despite not reaching crisis levels.

29% view the situation as "acceptable," but below expectations, while only 12% consider it "good" or "very good," reflecting a limited number of respondents with strong technical infrastructure.

Free Private Education:

The data highlights a variance in supervisors' evaluations of maintenance and updates of electronic devices in free private respondents, revealing disparities in technological infrastructure quality across governorates. 16.1% of supervisors believe the situation "needs improvement," while 22.6% rate it as "acceptable." Meanwhile, 38.7% consider it "good," suggesting some improvement, though 22.6% still find the devices in "very good" condition.

Non-Free Private Education:

Data on supervisors' evaluations in non-free private education regarding maintenance and updates of electronic devices and programs shows a relatively positive trend with regional disparities. Only 0.9% rated the situation as "unsuitable at all," indicating minimal significant issues in this sector. On the other hand, 7.7% believe it "needs improvement," a low percentage in comparison. Additionally, 12.8% consider the situation "acceptable," showing some respondents require further attention despite progress. Meanwhile, 36.8% rate it as "good," and 41.9% as "very good," indicating that most respondents in the non-free private sector provide a well-equipped and up-to-date technological environment supporting effective education.

UNRWA:

100% of supervisors rated it as "acceptable."

By Governorate in Each Sector:
- **Beirut**: Records the highest percentage in the "unsuitable at all" category in public education (36.4%), but achieves 100% "good" in free private education and 55.6% "very good" in non-free private education.

- **Mount Lebanon – Suburbs**: Shows moderate to good performance across all sectors.
- **North**: Struggles notably in public education (28.9% unsuitable), but improves in non-free private education (38.9% very good) and free private education (40% very good).
- **Bekaa**: Faces significant shortcomings in public education but achieves 66% "good" in free private education.
- **South**: Demonstrates an acceptable performance in public education with a high percentage of "acceptable" (37.5%), balanced between "good" and "very good" in private education sectors.
- **Akkar and Baalbek-Hermel**: Show high levels of weakness in both public and free private education with a notable lack of technical updates.

Conclusion:
- **Public Education**: Faces significant regional disparities, with pronounced shortcomings in Beirut and Akkar.
- **Free Private Education**: Achieves a balanced level of acceptability in most governorates, although Baalbek-Hermel requires comprehensive development.
- **Non-Free Private Education**: Generally demonstrates better performance compared to other sectors, particularly in Beirut and Mount Lebanon.
- **UNRWA**: Consistently rated as "acceptable," though not reaching higher levels of "very good."

Response Three: Coordinator (Question No. 20)

In Public Sector:

In Beirut, 22.2% of coordinators rated the maintenance of electronic devices as "unsuitable at all," while 44.4% believe it "needs improvement." Only 33.3% found it "acceptable." For technical support teams, 33.3% stated it was "unsuitable at all," and 44.4% suggested it "needs improvement." No responses indicated it was "good" or "very good." These results indicate a significant gap in both maintenance and technical support, requiring urgent attention to infrastructure and basic services.

In Mount Lebanon (suburbs), nearly half (47.1%) of coordinators believe maintenance "needs improvement," with only 23.5% rating it as "acceptable." For technical support teams, a majority of 35.3% rated it as "unsuitable at all" or requiring improvement. These results show moderate support, but consistent efforts are needed for better access.

In Mount Lebanon (excluding suburbs), responses were mixed with 20.5% considering it "unsuitable at all" and 35.9% deeming it "acceptable." Only 12.9% found services "good" or better. For technical support teams, 33.3% stated it "needs improvement." These findings highlight varying levels of satisfaction, indicating challenges and areas for improvement.

In the North, more than 50% of coordinators believe maintenance "needs improvement" or is "unsuitable at all." For technical support, 37.3% rated it as "unsuitable at all." These results emphasize the need for investment in digital infrastructure and support teams.

In Bekaa, ratings were balanced with 35% suggesting maintenance "needs improvement" and 35% finding it "acceptable." For technical support teams, 40% indicated a need for development. These results suggest moderate acceptability of services but consistent upgrades are required.

In the South, 42.9% rated maintenance as "acceptable," yet a significant 35.7% believed it "needs improvement." For technical support, 38.1% indicated a need for development, though responses were less critical compared to other regions. These results show a relatively balanced service but lacking consistency.

In Nabatieh, half of the coordinators believe maintenance "needs improvement," with 31.3% finding it "acceptable." Technical support had similar evaluations, with 37.5% suggesting development. These results show that Nabatieh performs better than most rural areas but still faces significant gaps.

In Akkar, 30.8% rated maintenance as "unsuitable at all," while 50% indicated it "needs improvement." For technical support, more than 40% stated it "needs improvement." These results suggest that infrastructure and technical support in Akkar are among the weakest across governorates.

In Baalbek-Hermel, 44.4% suggest maintenance "needs improvement," with a notable 16.7% rating it as "very good." For technical support, responses reflected maintenance, with 50% requiring improvements.

In the Free Private Sector, responses were consistent, with all evaluations rated as "good," highlighting strong support. In Mount Lebanon, there was strong support, with the majority rating services as "good" or "very good." In the North, there was a balanced split with noticeable areas requiring improvement.

In the South and Bekaa, 60% of coordinators in the South suggested development, while 50% in Bekaa showed moderate satisfaction.

In the Non-Free Private Sector, evaluations were consistently high across governorates, with "good" and "very good" ratings dominating responses. However, challenges were limited to urban, wealthier institutions, with weak representation in rural areas.

In UNRWA, responses in the North were mixed, with a balance between "needs improvement" and "good" evaluations.

General Conclusions:

1. Infrastructure and Maintenance: Across sectors, the highest dissatisfaction rates are found in the public sector, particularly in rural areas like Akkar, North, and Baalbek-Hermel.
2. Public Sector: Exhibits moderate satisfaction levels in Beirut, Mount Lebanon, and Nabatieh with some resources available.
3. Free Private Sector: Strong overall performance, especially in urban governorates like Beirut and Mount Lebanon.
4. Non-Free Private Sector: High ratings uniformly across governorates, particularly in Mount Lebanon and Beirut.
5. UNRWA: Shows a mixed response with a balance between "needs improvement" and "good."
6. Sustainability: Maintenance requires systematic and long-term investment across all sectors and regions.

Response Four: Teacher (Question No. 19)

The availability of maintenance and updating of electronic devices, technical equipment, and programs in respondents showed general results indicating that 27.1% of respondents believe they need improvement, while 22.0% described the situation as "acceptable," 21.3% rated it as "good," 17.1% as "very good," and 12.5% as "unsuitable at all."

In the public sector, 38.1% of respondents reported the need for improvement, with 25.6% describing it as "acceptable," 14.3% as "good," 4.1% as "very good," and 18.0% as "unsuitable at all."

In the free private sector, 24.9% of respondents indicated a need for development, 16.3% rated it as "acceptable," 22.5% as "good," 27.3% as "very good," and 9.1% as "unsuitable at all."

In the non-free private sector, 10.6% of respondents stated a need for development, 18.3% as "acceptable," 31.7% as "good," 34.2% as "very good," and 5.3% as "unsuitable at all."

For UNRWA, 50.0% of respondents believe maintenance needs improvement, with 25.0% describing it as "acceptable," 16.7% as "good," and 8.3% as "unsuitable at all."

By Governorates:

In Beirut, 23.7% of respondents believe maintenance needs improvement, 17.5% described it as "acceptable," 37.1% rated it as "good," 12.4% as "very good," and 9.3% as "unsuitable at all."

In Mount Lebanon (suburbs), 17.3% of respondents indicated a need for development, 17.6% as "acceptable," 28.7% as "good," 33.3% as "very good," and 3.1% as "unsuitable at all."

In Mount Lebanon (excluding suburbs), 20.0% of respondents believe maintenance needs improvement, 18.3% as "acceptable," 30.9% as "good," 18.9% as "very good," and 12.0% as "unsuitable at all."

In North Governorate, 31.6% of respondents reported a need for improvement, 21.6% rated it as "acceptable," 16.0% as "good," 13.8% as "very good," and 17.0% as "unsuitable at all."

In Bekaa, 17.0% of respondents indicated a need for development, 30.3% described it as "acceptable," 18.6% rated it as "good," 18.6% as "very good," and 15.4% as "unsuitable at all."

In the South, 43.2% of respondents believe maintenance needs improvement, 21.9% as "acceptable," 16.6% as "good," 9.5% as "very good," and 8.9% as "unsuitable at all."

In Nabatieh, 26.9% of respondents reported a need for development, 26.3% as "acceptable," 22.2% as "good," 13.8% as "very good," and 10.8% as "unsuitable at all."

In Akkar, 32.3% of respondents believe maintenance needs improvement, 25.9% as "acceptable," 12.7% as "good," 9.6% as "very good," and 19.5% as "unsuitable at all."

In Baalbek-Hermel, 33.9% of respondents indicated a need for development, 16.9% as "acceptable," 19.5% as "good," 15.3% as "very good," and 14.4% as "unsuitable at all."

Question: How would you describe each of the following in supporting the educational process?

Item four: the availability of technical support teams in respondents to handle technology-related issues?

Response One: Principal (Question No. 29)

In the public education sector, the availability of specialized technical support teams to handle technology issues is described as "unsuitable at all" by 51.7%, while 28.6% believe it needs development, 9.5% find it acceptable, 7.5% consider it good, and 2.7% describe it as very good.

In the free private education sector, 10.0% of respondents find technical support teams "unsuitable at all," 23.3% believe it needs development, 16.7% find it acceptable, 36.7% rate it as good, and 13.3% describe it as very good.

In the non-free private education sector, 0% consider technical support teams "unsuitable at all," 12.2% believe it needs development, 21.4% find it acceptable, 32.7% rate it as good, and 33.7% describe it as very good.

In UNRWA respondents, 0% see technical support as "unsuitable at all," 25.0% believe it needs development, 25.0% find it acceptable, 25.0% rate it as good, and 25.0% describe it as very good.

Across all sectors, 28.3% find technical support teams "unsuitable at all," 22.6% see it needing development, 14.7% believe it is acceptable, 19.4% rate it as good, and 15.1% describe it as very good.

In the public sector, there is a clear shortage of specialized technical support teams for handling technology-related issues. In Beirut, 37.5% believe the situation is "unsuitable at all," while in the North, the percentage rises to 65.7%. Mount Lebanon suburbs show variability, with 54.5% of respondents viewing it as "unsuitable at all," while 18.2% consider it acceptable. In the South, there is relatively better balance, with 46.7% expressing the need for specialized support teams.

The free private sector shows relatively better results compared to the public sector, with 100% of respondents in the South having technical support teams and rating the situation as "very good." However, in Mount Lebanon excluding suburbs, 50% rate the situation as "good."

The non-free private sector shows significant variation. In Beirut, 44.4% find it "very good," while in Mount Lebanon suburbs, 33.3% view it as "very good." Other regions show varying opinions.

UNRWA faces challenges as 50% in the South require development of technical support, while in Mount Lebanon suburbs, 100% describe it as "very good."

By Governorates:

In Beirut, 37.5% of respondents believe technical support is "unsuitable at all," while 33.3% rate it as "very good." Mount Lebanon suburbs have a higher percentage needing development, with some respondents showing improvement. The North experiences the worst conditions, with 65.7% rating it "unsuitable at all." The South shows a more balanced performance, with many respondents rating it as "acceptable."

Conclusions:

Beirut requires significant improvements in specialized technical support. Mount Lebanon suburbs show variability in support needs, and the North faces severe challenges. The South demonstrates relatively better performance, with a more balanced approach. The public education sector has a severe shortage of technical support, especially in the North and Beirut. The free private sector performs well,

especially in the South, while the non-free private sector reflects regional differences, with good performance in Beirut. UNRWA needs to improve technical support in certain areas.

Response Two: Supervisor (Question No. 21)

Overall Situation in Educational Sectors:

Public Sector:

Data from supervisors shows that the situation needs improvement in many areas, with more than 31% believing that the situation is "unsuitable at all" or "needs development." Despite this, a significant percentage of supervisors (23.5%) consider the situation "acceptable," with 9.2% rating it as "good," and 2.8% as "very good." Overall, this indicates a need for stronger technical support in respondents in various regions.

Free Private Sector:

Data from supervisors indicates that 41.9% rate the situation as "good," and 22.6% rate it as "very good." Conversely, 16.1% view the situation as "acceptable," and the same percentage believe it "needs development." A very small percentage (3.2%) consider it "unsuitable at all." These findings suggest that the private sector offers a good level of technical support compared to the public sector, but there is room for improvement.

Non-Free Private Sector:

The data shows that 35.0% of supervisors consider the situation "good," and 42.7% rate it as "very good," reflecting a high level of technical support. However, 12% view it as "acceptable," and a very small percentage (8.5%) believe it "needs development," with only 1.7% rating it as "unsuitable at all." These numbers indicate a significant improvement in technical support in non-free private respondents compared to free private respondents.

UNRWA:

There is a clear divide in support; 100% of respondents in Mount Lebanon rate it as "good," while 100% in the South believe it "needs development." Specifically, 66.7% consider it "good," and 33.3% think it "needs development."

By Governorates in Each Sector:

- **Public Sector:**
    - Baalbek-Hermel suffers the highest weakness (47.1% "acceptable"), while Beirut and Mount Lebanon (excluding suburbs) have the lowest percentage (9.1% and 4.3%, respectively).
- **Free Private Sector:**
    - Beirut achieves 100% "very good," while Baalbek-Hermel has 100% "needs development."
- **Non-Free Private Sector:**
    - Baalbek-Hermel (72.7% "good") and Mount Lebanon (58.3% "very good") show strong technical support, while Beirut exhibits significant variation with 11.1% needing development.
- **UNRWA:**
    - Shows variability, with 100% "good" in Mount Lebanon and 100% "needs development" in the South.

Conclusion:

The public sector struggles the most in terms of technical support compared to private education. The non-free private sector excels across all governorates, while the free private sector shows noticeable variation between Beirut and other regions. UNRWA experiences a significant gap between Mount Lebanon and the South.

Response Three: Coordinator (Question No. 20)

In the **Public Sector**, in Beirut, 33.3% of coordinators indicated that technical support is "unsuitable at all," while 44.4% believed it "needs development." Only 22.2% found the support "acceptable." In **Mount Lebanon (Suburbs)**, 35.3% of coordinators considered support "unsuitable at all," and 41.2%

thought it "needs development," with 23.5% rating it "acceptable." In **Mount Lebanon (excluding suburbs)**, 23.1% reported it as "unsuitable at all," 33.3% believed it "needs development," while 30.8% found it "acceptable." In **North Lebanon**, 37.3% stated that it is "unsuitable at all," and 35.6% thought it "needs development." In **Bekaa**, 25% considered it "unsuitable at all," and 40% said it "needs development," with 25% rating it "acceptable." In **South Lebanon**, 21.4% stated it is "unsuitable at all," and 38.1% thought it "needs development." In **Nabatieh**, 25% considered it "unsuitable at all," and 37.5% said it "needs development." In **Akkar**, 30.8% viewed it as "unsuitable at all," and 42.3% believed it "needs development." In **Baalbek-Hermel**, 27.8% considered it "unsuitable at all," while 50% thought it "needs development."

Regarding the **Free Private Sector**, no negative evaluations were provided in Beirut, with all responses indicating that support was either "good" or "very good." In **Mount Lebanon (Suburbs)**, 20% of coordinators rated support as "acceptable," while 60% found it "good" or "very good." In **Mount Lebanon (excluding suburbs)**, 60% of coordinators rated support as "good," with 40% considering it "acceptable." In **North Lebanon**, ratings were balanced, with equal proportions across various categories. In **Bekaa**, 50% rated support as "good," with similar percentages providing positive evaluations. In **South Lebanon**, 60% believed support was good, while the remaining proportion rated it less positively.

In the **Non-Free Private Sector**, evaluations were mixed but generally positive, with Beirut recording only 8.3% as "unsuitable at all" and 16.7% as "needs development," while 50% rated it "good" and 25% "very good." In **Mount Lebanon (Suburbs)**, similar trends were observed with slightly low negative ratings.

For **UNRWA**, results showed a balance between positive and negative evaluations, with half of the coordinators believing that support needs development, while the other half found it adequate.

General Conclusions:

The overall results indicate that the public sector suffers from a significant lack of specialized technical support, necessitating urgent improvements, particularly in rural areas like Akkar, North Lebanon, and Baalbek-Hermel. On the other hand, the free private sector shows notably better performance, with high levels of satisfaction regarding technical support.

In Beirut, there is overall good satisfaction with technical support services, but there is still room for improvement. Mount Lebanon (suburbs) reflects a variation in opinions regarding the quality of services, highlighting the need for further efforts to enhance them. North Lebanon faces lower levels of satisfaction, pointing to the urgent need for better technical support services.

Overall, there is a significant gap between the public and private sectors in terms of specialized technical support, necessitating political intervention and sustainable investment to improve infrastructure and technical support across all governorates to ensure effective and high-quality educational services for all students.

Response Four: Teacher (Question No. 19)

The availability of specialized technical support to address technological issues by governorates and education sector:

Overall, 25.1% of teachers indicated that the situation needs improvement, and 20.5% described the situation as "acceptable," while 20.2% rated it as "good," and 17.3% as "very good." Meanwhile, 17.0% rated the situation as "unsuitable at all."

In the **Public Sector**, 35.1% of teachers believe the situation needs development, 24.0% rated it "acceptable," 12.7% rated it "good," 3.3% rated it "very good," while 24.9% rated it "unsuitable at all."

In the **Free Private Sector**, 21.5% of teachers see the situation as needing development, 15.8% rated it "acceptable," 23.0% rated it "good," 27.3% rated it "very good," and 12.4% rated it "unsuitable at all."

In the **Non-Free Private Sector**, 10.4% believe the situation needs development, 16.6% rated it "acceptable," 30.8% rated it "good," 35.7% rated it "very good," and 6.5% rated it "unsuitable at all."

Regarding **UNRWA**, 50.0% of teachers indicated that the situation needs development, 16.7% rated it "acceptable," 25.0% rated it "good," and 8.3% rated it "unsuitable at all."

By Governorates:

In **Beirut**, 17.5% of teachers indicated the situation needs development, 21.6% rated it "acceptable," 30.9% rated it "good," 14.4% rated it "very good," and 15.5% rated it "unsuitable at all."

In **Mount Lebanon (Suburbs)**, 15.4% believe the situation needs development, 16.4% rated it "acceptable," 27.2% rated it "good," 36.1% rated it "very good," and only 4.9% rated it "unsuitable at all."

In **Mount Lebanon (excluding suburbs)**, 14.3% of teachers indicated the situation needs development, 20.0% rated it "acceptable," 28.0% rated it "good," 20.0% rated it "very good," and 17.7% rated it "unsuitable at all."

In **North Lebanon**, 29.4% believe the situation needs development, 18.7% rated it "acceptable," 15.3% rated it "good," 12.6% rated it "very good," and 24.0% rated it "unsuitable at all."

In **Bekaa**, 20.2% indicated the situation needs development, 25.0% rated it "acceptable," 18.1% rated it "good," 18.1% rated it "very good," and 18.6% rated it "unsuitable at all."

In **South Lebanon**, 33.7% believe the situation needs development, 24.9% rated it "acceptable," 18.9% rated it "good," 7.7% rated it "very good," and 14.8% rated it "unsuitable at all."

In **Nabatieh**, 28.1% indicated the situation needs development, 24.6% rated it "acceptable," 20.4% rated it "good," 10.8% rated it "very good," and 16.2% rated it "unsuitable at all."

In **Akkar**, 34.7% believe the situation needs development, 19.9% rated it "acceptable," 13.1% rated it "good," 10.0% rated it "very good," and 22.3% rated it "unsuitable at all."

In **Baalbek-Hermel**, 29.7% of teachers indicated the situation needs development, 19.5% rated it "acceptable," 17.8% rated it "good," 16.9% rated it "very good," and 16.1% rated it "unsuitable at all."

Conclusions:

The data reflects a significant need for specialized technical support in the public sector, especially in rural areas like Akkar, North Lebanon, and Baalbek-Hermel. In contrast, the free private sector exhibits higher levels of satisfaction with technical support, though there remains room for improvement. UNRWA shows a balanced perspective, with a mix of positive and negative evaluations depending on regions.

Question: How would you describe each of the following in supporting the educational process?

Section Six: The proficiency of teachers in supporting struggling learners.

Response One: Principal (Question No. 29)

The availability of specialized technical support to address technological issues by governorates and education sector:

Overall, 25.1% of respondents believe that the situation needs improvement, while 20.5% described it as "acceptable," and 20.2% rated it as "good." Furthermore, 17.3% rated it as "very good," whereas 17.0% considered it "unsuitable at all."

Analysis by education sector reveals significant disparities. The public sector faces a shortage of specialized technical support teams, with 35.1% of respondents indicating that the situation needs development, and 24.0% rated it "acceptable." Only 12.7% described it as "good," and a mere 3.3% rated it "very good," whereas 24.9% rated it "unsuitable at all." The free private sector showed better performance, with 21.5% needing development, 15.8% rated it "acceptable," 23.0% "good," 27.3% "very good," and only 12.4% rated it "unsuitable at all." The non-free private sector also reflects disparities across regions, with only 10.4% needing development, 16.6% "acceptable," 30.8% "good," 35.7% "very good," and 6.5% rated it "unsuitable at all." The UNRWA sector showed significant needs, with 50% of respondents believing that the situation needs development, 16.7% rated it "acceptable," 25.0% "good," and just 8.3% rated it "unsuitable at all."

The analysis by governorates reveals distinct disparities in school needs. Beirut shows a significant need for improvement, with only 17.5% of respondents rating the situation as requiring development, 21.6% "acceptable," 30.9% "good," 14.4% "very good," and 15.5% rated it "unsuitable at all." In Mount Lebanon suburbs, 15.4% need development, 16.4% "acceptable," 27.2% "good," 36.1% "very good," and only 4.9% rated it "unsuitable at all." In the North, the need is greater, with 29.4% needing

development, 18.7% "acceptable," 15.3% "good," 12.6% "very good," and 24.0% rated it "unsuitable at all." In the South, a relative balance is observed, with 33.7% needing development, 24.9% "acceptable," 18.9% "good," 7.7% "very good," and 14.8% rated it "unsuitable at all."

Response Two: Supervisor (Question No. 21)

Overall Situation:

Public Education

The overall figures show that 31.3% of supervisors believe that the availability of technical support teams is "completely unsuitable," and 33.2% see it as "needing development." Only about 12% (9.2% rated it "good" and 2.8% "very good") consider the situation satisfactory or excellent. The vast majority believe there is a need to improve technical support teams (64.5% between "completely unsuitable" and "needing development").

Private free schools Education

The total results show that 41.9% of private free schools respondents rate the availability of technical support teams as "good," and 22.6% as "very good," indicating that 64.5% of respondents have a largely positive view. Additionally, 16.1% rate it as "acceptable," while 19.3% consider it "completely unsuitable" or "needing development." These figures reflect a more positive outlook compared to the public sector, suggesting better investments or partnerships with technology companies.

Private Non-Free Education

The total results show that 42.7% of supervisors describe the availability of technical support teams as "very good," and 35% rate it as "good," meaning 77.7% of supervisors in non-free private respondents see the situation positively. Furthermore, 12% consider it "acceptable," 8.5% see it "needing development," and only 1.7% rate it "completely unsuitable." This indicates that non-free private respondents enjoy a high level of technical support compared to others, with a small percentage requiring improvements.

UNRWA

UNRWA shows a clear duality; 100% rated it as "good" in Mount Lebanon, while in the South, 100% said it "needs development." Specifically, 66.7% consider it "good," and 33.3% need development.

By Governorates:

Beirut: Public education faced disparities (36.4% "completely unsuitable"), while private free schools education received a 100% rating for "very good," and non-free private education saw a 66.7% rating.

Mount Lebanon: Balanced performance with 35.3% in public education needing development in suburbs, while private free schools education was positive (75% "good" excluding suburbs).

North: Challenges in public education (39.5% needing development), with notable variations in private free schools education (40% "very good," 40% needing development).

Bekaa: Generally positive performance, with private free schools respondents showing 66.7% "good" and 33.3% "very good," while public education requires some improvements (27.8% "acceptable").

South and Nabatieh: Relatively stable performance with positive evaluations across sectors, and non-free private education in Nabatieh showing 60% "good" and 20% "very good."

Akkar and Baalbek-Hermel: Notable areas needing substantial improvements, with Akkar having the highest rate of "completely unsuitable" at 39.5% in public education, and Baalbek-Hermel showing 47.1% "acceptable."

Conclusions:

- Public education faces clear challenges in peripheral regions such as Akkar and Baalbek-Hermel compared to central areas.
- Private free schools education shows high overall satisfaction in Beirut and other regions, but requires improvements in the North.
- Non-free private education achieves noticeable stability, with notable distinction in Nabatieh, though areas like Akkar still need improvement.

Response Three: Coordinator (Question No. 20)

Public Education

In Beirut, 44.4% of coordinators found teachers' competency to be "acceptable," while 22.2% rated it as "completely unsuitable." These results indicate a challenge with high levels of dissatisfaction. In Mount Lebanon (suburbs), 47.1% of coordinators rated teachers' competency as "acceptable." The high percentage of acceptable evaluations suggests room for continuous improvement, though excellent results remain limited. In the North, 40.7% indicated that competency "needs development," reflecting widespread dissatisfaction. In Akkar, 46.2% found teacher competency "needs development." High levels of dissatisfaction pose a challenge requiring targeted training. In Baalbek-Hermel, 44.4% indicated that teacher competency "needs development," while only 5.6% rated it as "very good." These results point to significant skill gaps.

Private free schools Education

In Beirut, all coordinators indicated that teachers' competency was "very good." This result is the strongest among all governorates in this sector. In Mount Lebanon (suburbs), 60% of coordinators rated teachers' competency as "good" or "very good," showing consistently high satisfaction. In Akkar, 33.3% rated competency as "acceptable," while 66.7% considered it "good," highlighting a challenge to close the gap for excellence.

Private Non-Free Education

Ratings were mixed in this sector; 58.3% of coordinators in Beirut found teachers' competency to be "very good," with a small percentage of dissatisfaction (8.3%). This is a relatively high result in terms of excellence. In the North, 45.2% rated competency as "good," while 3.2% rated it "completely unsuitable." These results indicate a need to address lower-quality evaluations.

Overall, public education results indicate significant dissatisfaction in areas like Akkar (46.2% consider competency "needs development") and the North (40.7% find it "needs development"). Beirut, Bekaa, and the South show better performance, with more than 50% rating competency as "acceptable" or better. For private free schools education, there are exceptionally positive evaluations in Beirut and Mount Lebanon (suburbs), with 100% and 60% respectively rating it as "very good." However, there are still areas like Baalbek-Hermel with dissatisfaction rates exceeding 40% for required improvements.

In Beirut, the most consistent governorate across all sectors, with the majority rating competency as "good" or "very good." While Mount Lebanon suburbs show high satisfaction in both private sectors, public education remains moderate. Northern and Akkar regions continue to experience persistent dissatisfaction across both public and private sectors due to limited resources and infrastructure challenges. Baalbek-Hermel faces similar difficulties, with over 40% in both public and free private sectors requiring development.

The data indicates an urgent need for improved teacher competency to support struggling learners across all sectors and governorates, particularly in rural and underserved areas such as Akkar, North, and Baalbek-Hermel, requiring sustainable political intervention and investment to ensure effective and high-quality educational services for all students. Teacher training programs should focus on enhancing competency in using technology and providing tailored programs for struggling learners, with solutions tailored for regions like Akkar, Baalbek-Hermel, and the North to ensure better educational outcomes.

General Conclusions:

- **Highest Satisfaction Levels**:
  - Private free schools education in Beirut and Nabatieh shows 100% satisfaction with teachers handling programs for struggling learners.
  - UNRWA (North) also records a 100% satisfaction rate.
- **Areas with Lowest Satisfaction**:
  - Beirut public education has a significant portion of respondents (22.2%) rating teacher competency as "completely unsuitable."
  - Akkar exhibits higher dissatisfaction in both public and non-free private sectors (19.2% and 33.3% in "completely unsuitable" respectively).

Response Four: Teacher (Question No. 19)

Availability of Specialized Technical Support to Address Technology Issues by Governorates and Education Sector

Overall results indicate that 25.1% of teachers believe the situation requires development, while 20.5% described it as "acceptable," 20.2% rated it as "good," 17.3% rated it as "very good," and only 17.0% considered it "completely unsuitable."

Analysis by education sector reveals significant disparities. The public sector faces a shortage of specialized technical support teams, with 35.1% of teachers seeing a need for development, and 24.0% describing the situation as "acceptable." Only 12.7% rated it as "good," and 3.3% as "very good," while 24.9% deemed it "completely unsuitable." On the other hand, the private free sector performed relatively better, with 21.5% requiring development, and 15.8% rating it as "acceptable." Meanwhile, 23.0% rated it as "good," 27.3% as "very good," and only 12.4% found it "completely unsuitable." The private non-free sector also shows variation between regions, with just 10.4% needing development, 16.6% rating it as "acceptable," 30.8% considering it "good," 35.7% as "very good," and only 6.5% describing it as "completely unsuitable." The UNRWA sector, however, displayed greater needs, with 50% of teachers viewing the situation as requiring development, and 16.7% rating it as "acceptable." A quarter considered it "good," while only 8.3% found it "completely unsuitable."

Analysis by Governorates

In Beirut, there is a noticeable need for improvement, with only 17.5% of teachers rating the situation as requiring development. Additionally, 21.6% found it "acceptable," 30.9% "good," and 14.4% "very good," while only 15.5% considered it "completely unsuitable." In Mount Lebanon suburbs, 15.4% required development, 16.4% rated it as "acceptable," 27.2% as "good," 36.1% as "very good," and only 4.9% described it as "completely unsuitable." In the North, the need is higher, with 29.4% of teachers requiring development, 18.7% rating it as "acceptable," 15.3% as "good," and 12.6% as "very good," while 24.0% deemed it "completely unsuitable." In the South, there is a relative balance, with 33.7% needing development, 24.9% rating it as "acceptable," 18.9% as "good," and 7.7% as "very good," while 14.8% found it "completely unsuitable."

These findings reflect a need for continuous improvement in technical support for addressing technology-related issues across different regions and sectors.

Question: How would you describe the following to support the educational process
Item Seven: The Proficiency of Most Teachers in Applying Social Emotional Support Programs
Response One: Principal (Question No. 29)

Overall Across Sectors:

In Beirut, teacher performance in applying social support programs shows significant variation, where only 0% of respondents describe the situation as "completely unsuitable." Meanwhile, 16.7% see it as needing development, 33.3% as "acceptable," 38.9% as "good," and just 11.1% rated it as "very good." In Mount Lebanon suburbs, 6.1% rated the situation as "completely unsuitable," while 24.5% see a need for development, 30.6% as "acceptable," 20.4% as "good," and 18.4% as "very good."

In Mount Lebanon (excluding suburbs), 6.3% considered the situation "completely unsuitable," 9.4% see it as needing development, while 46.9% rated it as "acceptable," 28.1% as "good," and only 9.4% rated it as "very good."

In the North, 9.1% of respondents rated the situation as "completely unsuitable," while 41.8% believe it needs development. Another 30.9% describe it as "acceptable," 14.5% as "good," and just 3.6% as "very good."

In the Bekaa, 16.0% rated it as "completely unsuitable," with 32.0% seeing a need for development, 12.0% as "acceptable," 20.0% as "good," and another 20.0% as "very good."

In the South, 8.0% rated it as "completely unsuitable," 16.0% needing development, 32.0% as "acceptable," 36.0% as "good," and only 8.0% rated it as "very good."

In Nabatieh, 7.1% described the situation as "completely unsuitable," 17.9% see a need for development, 35.7% rated it as "acceptable," 35.7% as "good," and only 3.6% rated it as "very good."

In Akkar, only 3.6% rated it as "completely unsuitable," while 39.3% believe it needs development. Another 35.7% rated it as "acceptable," 14.3% as "good," and 7.1% as "very good."

In Baalbek-Hermel, 15.8% rated it as "completely unsuitable," 15.8% see a need for development, 36.8% rated it as "acceptable," 26.3% as "good," and only 5.3% as "very good."

Overall, 7.9% describe the performance as "completely unsuitable," 25.8% needing development, 32.6% as "acceptable," 24.0% as "good," and just 9.7% rated it as "very good."

By Education Sectors:

The public sector faces a significant need for improvement in teachers' proficiency in social support programs, with 32.0% believing it requires development, and 36.1% rating it as "acceptable." Only 17.7% rated it as "good," and just 3.4% as "very good." Beirut shows better performance compared to other regions, while the North and Bekaa face substantial challenges.

The private free sector exhibits a moderate to good performance, with 33.3% believing proficiency needs development, 23.3% as "acceptable," 20.0% as "good," and 13.3% as "very good."

The private non-free sector shows better overall performance, with 32.7% rating it as "good" and 18.4% as "very good," with only 15.3% seeing it as needing development.

The UNRWA sector demonstrates excellent performance, with 75.0% of respondents describing proficiency as "very good," reflecting significant success in applying social-emotional support programs.

By Governorates:

In Beirut, 38.9% rated it as "good," with only 11.1% considering it "very good." Mount Lebanon suburbs show a balance between "good" and "very good," while Mount Lebanon (excluding suburbs) shows considerable variation with a higher percentage in the "acceptable" category.

The North requires significant improvement, with 41.8% needing development. The Bekaa and South demonstrate positive performance, with "very good" ratings of 20.0% and 36.0%, respectively.

Nabatieh shows a relatively stable performance, with 35.7% rating it as "good" and another 35.7% as "very good." Akkar and Baalbek-Hermel face substantial challenges, with high percentages believing it needs development, and low percentages rating it as "very good."

Response Two: Supervisor (Question No. 21)

Overall Situation:

Public Education:

Public education shows variation in the evaluation of social emotional support program implementation. The highest percentage, at 36.9%, believes the programs are "in need of development," followed by "acceptable" at 30%, and "good" at 16.1%. Additionally, 13.8% rate the programs as "completely unsuitable." These results indicate a general consensus on the need for improvement in these programs.

Private free schoolsEducation:

This sector demonstrates a relatively positive evaluation, with 45.2% rating the proficiency as "good" and 16.1% as "very good." However, there is some variation across regions, with a need for improvement in certain areas.

Private Non-Free Education:

This sector receives a good evaluation, with 35% rating it as "good" and 26.5% as "very good." However, there is a noticeable need for improvement in regions like Akkar and the Bekaa.

UNRWA:

The data shows moderate positive evaluations; in Mount Lebanon, half of the supervisors consider proficiency as either "good" or "acceptable," while South Lebanon shows a full 100% positive rating for "good."

By Governorates in Each Sector:

- **Beirut:** Opinions range between "good," "acceptable," and "in need of development," indicating a moderate level of satisfaction across all sectors, with a need for some improvements.
- **Mount Lebanon (Suburbs):** Shows variation between sectors, with 41.2% in public education believing programs are "in need of development," whereas the private sector exhibits a better evaluation.
- **North:** Faces negative evaluations in public education, with 50% believing the programs need development, while the private sector shows some positive evaluations.
- **Bekaa:** Displays relatively low evaluations in public education, while private education enjoys overall satisfaction, with 66.7% rating proficiency as "good" and 33.3% as "very good" in free private education.
- **South:** Demonstrates relatively good satisfaction across sectors, with the UNRWA sector showing complete positive evaluations.
- **Akkar:** Shows urgent development needs in both public and private education, with varying opinions between "acceptable" and "good."
- **Baalbek-Hermel:** Indicates a significant need for development in public education, while the private sector shows a positive evaluation.

Conclusion:

Private free schoolsand non-free education sectors perform better compared to public education, especially in regions like South Lebanon and the Bekaa. Meanwhile, public education faces significant variations in supervisor evaluations, with a pressing need for improvement in the North and Akkar. The UNRWA sector shows relatively stable performance in the South, with variations in Mount Lebanon. Results emphasize the need to focus on enhancing programs in the most vulnerable governorates and developing unified strategies to support students and teachers.

Response Three: Coordinator (Question No. 20)

Public Education in Beirut:

The results show that 33.3% rated social emotional support as "good" and 33.3% as "acceptable," while 22.2% classified it as "completely unsuitable." Despite some positive evaluations, there is an urgent need for additional teacher training to support the diverse needs of learners.

In the Suburbs of Mount Lebanon:

29.4% rated it as "good" and 35.3% as "acceptable," with 5.9% rating it as "completely unsuitable" and 23.5% "in need of development," indicating moderate performance and the necessity for ongoing investment in teacher training.

In Other Areas of Mount Lebanon:

46.2% rated it as "acceptable," while the lower categories had higher percentages (12.8% rated as "completely unsuitable" and 23.1% "in need of development"). This suggests a need for resource allocation and targeted programs for better support.

In the North:

39.0% rated it as "acceptable," but with a high percentage (33.9%) in the "in need of development" category and 11.9% as "completely unsuitable," highlighting the need for improved training.

In Bekaa:

50.0% rated it as "acceptable," with 20.0% each for "completely unsuitable" and "in need of development," indicating basic understanding requiring professional development.

In the South:

31.0% rated it as "good" and 21.4% as "acceptable," but 31.0% classified it as "in need of development," requiring focused investment in training.

In Nabatieh:

37.5% rated it as "acceptable," with a high percentage of 31.3% in the "in need of development" category, necessitating ongoing interventions to enhance teacher effectiveness.

In Akkar:

The ratings were balanced, with 34.6% rating it as "acceptable" and 23.1% as "good," while 26.9% were in need of development, indicating a need for both training and resource improvement.

In Baalbek-Hermel:

33.3% rated it as "good," but 33.3% were categorized as "in need of development," highlighting the need for a strategic focus on empowering teachers.

Private free sector in Beirut:

100% rated it as "acceptable" with no notable challenges. In Mount Lebanon suburbs, 40.0% rated it as "very good" and 40.0% as "acceptable," indicating positive results requiring targeted efforts for further improvement.

In the North:

75.0% rated it as "good," and 25.0% as "in need of development," suggesting strong educational support with ongoing challenges.

In Bekaa:

50.0% rated it as "very good" with no significant challenges, making it a leading area requiring sustained performance.

In the South:

33.3% rated it as "good" and 33.3% as "very good," with 16.7% categorizing it as "completely unsuitable," necessitating minor improvements.

In Nabatieh:

54.5% rated it as "good," with 27.3% in the "in need of development" category, indicating a balanced, high-performance area with slight intervention needs.

In Akkar:

46.2% rated it as "acceptable" and 30.8% as "in need of development," requiring comprehensive support programs.

In Baalbek-Hermel:

54.5% rated it as "good," and 18.2% as "in need of development," reflecting exceptional performance with minor gaps.

UNRWA in the North:

100% rated it as "good," with no notable challenges.

Conclusions:

- The analysis indicates variations in efficiency levels across sectors and governorates. Private sectors (free and non-free) generally show better performance compared to public education.
- **Highest Levels of Satisfaction:**
    - Private free sector in Beirut, Nabatieh, and Baalbek-Hermel show high satisfaction rates (100% in some cases).
    - UNRWA in the North demonstrates 100% satisfaction with teacher proficiency in implementing social emotional support programs.
- **Areas with Lowest Satisfaction:**
    - Nabatieh and Beirut in the public sector show higher dissatisfaction, with significant portions classifying programs as "completely unsuitable" (31.3% and 22.2% respectively).
    - Akkar shows a moderate level of dissatisfaction in both public and private non-free sectors (15.4% in the "completely unsuitable" category).

Fourth Response: Teacher (Question #19)

The proficiency of teachers in implementing social emotional support programs varies across regions and educational sectors. Overall, 7.4% of participants consider teacher proficiency as "completely unsuitable," while 20.3% believe it needs development, and 29.5% rate it as "acceptable." Additionally, 27.0% describe it as "good," and 15.8% rate it as "very good."

In the public sector, 7.6% view proficiency as "completely unsuitable," 25.1% need development, 36.1% rate it as "acceptable," 24.0% as "good," and only 7.3% consider it "very good."

In the free private sector, 12.0% deem proficiency "completely unsuitable," 22.5% need development, 17.7% rate it as "acceptable," 27.8% as "good," and 20.1% describe it as "very good."

In the non-free private sector, 5.7% rate proficiency as "completely unsuitable," 12.4% need development, 22.6% consider it "acceptable," 31.4% rate it as "good," and 27.9% describe it as "very good."

For UNRWA, 8.3% assess proficiency as "completely unsuitable," 16.7% require development, 50.0% rate it as "acceptable," and 25.0% as "good," with no respondents considering it "very good."

Analyzing proficiency across governorates reveals significant variation in performance. In Beirut, 7.2% consider proficiency "completely unsuitable," 14.4% need development, 30.9% rate it as "acceptable," 34.0% as "good," and 13.4% describe it as "very good."

In Mount Lebanon suburbs, 4.3% rate proficiency as "completely unsuitable," 12.0% need development, 21.0% consider it "acceptable," 31.8% as "good," and 30.9% describe it as "very good."

In Mount Lebanon (outside suburbs), 6.9% view proficiency as "completely unsuitable," 16.0% need development, 25.1% rate it as "acceptable," 33.7% as "good," and 18.3% describe it as "very good."

In North Lebanon, 11.9% assess proficiency as "completely unsuitable," 24.8% require development, 27.4% consider it "acceptable," 25.2% rate it as "good," and only 10.7% describe it as "very good."

In Bekaa, 7.4% rate proficiency as "completely unsuitable," 20.2% need development, 27.7% consider it "acceptable," 27.1% as "good," and 17.6% describe it as "very good."

In the South, 4.7% consider proficiency "completely unsuitable," 26.0% require development, 35.5% rate it as "acceptable," 26.6% as "good," and 7.1% describe it as "very good."

In Nabatieh, 3.6% view proficiency as "completely unsuitable," 18.6% need development, 42.5% rate it as "acceptable," 21.0% as "good," and 14.4% describe it as "very good."

In Akkar, 9.6% assess proficiency as "completely unsuitable," 25.9% require development, 33.1% rate it as "acceptable," 19.9% as "good," and 11.6% describe it as "very good."

Finally, in Baalbek-Hermel, 5.9% rate proficiency as "completely unsuitable," 21.2% require development, 33.1% consider it "acceptable," 28.0% as "good," and 11.9% describe it as "very good."

Question: Support provided by school administration for technology use
First Response : Principal (Question # 30)

Encouraging teachers to use technology: A total of 245 schools across all sectors in Lebanon are working to encourage teachers to use technology. This includes 15 schools in Beirut, 44 schools in Mount Lebanon suburbs, 31 schools in Mount Lebanon excluding suburbs, 46 schools in the North, 23 schools in Bekaa, 21 schools in the South, 23 schools in Nabatieh, 28 schools in Akkar, and 14 schools in Baalbek-Hermel.

When comparing educational sectors, the public education sector has the highest number of schools encouraging technology use, with 130 schools distributed across various governorates. The North recorded the highest number with 29 schools, followed by Akkar with 20 schools, and Mount Lebanon excluding suburbs with 18 schools, reflecting clear efforts to encourage technology use in underdeveloped areas. The private subsidized education sector includes only 26 schools, with Akkar leading at 6 schools, followed by Mount Lebanon excluding suburbs with 4 schools. The private non-subsidized sector shows greater interest in encouraging technology, with 85 schools, 30 of which are in Mount Lebanon suburbs. The UNRWA sector has the lowest number, with only 4 schools distributed between Mount Lebanon and the North.

For comparison by governorates, Beirut has 15 encouraging schools, Mount Lebanon suburbs 44 schools, Mount Lebanon excluding suburbs 31 schools, the North 29 schools, Bekaa 23 schools, the South 21 schools, Nabatieh 23 schools, Akkar 28 schools, and Baalbek-Hermel 14 schools.

Providing training for teachers to use technology: A total of 134 schools across all sectors provide training, including 7 schools in Beirut, 32 schools in Mount Lebanon suburbs, 14 schools in Mount Lebanon excluding suburbs, 20 schools in the North, 16 schools in Bekaa, 13 schools in the South, 15 schools in Nabatieh, 8 schools in Akkar, and 9 schools in Baalbek-Hermel.

When comparing educational sectors, the public education sector includes 43 schools providing training, with the North leading at 9 schools. The private subsidized education sector includes only 19 schools offering training, with Nabatieh leading at 5 schools. The private non-subsidized sector has 71 schools, with Mount Lebanon suburbs having the highest number at 23 schools. The UNRWA sector includes only one school.

Technical support available to solve problems: A total of 88 schools across all sectors provide technical support, including 4 schools in Beirut, 21 schools in Mount Lebanon suburbs, 8 schools in Mount Lebanon excluding suburbs, 13 schools in the North, 7 schools in Bekaa, 10 schools in the South, 13 schools in Nabatieh, 5 schools in Akkar, and 7 schools in Baalbek-Hermel.

Allocating time for teachers to use technology: A total of 117 schools across all sectors allocate time for technology use, including 8 schools in Beirut, 18 schools in Mount Lebanon suburbs, 12 schools in Mount Lebanon excluding suburbs, 27 schools in the North, 13 schools in Bekaa, 11 schools in the South, 17 schools in Nabatieh, 6 schools in Akkar, and 5 schools in Baalbek-Hermel.

When comparing educational sectors, the public education sector includes 59 schools allocating time for technology use. The private subsidized sector shows low numbers with only 13 schools. The private non-subsidized sector performs relatively well with 43 schools, while the UNRWA sector includes only two schools.

Second Response: supervisor (Question # 22)

Responses of school supervisors regarding the support provided by school administration for using technology, focusing on distribution by sectors (public, private subsidized, private non-subsidized, UNRWA) and regions (various governorates):

Encouraging teachers to use technology
- The public sector records the highest frequency in supervisors' responses for "encouraging teachers to use technology," with 188 repetitions. This indicates that school administration in the public sector places greater emphasis on motivating teachers to adopt and use technology in education.
- In private subsidized education, the frequency of this response was 25 times, significantly lower than the public sector (188) and private non-subsidized education (105). UNRWA schools recorded just 3 repetitions.
- The North governorate recorded the highest frequency (50), dominated by the public sector (32 out of 50), while other sectors (private subsidized and non-subsidized) showed lower frequencies. Mount Lebanon (suburbs) recorded 48 repetitions, with notable distribution between the public sector (15) and private non-subsidized sector (27), highlighting the significant attention given by school administrations in these areas to encouraging teachers.
- Beirut recorded the lowest frequency (18), with balanced distribution between the public sector (8) and private non-subsidized sector (9). Bekaa recorded 27 repetitions, with the public sector dominating at 13 out of 27. Nabatieh recorded 30 repetitions, with a significant preference for the public sector (21 out of 30), indicating weaker encouragement of teachers in these areas compared to others.

Providing electronic educational resources
- The private non-subsidized sector records the highest frequency in supervisors' responses regarding the provision of electronic educational resources, totaling 45 repetitions, reflecting a greater focus on this sector.
- Mount Lebanon (suburbs) recorded the highest frequency (23), with notable distribution between the private non-subsidized sector (15 repetitions) and the public sector (5), emphasizing the importance of this region in providing electronic educational resources.

- Beirut recorded the lowest frequency (6 repetitions), including only one from the public sector, while Mount Lebanon (excluding suburbs) recorded 8 repetitions, with just two from the public sector, reflecting lower resource provision in these regions compared to others.

Allocating time for teachers to use technology during classroom teaching
- The public sector recorded the highest frequency in allocating time for teachers (68 repetitions), indicating recognition of the importance of allocating time for technology use in teaching.
- The highest frequency was in the North governorate (21 repetitions), dominated by the public sector (11 out of 21), with notable presence from the private non-subsidized sector (10 repetitions).
- The lowest frequency was in Beirut (6 repetitions), where the private non-subsidized sector dominated (4 repetitions), while the public sector recorded only 2 repetitions, reflecting lower allocation of time for technology use in classrooms compared to other regions.

Technical support for solving technical issues
- The private non-subsidized sector recorded the highest frequency in providing technical support (54 repetitions), indicating greater attention to addressing technical issues faced by teachers. The public sector recorded 33 repetitions, showing limited interest in providing technical support compared to the private non-subsidized sector.
- The highest frequency was in Mount Lebanon (suburbs) (18 repetitions), with the private non-subsidized sector dominating significantly (16 repetitions) in this region.
- The lowest frequency was in Beirut (5 repetitions), where the public sector's contribution was limited, and the private non-subsidized sector showed higher frequency.

Providing training for teachers on technology use
- The private non-subsidized sector recorded the highest frequency in providing training (83 repetitions), indicating that this sector offers multiple training programs for teachers.
- The public sector recorded a total of 57 repetitions, reflecting good focus on providing training for teachers on technology use.
- The highest frequency was in Mount Lebanon (suburbs) (25 repetitions), with the private non-subsidized sector having the largest share (18 repetitions).
- The lowest frequency was in Beirut (11 repetitions), where the public sector recorded only 4 repetitions, and private subsidized education recorded just 1 repetition.

Comparative analysis between sectors and governorates:
1. The public sector leads in most areas of support, particularly in encouraging technology use and allocating time for teachers. This highlights the public sector's commitment to providing necessary support for its teachers.
2. The private non-subsidized sector performs strongly in providing electronic resources, technical support, and training, reflecting concentrated efforts in these areas within this sector.
3. Mount Lebanon (suburbs) and the North lead in most areas of support, indicating a stronger focus on supporting teachers in these regions, likely due to stronger educational policies or better local resources.
4. Beirut and Nabatieh recorded lower frequencies in most areas, suggesting potential gaps in the support provided in these regions. This may indicate a need for increased attention and focus on technology in education in these areas.

General conclusions:
- The education sector in Beirut and Nabatieh needs improvement in areas like training provision and technical support.
- The North and Mount Lebanon (suburbs) show higher performance in most areas, reflecting the success of teacher support strategies in these regions.
- The public sector remains most effective in motivating teachers and allocating time for technology use, while the private non-subsidized sector excels in providing electronic resources, technical support, and training.

Third response: coordinator (Question # 22)

Regarding the support provided by school administration to enhance the use of technology, the following key points emerge based on the coordinators' responses:

1. Encouraging teachers to use technology:
- This is the most common type of support across all governorates, with its percentage exceeding 30% in most areas, indicating that school administrations recognize the vital role of teachers in driving digital transformation.
- Regions with the highest percentages in this aspect include Bekaa (55%) and Akkar (57.7%), reflecting a strong focus on both moral and material incentives for teachers.

2. Allocating time to use technology:
- This type of support appears moderately, ranging between 7% and 20% in most areas.
- Mount Lebanon (suburbs) (11.8%) and the North (13.6%) recorded above-average rates, showing greater attention to enabling teachers to use technology during working hours.

3. Providing electronic educational resources:
- This aspect shows variability among governorates. While some areas, such as Beirut (22.2%) and Bekaa (10%), show moderate interest, other areas like Akkar have paid little attention to this aspect.
- The provision of resources is tied to schools' ability to invest in digital infrastructure, which can be challenging in some rural governorates.

4. Offering training for teachers:
- Training is a crucial element in supporting the use of technology. High percentages of support were noted in regions like the South (21.4%) and Baalbek-Hermel (16.7%), reflecting a focus on continuously developing teachers' skills.

5. Technical support for resolving technical issues:
- This support is important but relatively less common compared to other aspects, with percentages ranging between 5% and 10%.
- Areas that showed interest in technical support include Baalbek-Hermel (11.1%) and Beirut (11.1%), indicating a focus on addressing technical issues that may hinder the use of technology.

General Conclusions:
- **"Encouraging teachers"** stands out as the most prominent type of support, highlighting the importance of moral and material appreciation in promoting technology use.
- Despite efforts to provide training and technical support, their percentages remain modest in some areas, necessitating enhanced efforts to achieve comprehensive digital transformation.
- The level of support varies between governorates, reflecting disparities in resources and capabilities, which calls for centralized planning to ensure equitable access to technological support.

Recommendations:
1. **Increase technical support:**
   - Weak technical support is a major obstacle in all governorates, particularly in the North and Bekaa.
2. **Expand training programs:**
   - Training is unavailable in many areas and should be prioritized.
3. **Diversify support aspects:**
   - Some governorates focus on a single aspect (e.g., encouraging teachers), which requires improving balance across different areas of support.
4. **Allocate electronic resources:**
   - There is a critical need to provide resources in the South, Nabatieh, and Bekaa.

Fourth response : Teacher

In Beirut Governorate, the public education sector recorded a 43.3% rate for the phrase "encouraging teachers to use technology." Meanwhile, the free private education sector achieved 50.0% for the same phrase. In the private non-free education sector, the highest rate, 30.5%, was for the phrases "encouraging teachers to use technology" and "providing training for teachers on using technology."
In Mount Lebanon (suburbs), the highest percentage in the public education sector was 35.0% for "encouraging teachers to use technology." The free private education sector recorded 29.7% for a similar phrase, while the private non-free education sector achieved 24.8% for the same phrase. In Mount Lebanon (excluding suburbs), the public sector recorded 36.6%, the free private sector 32.3%, and the private non-free sector 17.7%, with "encouraging teachers to use technology" prevailing across all sectors.
In the North Governorate, the public education sector achieved 45.2% support for encouraging technology use, and the free private sector recorded 47.5%. In the private non-free sector, the percentage was 19.0%. In the Bekaa Governorate, the public sector scored 45.9%, the free private sector 47.1%, and the private non-free sector 25.0% for "encouraging teachers to use technology."
In the South Governorate, the highest percentage was 43.4% in the public sector. In the free private education sector, the percentage was 30.0% for both "encouraging teachers to use technology" and "providing training for teachers." The private non-free sector recorded 18.8% for similar phrases.
In Nabatieh, the public and free private education sectors each recorded 30.4%. Meanwhile, the private non-free sector recorded 34.4% for the same phrase. In Akkar, the public sector scored the highest at 56.6%, while the free private sector recorded 33.3% for "providing training." The private non-free sector achieved 26.6%.
In Baalbek-Hermel, the public sector recorded 46.8%, the free private sector achieved 20.0% for "providing training," and the private non-free sector scored 19.4% for both "encouraging teachers to use technology" and "providing training for teachers on using technology."

Key Findings:

The most common form of support across all governorates and sectors was "encouraging teachers to use technology." The highest support rate was observed in Akkar's public sector, at 56.6%. There is notable variation in support levels between governorates, with some areas excelling in providing training and technology compared to others. Private non-free schools rely more heavily on technology and offer broader support in terms of training and resources.

Question: Training Needs Related to Technology
Second response: supervisor (Question # 23)

An analysis of the responses from supervisors who responded the open-ended question reveals that most provided a variety of training needs. Some supervisors merely listed points (…) without writing anything specific, while others stated they did not require any training. A few mentioned needs unrelated to training, such as requests for technological devices (e.g., laptops). Nonetheless, the responses related to training were classified into the following main areas to identify the most critical training needs for supervisors in schools.

The responses were categorized under the following main headings:

1. **Training Courses in IT and Computer Programs:**
   Many responses highlighted the urgent need to train supervisors in using computers and programs such as Excel and Word. This was the most frequently mentioned category.
2. **Training Courses in Educational Technology Usage:**
   There is significant interest in training supervisors on electronic platforms and interactive boards, reflecting a desire to enhance teaching efficiency through modern technological tools.

3. **Specialized Training in Technology for Administration and Communication:**
   Many supervisors indicated the need for training on using technology for administrative purposes, such as organizing activities, creating schedules, and communicating with parents.
4. **Provision of Technological Devices and Technical Support for Training:**
   The responses emphasized the importance of providing appropriate technological devices like laptops, along with specialized technical support to ensure effective training.
5. **Sustainable Training to Keep Up with Technological Advancements:**
   The need for regular training courses to help supervisors stay updated with the latest technological developments was frequently mentioned.
6. **Training on Artificial Intelligence and Advanced Technologies:**
   Some supervisors highlighted the need for training in artificial intelligence and advanced software technologies to better support education and training.
7. **Training on Distance Learning:**
   Certain responses pointed to the need for training in remote learning tools such as Microsoft Teams and Zoom, aligning with modern trends in e-learning.
8. **Specialized Training in Technological Soft Skills:**
   Some supervisors expressed the need for training in soft technological skills, such as managing communication and using digital tools professionally.
9. **Training in Typing and Software Applications:**
   A specific need for training supervisors in fast typing and using word processing applications was identified.
10. **Specialized Training in Educational Technology and Interaction with Digital Media:**
    Some supervisors expressed a desire for training on how to interact with digital media in modern education effectively.
11. **Administrative and Technical Training:**
    Certain responses emphasized the necessity of training courses focused on management and using technology to handle students effectively.

Summary:
The responses highlight a wide range of training needs, from basic IT skills to advanced technologies like artificial intelligence and remote learning tools. The findings underscore the importance of sustainable and specialized training programs tailored to the evolving demands of educational technology.

Third response: coordinator

Training Needs Analysis by Sector and Region
Public Sector
The data reveals clear differences in training needs across the governorates:
1. **Beirut:**
   Needs are evenly distributed at 11.1% for each of the following: training in technology usage, training courses, using the Teams platform, developing electronic content, interactive boards, artificial intelligence training, updating technological skills, and providing electronic resources.
2. **Mount Lebanon (Suburbs):**
   Needs are evenly distributed at 5.9% across categories such as educational software training, modern technological tools usage, continuous training courses, electronic content development, and training on computers and interactive boards.
3. **North Lebanon:**
   Diverse needs are noted, with each accounting for 1.7%, including basic computer training, specialized training courses, and providing technological equipment. Some needs rise slightly to 3.4%.
4. **Bekaa:**
   Most needs are equally represented at 5%, including training on technology in education, providing equipment, and specialized training courses.

5. **South Lebanon:**
   Needs are mostly at 2.4%, with some rising to 7.1%, focusing on modern technology usage and artificial intelligence training.
6. **Nabatieh:**
   Most needs are evenly distributed at 6.3%, with a focus on continuous training and specialized courses in modern technology.
7. **Akkar:**
   Needs are distributed at 3.8%, emphasizing basic training and technological infrastructure requirements.
8. **Baalbek-Hermel:**
   Needs range between 5.6% and 11.1%, with a focus on basic training and providing technological equipment.

General Observations:
- Between 0.4% and 2% of respondents across all governorates mentioned diverse needs, focusing on continuous training, technological skills development, using AI in education, and providing necessary technological infrastructure.
- The findings highlight the need for comprehensive training programs that account for regional differences and address specific needs, especially in areas with limited technological infrastructure.

Private Sector (Non-Free)
The training needs in the private sector vary according to the technology used:
1. **Key Needs Identified:**
   o **Project Management Tools:** Learning tools like Trello and Asana is essential for coordinating tasks and team collaboration.
   o **Collaborative Tools:** Platforms like Google Drive and Microsoft Teams are crucial for effective communication and meeting organization.
   o **Data Analysis:** Proficiency in tools like Excel and Power BI is vital for reporting and performance analysis, enabling data-driven decision-making.
   o **Cybersecurity:** Understanding the basics of data protection is necessary to safeguard sensitive information against cyber threats.
2. **Regional Breakdown:**
   o **Bekaa:** The highest training need at 50%, indicating a focus on developing technological skills intensively.
   o **North Lebanon:** Balanced needs at 25%, reflecting moderate training requirements. Efforts to enhance educational initiatives are recommended.
   o **South Lebanon:** A lower need at 20%, pointing to a gap in technological knowledge that requires addressing through training in modern technology usage.
   o **Nabatieh:** High training needs at 50%, emphasizing the importance of teacher training and technological resources.
   o **Akkar:** Moderate needs at 33.3%, showing room for improvement in technological skills but lower compared to other regions.

Recommendations for Training Programs:
To meet the diverse needs, the following areas should be prioritized:
1. **Digital Project Management:**
   Train educators in tools like Trello and Asana for task organization and improved collaboration.
2. **Collaborative Tools:**
   Educate on using platforms like Google Drive and Microsoft Teams for effective team communication.
3. **Data Analysis:**
   Offer specialized courses in Excel and Power BI for educational data analysis and reporting.

4. **Cybersecurity:**
   Conduct workshops on basic data protection and handling potential cyber risks.
5. **Programming and App Development:**
   Provide courses to enhance programming skills, supporting technical teams and understanding technology better.
6. **Distance Learning:**
   Enhance skills in using digital educational platforms and remote learning applications.

Fourth response: teacher

Teachers were asked an open-ended question about their training needs related to technology. After analyzing the responses, which were largely similar and repetitive, the following themes were identified:

- **Training on Technical Devices:** Computers, projectors (LCD), interactive boards (Active Boards).
- **Training on Applications:** Microsoft Office, Google Classroom, and e-learning tools (Kahoot, Padlet, Quizlet).
- **Digital Content Development:** Designing interactive content and creating educational videos.
- **Modern Technologies:** Training on artificial intelligence applications and data analysis.
- **Technical Support and Infrastructure:** Providing internet access, devices, and digital educational resources.
- **Continuous Training:** Regular workshops and training sessions.

General Categories of Needs

The identified themes were grouped into broader categories:

1. **Infrastructure and Devices:** Includes computers, interactive boards, and projectors.
2. **Technical Skills:** Covers the use of applications, e-assessment tools, and AI technologies.
3. **Professional Training and Development:** Focuses on regular and sustainable training sessions.
4. **Administrative Support:** Encompasses the provision of resources and capabilities for implementation.
5. **Integration of Technology in Education:** Involves curriculum design using technology.

Needs Prioritization by Region

1. **Training on Using Technology and Electronic Devices in Education:**
   - Primarily highlighted by teachers in **North Lebanon, Akkar, Baalbek-Hermel, and Nabatieh**, with lesser focus in **Beirut, Mount Lebanon (suburbs and non-suburbs), South Lebanon, and Bekaa** in ascending order of priority.
2. **Training on Artificial Intelligence Applications:**
   - Requested by all regions, with greater emphasis in **Beirut and Mount Lebanon (non-suburbs)**.
3. **Need for Continuous Training:**
   - Mentioned across all governorates.
4. **Provision of Devices, Internet, and Infrastructure:**
   - Priority ranking (descending order): **Mount Lebanon, Beirut, Bekaa, Nabatieh, North Lebanon, South Lebanon, Baalbek-Hermel, and Akkar**.
5. **Technical Support for Teachers:**
   - Required in all governorates, with a focus on peripheral regions.

Conclusion

The results indicate significant demand for training and resources across all regions, with varying levels of focus depending on local priorities. The findings emphasize the need for:

- Addressing infrastructure gaps, particularly in peripheral areas.
- Developing specialized training programs tailored to regional priorities (e.g., AI training in urban areas, foundational tech training in rural areas).
- Ensuring sustainable support through ongoing professional development initiatives.

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- Providing technical assistance and reliable infrastructure to support technology integration in education effectively.

Section Four: Leadership and Administrative Competencies
Category One: Strategic Planning and Decision-Making

What does school do to achieve educational goals
Item 1: Establishing Strategic Plans
Response 1 (Principal): Question No. 32
Response 2 (Supervisor): Question No. 24

General Overview
Public Sector
31.3% of schools describe their strategic planning process as "always and highly effective," and **38.7%** as "often."
This indicates that **70%** of schools engage in strategic planning effectively.
21.2% of supervisors believe strategic planning happens "sometimes."
6.9% think it is "rarely" done, and **1.8%** say it is "never" done.
Private Sector (Free Education)
74.2% of supervisors across all governorates report that schools "always and effectively" create strategic plans.
16.1% believe strategic plans are developed "often," while **9.7%** say it happens "sometimes."
Private Sector (Paid Education)
70.1% of supervisors state that schools "always and effectively" engage in strategic planning, and **24.8%** say "often."
4.3% report it happens "sometimes," while a minority (**0.9%**) say it is "rarely" done.
UNRWA Schools
100% of participants in the South and Mount Lebanon confirm that strategic plans are "always and effectively" developed.
Observations by Governorates
Public Sector
Beirut: Results are varied:
36.4% "always," **36.4%** "rarely," and **27.3%** "sometimes."
Mount Lebanon (Suburbs):
76.5% report plans are created "often" (**47.1%**) or "always" (**29.4%**).
Mount Lebanon (Non-Suburbs):
91.3% of supervisors state strategic planning is "always and highly effective" (**43.5%**) or "often" (**47.8%**).
North Lebanon:
Varied responses: **44.7%** "often" and **28.9%** "always."
Bekaa:
Moderate results: **38.9%** "sometimes" and **22.2%** "always" or "often."
Private Sector (Free Education)
Beirut, Mount Lebanon (Non-Suburbs), North, South, and Bekaa:
Plans are implemented **100% "always."**
Nabatieh:
Requires improvement, with **50%** "often."
Akkar:

75% "always," but **25%** report it happens "sometimes."
Private Sector (Paid Education)
Beirut:
77.8% "always," and **22.2%** "often."
Mount Lebanon (Suburbs):
71.9% "always," with a few reporting "rarely" or "sometimes."
North and Bekaa:
Lower percentages compared to other areas, with mixed results between "sometimes" and "often."
UNRWA Schools
Full success in the South and Mount Lebanon, with **100%** reporting plans are "always and effectively" developed.
Comparative Analysis Between Sectors and Governorates
Private Free Education and UNRWA:
Most consistent and effective in implementing strategic plans.
Public and Paid Private Education:
Show regional disparities, especially in **North Lebanon** and **Bekaa,** where improvements are needed.
Mount Lebanon and South Lebanon:
Stand out as the best-performing regions across most sectors.
UNRWA Schools:
Maintain a perfect success rate (**100%**) in strategic planning.
Conclusion
The data highlights significant disparities across sectors and regions. While some sectors excel in strategic planning, others, particularly in rural areas, require targeted interventions to improve effectiveness. Emphasis should be placed on:
Addressing regional gaps in strategic planning.
Enhancing training for supervisors and administrators in underperforming areas.
Ensuring continuous monitoring and evaluation to sustain success in top-performing regions.

Third Response : Coordinator (Question No. 24)

The results of strategic planning in the public education sector show noticeable variations across different governorates. In Beirut, strategic planning is inconsistently implemented, with 33.3% of coordinators reporting that planning is "always effective," while a similar percentage (33.3%) say it is "rarely" effective, reflecting a lack of consistency among schools in this area.
In Mount Lebanon suburbs, strategic planning is reasonably carried out, with 41.2% stating it is "often" and 17.6% "always effective," suggesting room for improvement in overall effectiveness.
For Mount Lebanon (excluding suburbs), the highest percentage of coordinators (35.9%) report that planning is done "sometimes," indicating inconsistent implementation. In the North, 33.9% of coordinators say planning is done "sometimes" or "often," indicating a need for more continuous efforts to ensure effective application.
In Bekaa, 35% of responses indicate planning is "often" carried out, while 30% say it is "sometimes," showing a gradual, but incomplete, approach. In the South, the results are more positive, with 40.5% reporting "often" and 26.2% "always effective" planning, suggesting a strong commitment to strategic planning, though not all schools achieve high effectiveness.
In Nabatieh, the best results are seen, with 56.3% of coordinators stating planning is "always effective," reflecting a strong dedication to strategic planning. In Akkar, 34.6% report that planning is "often" effective, while 19.2% say it is "always effective," indicating progress but with room for improvement. In Baalbek-Hermel, 38.9% report "often" and 27.8% "always effective" implementation, showing good planning with some gaps that need addressing.
In the private free education sector, strong results are observed in Mount Lebanon suburbs and Bekaa, with 60% of coordinators stating planning is "always effective," reflecting strong leadership in strategic planning.

In the private paid education sector, results stand out, with 66.7% in Beirut, 67.7% in the North, and 62.5% in Bekaa reporting "always effective" planning, indicating a superior performance in strategic planning compared to other sectors.

For UNRWA schools, the strongest results are in the North, where 100% of coordinators report that planning is "always effective," showcasing a robust commitment to strategic planning within UNRWA schools in the region.

Fourth Response : Teacher (Question No. 23)

Throughout the academic year, school administrations in both public and private sectors develop strategic plans to achieve educational objectives. Statistics indicate that 33.9% of public schools effectively implement strategic plans, with 36.8% doing so regularly, while 1.8% do not adopt strategic planning at all.

At the governorate level, Beirut shows a moderately high to high positive response, with 33.33% of schools implementing plans effectively. In Mount Lebanon (excluding suburbs), the highest percentage in the "Always Effective" category is 48.78%, indicating excellent administrative performance. For Mount Lebanon suburbs, 43.33% fall into this category. In the North, performance is distributed with high percentages in "Often" (33.33%) and a lower percentage in "Always Effective" (28.89%). In Nabatieh, the highest percentage is in "Often" (50%), reflecting stability, with room for improvement in "Always Effective" (29.46%).

In Akkar, the highest percentage focuses on "Often" (37.35%) and "Always Effective" (31.93%), which is a relatively positive indicator. In Bekaa, good performance is shown at 35.71% for "Always Effective," but with high percentages in "Sometimes" (23.47%), indicating variability. In the South, performance is moderately to good, with 42.62% in the "Always Effective" category. In Baalbek-Hermel, the lowest percentage in "Always Effective" (23.38%) reflects greater challenges.

In the private free sector, rates vary by governorate; Beirut recorded the lowest percentage in "Always Effective" (25.0%), while Akkar recorded the highest (71.4%). The private paid sector demonstrated significant superiority across all governorates, particularly in Nabatieh (71.9%) and Baalbek-Hermel (72.2%).

Comparing sectors, the private paid sector excels in effective strategic planning across most governorates, while the public sector shows noticeable variation, with strong performance in Mount Lebanon and weaker performance in Baalbek-Hermel and the North. The private free sector performs well in most governorates, except for the South where performance is lower.

Mount Lebanon shows the highest commitment to strategic planning, especially in private schools. In the North and Bekaa, performance is lower compared to Mount Lebanon. Nabatieh records advanced performance in both public and private sectors. These results highlight the disparities in performance across governorates and the importance of enhancing efforts to achieve effective educational strategies.

Question: What does the school do to achieve educational objectives?

Item 2: Developing alternative plans to handle emergencies and crises

First Response : Principal (Question No. 32)

The public sector demonstrates strong performance in some areas, such as Mount Lebanon suburbs, where 63.6% report "Always and Effectively" implementing alternative plans. In contrast, weaker performance is observed in regions like Baalbek-Hermel, where 9.1% report "Never," a notably high percentage compared to other governorates.

In the private free sector, the best performance is seen in governorates such as the North (83.3%) and Bekaa (66.7%) under the "Always and Effectively" category, while Beirut and Mount Lebanon suburbs achieve 100% "Always," indicating slight variations between regions.

In the private paid sector, Baalbek-Hermel shows a strong result with 80.0% reporting "Always," whereas the North records 7.7% under "Rarely," highlighting considerable discrepancies across regions. Meanwhile, the UNRWA sector consistently achieves the highest scores across all governorates, with 100% reporting "Always," reflecting a stable and reliable performance.

At the governorate level:

- Beirut records the highest percentages in both private free and private paid sectors.
- Mount Lebanon suburbs lead in the public sector with 63.6% reporting "Always."
- In the South, the private free sector achieves 100% "Always," while the public sector lags with 40.0% under "Always."

Conclusions highlight substantial disparities in the public sector's performance across governorates, necessitating targeted efforts to improve outcomes in low-performing regions such as Baalbek-Hermel and the North. Addressing these discrepancies will require tailored support and region-specific programs.

Recommendations include enhancing performance in the public sector through principal training programs, sharing successful practices across sectors, and focusing on reducing gaps between governorates. This will help to improve results in regions with weaker performance and ensure more consistent implementation of strategic and emergency planning.

Second Response : Supervisor (Question No. 24)

General Overview by Sectors:

Public Sector:

The majority of participants (63.1%) report that schools implement emergency plans "Often" or "Always and Effectively." Mount Lebanon (excluding suburbs) and the South showed the highest levels of effective management, while Baalbek-Hermel highlighted the need for improvement.

Private Free Sector:

Most regions reported moderate to good levels of implementation, with 22.6% indicating "Often" and 67.7% "Always," though significant disparities were observed between governorates.

Private Paid Sector:

59.8% of participants believe that plans are implemented "Always and Effectively." Areas like Beirut and Mount Lebanon (excluding suburbs) demonstrated strong performance.

UNRWA:

Implementation is consistent, with 100% reporting "Often" in Mount Lebanon and 100% "Always and Effectively" in the South.

Observations by Governorate and Sector:

Public Sector:

Beirut: Moderate performance, with 27.3% of supervisors reporting "Always" implementing alternative plans, while 27.3% reported "Sometimes," and the highest rate of "Rarely" (36.4%) among governorates.

Mount Lebanon (excluding suburbs): Very positive results, with 43.5% reporting "Always" and 52.2% "Often."

South and Nabatieh: Strong performance, with 40.6% and 52.2% reporting "Often," and 37.5% and 30.4% "Always," respectively.

Akkar and Baalbek-Hermel: Relatively weak performance, with the highest rates of "Sometimes" (39.5% and 41.2%) and the lowest rates of "Always" (13.2% and 11.8%).

Private Free Sector:

Generally strong performance in most governorates, with "Often" and "Always" ratings ranging between 60% and 100%.

Private Paid Sector:

Beirut (77.8%) and **Mount Lebanon (excluding suburbs, 83.3%)** reported "Always and Effectively" implementing alternative plans.

Bekaa and North: Mixed results, with 50% reporting "Always."

South and Nabatieh: High performance, with 71.4% and 60% of supervisors, respectively, reporting "Always and Effectively."

Akkar and Baalbek-Hermel: Good results, with many supervisors reporting consistent implementation of alternative plans.

UNRWA:

Outstanding results in Mount Lebanon and the South, with 100% reporting "Often" and "Always." Comparative Analysis Between Sectors and Governorates:

Public Sector: High effectiveness in Mount Lebanon (excluding suburbs) and the South, with a need for improvement in Beirut and Baalbek-Hermel.

Private Paid Sector: Significant regional variation, with positive results in Beirut but weaker performance in the North and Bekaa.

UNRWA: Demonstrates the highest consistency and effectiveness among all sectors.

Recommendations: Efforts should focus on improving planning and execution in areas with low performance, such as Akkar and Bekaa. Sharing best practices and providing targeted support in weaker regions could enhance outcomes across sectors.

Response 3: Coordinator (Question No. 24)

Public Sector:

In some governorates, such as Beirut, there was significant variation in the implementation of planning. While 33.3% of coordinators indicated that planning is conducted effectively, 22.2% reported no planning at all. In Mount Lebanon suburbs, planning was moderately effective, with 35.3% of coordinators reporting it occurs "Often" and 17.6% stating it is "Always and Effectively."

In Mount Lebanon (excluding suburbs), planning is gradually being adopted, with 38.5% and 25.6% of coordinators indicating implementation "Often" and "Always and Effectively," respectively. This reflects a reasonable awareness, but one that remains incomplete.

In the North and Bekaa, results also showed notable diversity. In the North, 35.6% of coordinators reported planning occurs "Often," while in Bekaa, 20% indicated it happens "Always and Effectively," signaling relative progress in planning.

Private Free and Paid Sectors:

In Beirut and Mount Lebanon (excluding suburbs), these sectors demonstrated strong results, with 66.7% and 65.2%, respectively, reporting that planning is conducted "Always and Effectively." In Bekaa, the private free sector showed a rate of 43.8%, while UNRWA achieved 100% "Always and Effectively," reflecting exceptional performance in emergency planning.

UNRWA:

The agency exhibited excellent performance in the North, with 100% of coordinators stating that planning is conducted "Always and Effectively," highlighting a strong readiness and a high level of organization.

Conclusions:

The findings reveal clear disparities in the performance of different sectors. The private paid sector and UNRWA displayed the highest levels of effectiveness in emergency planning. However, the public sector showed significant variation among governorates, necessitating enhanced and standardized planning efforts in lower-performing regions.

Response 4: Teacher (Question No. 23)

Public Sector:

The results indicate that 28.6% of schools deal with crises "Always and Effectively," while 38% handle them "Regularly," and only 2.8% have no alternative plans in place. These figures highlight varying levels of preparedness across different governorates.

Highest preparedness: Mount Lebanon (excluding suburbs) recorded the highest percentage for "Always" at 42.68%, followed by the North (27.78%), South (37.70%), and Nabatieh (25.00%).

Lowest preparedness: Beirut showed the lowest percentage for "Always" at 23.33%.

Bekaa (38.78%) and the North (30.74%). Beirut had the lowest percentage in this category at 40%.
Private Paid Sector:
Beirut: Recorded 72.9% for "Always and Effectively."
Mount Lebanon (including suburbs): Showed remarkable performance with 74.2% for "Always."
Baalbek-Hermel: Achieved 75% for "Always," reflecting strong effectiveness in emergency planning.
Private Free Sector:
Beirut: Most responses fell under "Often" or "Always," accounting for 75%.
Bekaa and Mount Lebanon (excluding suburbs): Displayed strong results with 67.6% and 80.6% for "Always," respectively.
UNRWA:
In Mount Lebanon (including suburbs), 40% of schools responded with "Always."
In the North, performance was weaker, reflecting a lack of robust alternative planning.
Conclusions:
The private paid sector demonstrates significant effectiveness in consistently implementing crisis plans. Conversely, the public sector shows clear disparities among governorates, indicating a need for more comprehensive and uniform preparedness across all regions. Enhanced focus should be directed toward underperforming areas, particularly in Beirut and the North.

Question: How are plans formulated?
First Response : Principal (Question No. 33)

Overall School Performance:
51.3% of schools involve all stakeholders effectively and efficiently.
38.4% involve some stakeholders effectively and efficiently.
Remaining percentages indicate reliance on individual mechanisms or lack of defined plans.
Comparison by Educational Sectors:
Public Sector:
51% of schools effectively involve all stakeholders in "planning related to resource management, task distribution, and prioritization."
Highest percentages: Beirut (87.5%) and Mount Lebanon (excluding suburbs) (61.1%).
Lower percentages: Bekaa (46.2%) and Akkar (55%).
37.4% involve some stakeholders effectively:
Highest: South (60%) and Baalbek-Hermel (45.5%).
Lowest: Mount Lebanon suburbs (18.2%).
Beirut and Mount Lebanon (excluding suburbs) demonstrate high levels of efficiency and effectiveness in planning and task management. Akkar and Bekaa exhibit higher reliance on undefined mechanisms and individual decision-making.
Private Free Sector:
50% of schools involve all stakeholders effectively, with notable performance in Bekaa and North (66.7%).
Beirut and South: Full commitment, with 100% "Always."
36.7% involve some stakeholders effectively, highlighting certain challenges in this sector.
Private Paid Sector:
51% involve all stakeholders effectively:
Beirut (88.9%) and Baalbek-Hermel (100%) recorded the highest percentages.
Individual decisions by principals were notable in certain regions, such as Akkar (16.7%) and North (7.7%).
UNRWA:

75% of schools involve all stakeholders effectively, with standout performance in Mount Lebanon suburbs and North (100%).

Comparison by Governorates:

Beirut:

Tops performance in both public and private paid sectors:

Public: 87.5% involve all stakeholders effectively.

Private Paid: 88.9% involve all stakeholders effectively.

Mount Lebanon Suburbs:

Shows a decline in the public sector with only 18.2% involving all stakeholders.

However, UNRWA schools excel at 100%.

North:

Private free sector performs well, with 66.7% involving all stakeholders.

Public sector: 48.6% involve all stakeholders effectively.

South:

Balanced performance:

Public: 60%.

Private Free: 100%.

Bekaa:

Mixed results:

Private Free: 66.7% involve all stakeholders effectively.

Public: Lower performance at 46.2%.

Akkar:

Public sector lags, with only 55% involving all stakeholders effectively.

Private paid sector: 33.3% involve all stakeholders effectively.

Baalbek-Hermel:

Public sector shows moderate performance, with 36.4% involving all stakeholders effectively.

Private paid sector excels with a perfect score of 100%.

Variations Among Governorates:

Public Sector:

Displays the most significant disparities, with participation ranging from excellent in Beirut to weaker in Akkar.

Private Free Sector:

More consistent due to relatively unified mechanisms.

Private Paid Sector:

Shows stable performance across governorates.

Conclusions:

Public Sector: Achieves medium to high participation levels but faces noticeable disparities between governorates, with weaker performance in Akkar and Bekaa.

Private Free Sector: Demonstrates strong participation in most governorates, with notable success in South and Bekaa.

Private Paid Sector: Exceptional participation levels, particularly in Beirut and Baalbek-Hermel.

UNRWA: Fully committed to involving all stakeholders, especially in Mount Lebanon and North.

Overall: Public and private paid sectors exhibit high participation rates. South and Beirut stand out across all sectors.

Areas for Improvement: Akkar and Baalbek-Hermel show lower participation rates.

Individual Decision-Making: Reliance on principal-driven decisions persists in some governorates.

Second Response : Supervisor (Question No. 25)

General Overview:

Public Sector:

39.2% of supervisors reported that "all stakeholders participate effectively and efficiently."

38.7% noted that "some stakeholders participate effectively and efficiently."

Combined positive participation rate: **77.9%.**

22.1% of schools reported negative outcomes, such as the absence of a defined mechanism, reliance on individual decisions by the principal, or ineffective stakeholder participation.

Private Free Sector:

61.3% of schools stated that "all stakeholders participate effectively and efficiently."

22.6% noted that "some stakeholders participate effectively and efficiently."

3.2% indicated "no defined mechanisms for planning," while **9.7%** cited reliance on individual decisions by the principal.

3.2% observed participation by some stakeholders without noticeable effectiveness.

Total positive participation rate: **83.9%.**

Private Paid Sector:

56.4% reported that "all stakeholders participate effectively and efficiently."

37.6% noted that "some stakeholders participate effectively and efficiently."

1.7% observed participation by some stakeholders without significant effectiveness.

4.3% cited reliance on individual decisions by the principal.

Total positive participation rate: **94.0%.**

UNRWA:

Demonstrates outstanding performance, with **100% effective participation** in Mount Lebanon and South, reflecting superior organizational efficiency.

Key Observations by Governorates:

Beirut:

Leads with positive rates across all sectors, particularly in private free and paid education (**100%**).

South:

Achieves the highest positive rate in the public sector (**90.7%**) and **100%** in private sectors.

North and Mount Lebanon (suburbs):

High positive rates ranging from **82% to 96%.**

Akkar:

Struggles with weak stakeholder participation (**31.1%** in the public sector).

High reliance on individual decisions:

50% in private free education.

33.3% in private paid education.

Baalbek-Hermel:

Moderate positive rates in the public sector (**76.5%**).

Needs improvement in collaborative planning.

Private education stands out with **100% positive performance.**

Nabatieh:

Weakness in defined mechanisms (**16.7%**) in private free education despite a high overall positive rate.

Comparative Insights Between Sectors and Governorates:

Sectoral Comparison:

The private sector outperforms the public sector in planning mechanisms, especially in Beirut and South.

Regional Comparison (Public Sector):

South, Beirut, Bekaa, and North achieve the highest positive rates.

Areas Needing Improvement:

Akkar and **Baalbek-Hermel** require the development of comprehensive planning mechanisms and reduced reliance on individual decisions.

Conclusions:

Private Sectors: Consistently demonstrate strong and effective planning mechanisms, with Beirut and South showing exceptional performance.

Public Sector: Displays variability, with high performance in certain regions (e.g., South and Beirut) and weaker outcomes in areas like Akkar and Baalbek-Hermel.

UNRWA: Exemplifies organizational excellence with 100% effectiveness in key regions.

Recommendations: Focus on strengthening collective planning mechanisms in low-performing regions and reducing dependency on individual decision-making.

Response 3: Coordinator (Question No. 25)

In Beirut, there is a noticeable disparity across different sectors. In the public sector, all stakeholders participate effectively and efficiently at a rate of 33.3%, while the lowest rate is for decisions made solely by the principal (0%). In the private free sector, all operations involved partial participation by stakeholders effectively, with a rate of 100%. In the private paid sector, the highest rate was for effective participation at 41.7%.

In Mount Lebanon (suburbs), the public sector shows effective participation by stakeholders at 35.3%. The private free sector displayed a more diverse distribution, with effective participation being the most common at 60%. In the private paid sector, there was a focus on effective participation by stakeholders at a rate of 52.2%.

In Mount Lebanon (non-suburbs), the public sector showed varied rates, with the highest being for effective participation by all stakeholders (30.8%). In the private free sector, the largest percentage was for partial participation by stakeholders without effectiveness (80%). In the private paid sector, effective participation was most prominent at 47.4%.

In the North, the public sector showed high rates of effective participation by stakeholders at 42.4%. In the private free sector, the highest percentage was for partial participation by stakeholders without effectiveness (75%). In the private paid sector, effective participation was highest at 51.6%.

In the Bekaa, the public sector recorded effective participation by stakeholders at 65%. In the private free sector, the largest percentage was limited to partial participation by stakeholders without effectiveness (100%). In the private paid sector, effective participation was at 43.8%.

In the South, the public sector stood out with effective participation by all stakeholders at 40.5%. The private free sector recorded effective participation at 60%. In the private paid sector, the highest rate was for effective participation at 50%.

In Nabatieh, the public sector recorded the highest level of effective participation by all stakeholders at 50%. In both the private free and paid sectors, the largest percentages were for decisions made solely by the principal or partial participation by stakeholders without effectiveness.

In Akkar, the public sector showed distributed rates, with a focus on effective participation at 34.6%. In both the private free and paid sectors, the highest rates were almost equally distributed among different types of participation.

In Baalbek-Hermel, the public sector was most notable for effective participation at 50%. In the private free and paid sectors, there were high percentages for decisions made solely by the principal and partial participation by stakeholders without effectiveness.

On a total aggregate level, the highest percentage was for participation by stakeholders effectively and efficiently at 41.6%, followed by effective participation at 35.7%, indicating a positive development in resource and task management across different sectors.

General Conclusions

Public Sector

Most areas, such as Beirut, the North, and Baalbek-Hermel, show a good level of participation by various stakeholders, with a higher percentage in "all stakeholders participate effectively and efficiently." The Bekaa is an exception, with 65.0% of schools showing participation by a limited group of stakeholders.

Private Free Sector

Beirut and the Bekaa exhibit complete participation by all stakeholders, while the North adopts a stronger approach to individual decision-making.

Private Paid Sector

Similar trends to the private free sector, with significant participation in some areas such as the South and Baalbek-Hermel, though there is still reliance on individual decisions or limited stakeholder participation in some regions.

UNRWA Sector

The North demonstrates 100% effective participation, with all stakeholders involved.

Response 4: Teacher (Question No. 24)

In the public sector, the overall national results showed that 40.7% of teachers responded with "All stakeholders participate effectively and efficiently in planning." Meanwhile, 32.7% responded with "Some stakeholders participate effectively," and 9.7% stated that no specific mechanism exists for this process.

In Beirut Governorate, 16.7% of teachers reported that no specific mechanism exists for planning. Meanwhile, 36.7% stated that all stakeholders participate effectively and efficiently in planning resource management and task distribution, while 33.3% indicated that this occurs frequently.

In Mount Lebanon (suburbs), 45.0% of teachers responded that all stakeholders participate effectively and efficiently. Meanwhile, 26.7% stated that some stakeholders participate effectively, and 13.3% reported no specific mechanism for planning.

In Mount Lebanon (excluding suburbs), 45.1% of teachers reported that all stakeholders participate effectively and efficiently, while 34.1% stated that some stakeholders participate effectively.

In the North Governorate, 40.0% of teachers said all stakeholders participate effectively and efficiently, while 31.1% indicated that some stakeholders participate effectively.

In the Bekaa Governorate, 42.9% of teachers responded that all stakeholders participate effectively and efficiently, while 28.6% stated that some stakeholders participate effectively.

In the South Governorate, 47.5% of teachers indicated that all stakeholders participate effectively and efficiently, while 34.4% stated that some stakeholders participate effectively.

In Nabatieh Governorate, 39.3% of teachers reported that all stakeholders participate effectively and efficiently, while 35.7% stated that some stakeholders participate effectively.

In Akkar Governorate, 39.8% of teachers responded that all stakeholders participate effectively and efficiently, while 36.1% reported that some stakeholders participate effectively.

In Baalbek-Hermel Governorate, 32.5% of teachers stated that all stakeholders participate effectively and efficiently, while 27.3% reported that some stakeholders participate effectively.

For the free private sector, overall sectoral results showed that 3.3% of teachers (0.4% of the overall total) indicated no specific mechanism for planning. Meanwhile, 5.7% (0.6% of the overall total) saw planning as being based on individual decisions by the principal. Another 3.3% (0.4% of the overall total) noted the involvement of stakeholders but without effectiveness. A significant percentage, 34.0% (3.7% of the overall total), indicated effective partial participation by some stakeholders, pointing to gaps in comprehensive collaboration. The majority (53.6%) noted effective and efficient participation by all stakeholders (5.9% of the overall total), representing more than half of the teachers in this sector. There was a marked decrease in the percentage of "no specific mechanism" and "individual decisions," indicating clarity in administrative plans. A combined total of 6.9% for "no specific mechanism" or "individual decisions" highlights challenges in establishing clear organizational planning. A total of 12.3% indicates a lack or weakness in planning mechanisms, distributed as follows: 3.3% have no specific mechanism, 5.7% rely on individual decisions by the principal, and 3.3% observe weak stakeholder participation.

At the governorate level, in Beirut Governorate, 37.5% of teachers indicated "All stakeholders participate effectively and efficiently," while 12.5% reported "Some stakeholders participate effectively." There were no responses indicating the absence of mechanisms. Planning in free private schools in Beirut Governorate heavily relies on effective participation.

In Mount Lebanon (suburbs), 51.4% indicated "All stakeholders participate effectively and efficiently," while 43.2% reported "Some stakeholders participate effectively." There were no responses for other statements. These results reflect a strong reliance on stakeholder participation in planning.

In the North Governorate, 70.0% of teachers responded that "All stakeholders participate effectively and efficiently," while 22.5% reported "Some stakeholders participate effectively." There were no responses for other statements.

In the Bekaa Governorate, 58.8% of teachers indicated "All stakeholders participate effectively," while 10.0% reported "Some stakeholders participate effectively," and another 10.0% stated "No specific mechanism exists."

In the South Governorate, 70.0% of teachers reported "All stakeholders participate effectively," while 10.0% indicated "Some stakeholders participate effectively," and 10.0% stated "No specific mechanism exists."

It is clear that planning in the Bekaa and South Governorates relies on effective stakeholder participation.

In Baalbek-Hermel Governorate, 60.0% of teachers reported "Some stakeholders participate effectively," while 40.0% indicated "No specific mechanism exists." There is a noticeable lack of clear plans in some schools.

Overall, Beirut and Mount Lebanon (suburbs) recorded very high rates of comprehensive effective participation (49.5% and 49.7%), reflecting good management and efficient coordination. The South also recorded a high percentage of comprehensive effective participation (48.5%) with stable organizational mechanisms. On the other hand, northern and Baalbek-Hermel governorates recorded high rates of absence of mechanisms (8.5% and 8.5%) and individual decisions (8.3% and 11.0%), suggesting challenges in administrative operations. Akkar recorded a 10.4% rate for the absence of mechanisms, while Baalbek-Hermel showed a high rate of individual decisions (11%).

The private non-free sector showed the following results:

Absence of a specific mechanism: 3.9% of teachers (1.4% of total) noted the absence of any clear mechanism for planning.

Individual decisions by the principal: 6.8% of teachers (2.4% of total) reported that planning relies on individual decisions.

Non-effective participation by some parties: 4.4% of teachers (1.5% of total) indicated non-effective participation by some parties.

Effective participation by some parties: 38.0% of teachers (13.3% of total) indicated partial effective participation.

Effective participation by all parties: 46.9% of teachers (16.4% of total) stated that all parties participate effectively and efficiently in planning.

Distribution of results by governorate:

In Beirut: Effective participation by all parties: 57.6%. Some parties participate effectively: 28.8%. Individual decisions by the principal (8.5%). Absence of a specific mechanism (1.7%).

Mount Lebanon (suburbs): Effective participation by all parties: 50.0%. Some parties participate effectively: 41.0%. Other rates are minimal, resulting in strong reliance on either complete or partial stakeholder involvement.

In the North: Effective participation by all parties: 41.0%. Some parties participate effectively: 33.0%. A noticeable percentage lacks defined mechanisms (5.0%) and has individual decisions (9.0%).

In the Bekaa: 39.3% of teachers said "all parties participate effectively," and 7.1% said "some parties participate effectively."

In the South: 43.8% reported that all parties participate effectively, with a similar percentage for some parties.

In Baalbek-Hermel: Effective participation by all parties: 50.0%. Individual decisions by the principal: 5.6%. No clear mechanisms: no response.

Category Two: The Principal's Leadership and Administrative Competencies

Question: What is the leadership model adopted?
Response 1: Principal (Question No. 35)
In the public sector, participatory leadership stands out significantly, with high percentages such as 94.4% in Mount Lebanon (excluding suburbs), 93.3% in the South, and 93.8% in Nabatieh. The lowest percentage is recorded in Baalbek-Hermel at 81.8%. On the other hand, individual leadership appears in very small percentages, with the highest percentage in Baalbek-Hermel at 9.1%.
In the private free sector, participatory leadership is almost dominant across all governorates, reaching 100% in Beirut, Mount Lebanon (excluding suburbs), and the North, while the lowest percentage is in Akkar at 50%. Regarding individual leadership, it is very rare, with the highest percentage recorded in Baalbek-Hermel at 33.3%.
In the private non-free sector, participatory leadership ranges between 80% and 100% in most governorates, with the lowest percentage in Akkar at 50%. Individual leadership appears in some governorates such as Nabatieh at 16.7%.
The UNRWA sector shows 100% participatory leadership across all governorates, with no individual or other leadership models present.
When comparing sectors, the public sector appears to rely the most on participatory leadership at 90.5%, followed by the private free sector at 80%, and the private non-free sector at 84.7%. Regarding individual leadership, the public sector has the highest percentage at 7.5%, while the private free sector stands out with the lowest percentage of only 3.3%.
Analysis of variations between governorates highlights the importance of participatory leadership in Beirut at 100%, while Mount Lebanon (suburbs) records 85.7%, and Mount Lebanon (excluding suburbs) at 90.6%. In the North, participatory leadership reaches 94.5%, and in the Bekaa, it stands at 88%. The South shows a high percentage of participatory leadership at 96%. In Nabatieh, participatory leadership reaches 78.6%, with an individual leadership percentage of 17.9%. In Akkar, participatory leadership is 75%, with individual leadership at 21.4%. In Baalbek-Hermel, participatory leadership stands at 78.9%, while individual leadership reaches 10.5%.
The conclusions indicate that participatory leadership is dominant in most sectors and governorates, reflecting a collaborative educational environment aimed at enhancing teamwork within schools. However, the presence of notable percentages of schools relying on individual leadership in some governorates, such as Baalbek-Hermel and Akkar, highlights disparities in performance across regions. Recommendations include strengthening participatory leadership through training programs for principals, providing successful models to inspire other governorates, and establishing monitoring and evaluation mechanisms for principals, with rewards allocated to governorates achieving high rates of participatory leadership like Nabatieh and Baalbek-Hermel.
Response 2: Supervisor (Question No. 27)
Overall Situation
Public Schools:
Participatory leadership is prevalent at 77%, with regional variations where distributed and individual leadership are minimal in most areas.
Private Free Schools:
Participatory leadership stands out at 83.9%, with low rates of distributed leadership at 6.5% and individual leadership at 3.2%.
Private Non-Free Schools:
Participatory leadership is the most common at 80.3%, followed by distributed leadership at 15.4%.

UNRWA:

The performance is outstanding with 100% participatory leadership across all centers.

Key Observations by Governorates in Each Sector:

Public Schools:

- Beirut, the North, and Baalbek-Hermel show the highest rates of participatory leadership (81.8% and 88.2%).
- Mount Lebanon suburbs recorded the lowest percentage (64.7%), while Akkar has high rates of distributed leadership at 23.7% and individual leadership at 7.9%.

Private Free Schools:

- Excellent performance in major governorates like Beirut and Mount Lebanon (100%) and most other regions.
- Notable variations in Akkar with the lowest rate of participatory leadership at 25% and distributed leadership at 25%.

Private Non-Free Schools:

- Northern governorates show high rates of participatory leadership at 94.4%, while Akkar experiences lower performance at 55.6% with individual leadership at 22.2%.

UNRWA:

- No differences between governorates; performance is consistent at 100% participatory leadership.

Comparative Conclusion Between Sectors and Governorates:

- Participatory leadership is the most widespread across all sectors, with UNRWA standing out for its consistency.
- Notable disparities between governorates; Beirut, the North, and Mount Lebanon show stability, whereas Akkar struggles with lower participatory leadership rates.

Response 3: Coordinator (Question No. 27)

Beirut, as Lebanon's capital and a key hub in the educational system, presents a diverse range of leadership styles in both public and private sectors.

Public Sector:

In the public sector, individual leadership predominates, with the principal making decisions largely on their own, delegating tasks to the administrative team at 44.4%. This is followed by dual leadership with the supervisor at 33.3%, while participatory leadership is limited to only 11.1%.

Private Free Schools:

Participatory leadership dominates fully at 100%.

Private Non-Free Schools:

Participatory leadership stands at 58.3%, followed by individual leadership at 33.3%, and dual leadership with the supervisor at 8.3%.

Mount Lebanon:

In suburbs, participatory leadership shows a clear preference at 64.7%, with individual leadership at 23.5% and dual leadership with the supervisor at 11.8%. This reflects a trend towards involving multiple parties in decision-making in these areas. In the private sector, participatory leadership reigns at 80%, while individual leadership is minimal at 20%.

Mount Lebanon (Excluding Suburbs):

Participatory leadership remains dominant at 61.5%, followed by individual leadership at 30.8%, and dual leadership with the supervisor at 7.7%. In private non-free schools, dual leadership with the supervisor prevails at 73.7%, with participatory leadership at just 2.2%.

Northern Lebanon:

Participatory leadership tops the list at 66.1%, followed by individual leadership at 23.7% and dual leadership with the supervisor at 8.5%. In the private free sector, only participatory leadership is used, while the non-free private sector shows 87.1% participatory leadership and 9.7% individual leadership.

Bekaa:
Participatory leadership controls the scene at 60%, followed by dual leadership with the supervisor at 25%, and individual leadership at 15%. In private non-free schools, dual leadership with the supervisor accounts for 75%, with individual leadership at 18.8%.

Southern Lebanon:
Participatory leadership is prevalent at 59.5%, followed by individual leadership at 26.2% and dual leadership with the supervisor at 14.3%. In private free schools, participatory leadership is used at 60%, while 40% rely on individual leadership.

Nabatieh:
Participatory leadership dominates at 75%, with individual leadership at 18.8%, and dual leadership with the supervisor at 6.3%. In the private sector, dual leadership with the supervisor is dominant at 90.9%.

Akkar:
Participatory leadership accounts for 57.7%, with individual leadership at just 3.8%, and dual leadership with the supervisor at 15.4%. In non-free private schools, participatory leadership is used at 53.8%, individual leadership at 30.8%, and dual leadership with the supervisor at 15.4%.

Baalbek-Hermel:
Dual leadership with the supervisor is significant at 66.7%, while participatory leadership is limited to 5.6%, with individual leadership at 5.6% and supervisor-based individual leadership at 16.7%.

General Conclusions
Participatory leadership is the dominant model in many governorates across both public and private sectors, with variations in dual leadership observed in areas such as Mount Lebanon (Suburbs) and Baalbek-Hermel, as well as in private non-free schools in the south and Bekaa. This highlights a trend towards structured and composite leadership approaches.

Response 4: Teacher (Question No. 27)

In the public sector, the most common model is **participatory leadership**, comprising 67.9% of the sector and 36.3% of the total. This model reflects teachers' preference for involvement in decision-making. Following this is individual leadership, which ranks second at 19.2%, with individual leadership also being a significant common pattern at 11.7%.

In Beirut, 50% of teachers believe leadership is individual, while 23.3% consider it participatory. In Mount Lebanon suburbs, 70% think leadership is participatory, while only 16.7% view it as individual in certain decisions.

In Mount Lebanon (excluding suburbs), 74.4% perceive individual leadership, while 17.1% believe participatory leadership is prevalent. In the North, 63.7% view individual leadership as dominant, with 21.5% supporting participatory leadership, and 14.4% considering role distribution in some cases.

In the Bekaa, 67.3% of teachers state individual leadership, with 17.3% supporting participatory leadership. Southern Lebanon shows a strong preference for participatory leadership at 77.9%, with 16.4% seeing individual leadership in certain decisions. In Nabatieh, 76.8% believe individual leadership is dominant, while 10.7% see participatory leadership in some instances.

In Akkar, 66.9% think leadership is individual, with 22.9% favoring participatory leadership. In Baalbek-Hermel, 55.8% perceive individual leadership, while 28.6% see participatory leadership in some situations.

In the private free sector, the most prevalent model is participatory leadership at 76.1%, followed by individual leadership at 9.6% and role-sharing leadership at 13.9%. In the private non-free sector, participatory leadership leads with 69.7%, and role distribution reaches the highest level at 22.2% compared to other sectors.

In the UNRWA sector, participatory leadership is dominant at 91.7%, with 100% in both the North and South governorates, reflecting a strong reliance on this model.

Based on these results, it can be concluded that participatory leadership is the most widespread model across all sectors and governorates, with varying levels of role-distribution leadership among different sectors.

Question: What are the core leadership competencies?
Response 1: Principal (Question No. 39)

Overall Management of Change:

Total across all sectors:

- Beirut: 8 schools managing change
- Mount Lebanon Suburbs: 23 schools managing change
- Mount Lebanon (excluding suburbs): 14 schools managing change
- North: 25 schools managing change
- Bekaa: 11 schools managing change
- South: 10 schools managing change
- Nabatieh: 13 schools managing change
- Akkar: 11 schools managing change
- Baalbek-Hermel: 4 schools managing change
- Total: 119 schools managing change

Comparison between educational sectors:

In terms of managing change, the public sector shows a clear advantage with a total of 55 schools spread across various governorates, reflecting a strong response to the need for change and tackling challenges. This trend mirrors the significant government support provided to the public sector, along with infrastructure that aids in fostering organizational and administrative change within schools.

The private non-free sector comes in second with 50 schools, demonstrating notable investment in enhancing administrative flexibility and developing schools' ability to absorb change more effectively compared to the public sector. This reflects ongoing efforts to improve performance and achieve administrative excellence through greater adaptability to change.

The private free sector ranks third with a limited number of 10 schools, indicating resource constraints or a focus on other priorities that may hinder widespread adoption of change. UNRWA participates with only four schools, highlighting limited focus on managing change in this sector, which faces various financial and educational challenges.

The data underscores the importance of the public sector in driving change management due to its government support and available resources, enabling schools to adopt effective strategies for change in line with evolving needs. The private non-free sector demonstrates flexibility and investment in this area but remains below the public sector, with its capabilities constrained in some remote governorates facing resource challenges. The private free sector and UNRWA require further support to enhance their performance in this area, as the small number of schools is insufficient to meet the change demands in the current educational environment.

Comparison by governorates:

In Beirut, the private non-free sector leads in managing change with 6 schools, compared to only 2 in the public sector, reflecting a greater focus on educational dynamism and flexibility. In Mount Lebanon suburbs, the private non-free sector shows a significant advantage with 14 schools, while the public sector and free private sector each contribute 6 schools. In Mount Lebanon (excluding suburbs), the public sector dominates with 8 schools, highlighting its role in rural areas that require more support. In the North, the public sector dominates with 15 schools, indicating significant governmental investment in this region, allocating more resources for enhancing change management in schools. In Bekaa and South, efforts are distributed across sectors, with the public sector having 6 schools in Bekaa and 5 in the South, while the private non-free sector contributes modestly, accounting for less than half of the total schools involved in managing change in these regions. In Nabatieh, a balance is evident between the public and private non-free sectors with 7 and 5 schools respectively, reflecting good collaboration between the sectors. In Akkar, the public sector registers 6 schools compared to only 4 in the private non-free sector, highlighting the impact of strong government support. In Baalbek-

Hermel, the public sector shows no participation in managing change, with only 4 schools in the private sector, illustrating challenges in resource availability in this area.

Conclusion: Change management emerges as a critical factor in enhancing the flexibility of the educational system, with the public sector leading due to its resources and capabilities. The private non-free sector shows clear investment in managing change, but the free private sector and UNRWA need more support and focus to improve their performance in this area. Performance variation between governorates suggests the need for better resource distribution and targeted interventions in rural areas that require additional support for effective change and education strategies.

Response 2: Principal (Question No. 31)

Overall ranking based on principals' responses:

- Problem Solving: 46%
- Effective Communication: 41%
- Motivating and Supporting Faculty: 39%
- Planning and Organizing: 33%
- Managing Change: 17%

Analysis of Principals' Responses on Core Leadership Competencies for School Management:

Problem Solving

The public sector recorded the highest percentage at 48%, with the highest frequencies in South (25%), Akkar (24%), and North (24%).

Private non-free education recorded 36%, with a notable frequency in Mount Lebanon Suburbs at 22%.

Private free education recorded only 7%, distributed moderately across various regions.

UNRWA recorded just 1%.

Effective Communication

The public sector again recorded the highest percentage at 43%, with high frequencies in North (22%), Akkar (22%), and South (21%).

Private non-free education recorded 35%, with a significant frequency in Mount Lebanon Suburbs at 19%.

Private free education registered 7%, distributed across several regions.

UNRWA recorded just 1%.

Motivating and Supporting Faculty

The public sector recorded 41% of responses, with the highest frequencies in South (21%) and North (19%).

Private non-free education recorded 34%, with a high frequency in Mount Lebanon Suburbs at 19% and North at 13%.

Private free education recorded 7%, distributed across various regions.

UNRWA recorded just 1%.

Planning and Organizing

The public sector recorded the highest percentage at 39%, with notable frequencies in South (22%) and North (17%).

Private non-free education recorded 30%, with a significant frequency in Mount Lebanon Suburbs at 17%.

Private free education recorded 6%, with a notable frequency in Beirut at 3%.

UNRWA recorded just 1%.

Managing Change

The public sector recorded the largest percentage at 48%, with frequencies in Akkar (9%) and Mount Lebanon (excluding suburbs) at 8%.

Private non-free education recorded 39%, with the highest frequency in Mount Lebanon Suburbs at 9%.

Private free education recorded 5%, distributed across various regions, including 3% in Mount Lebanon (excluding suburbs).

UNRWA recorded just 1%.

Comparative conclusions between sectors:

- The public sector is the most prominent in defining leadership competencies, with significant focus on "Problem Solving," "Effective Communication," and "Motivating and Supporting Faculty."
- Private non-free education ranks second in most competency choices, with a strong emphasis on "Problem Solving," "Effective Communication," and "Motivating and Supporting Faculty."
- Private free education shows the least presence in many competencies compared to other sectors, with a focus on "Problem Solving," "Effective Communication," and "Motivating and Supporting Faculty."
- UNRWA had the lowest participation, with a focus on "Motivating and Supporting Faculty" and "Planning and Organizing."

Response 3: Coordinator (Question No. 31)

In the education sector, Beirut leads with core leadership competencies, such as Change Management at 33.3%, and Motivating and Supporting Faculty at 11.1%. In Mount Lebanon (Suburbs), Change Management is at 5.9%, while Motivating and Supporting Faculty reaches 23.5%, and Planning and Organizing at 11.8%.

In Mount Lebanon (Excluding Suburbs), Change Management is at 5.1%, and Motivating and Supporting Faculty at 10.3%, with Effective Communication at 17.9%. In North Lebanon, Change Management reaches 1.7%, Motivating and Supporting Faculty at 8.5%, and Problem-Solving at 11.9%.

In Bekaa, Planning and Organizing is at 10.0%, Change Management at 15.0%, and Problem-Solving at 20.0%. In the South, Motivating and Supporting Faculty reaches 16.7%, while Problem-Solving is at 14.3%.

In Nabatieh, Motivating and Supporting Faculty is at 12.5%, and Problem-Solving at 12.5%. In Akkar, Change Management reaches 15.4%, and Motivating and Supporting Faculty at 11.5%. In Baalbek-Hermel, Motivating and Supporting Faculty is at 16.7%, and Problem-Solving at 5.6%.

In the free private sector, Beirut records 100% for core leadership competencies. In Mount Lebanon (Suburbs), the percentage is 20% for both Motivating and Supporting Faculty and Change Management. In Mount Lebanon (Excluding Suburbs), 20% is recorded for core leadership competencies. In North Lebanon, Motivating and Supporting Faculty and Change Management reach 25%.

In the non-free private sector, Beirut records 8.3% for Change Management and 8.3% for Motivating and Supporting Faculty. In Mount Lebanon (Suburbs), 2.2% is recorded for both Motivating and Supporting Faculty and Change Management, while in North Lebanon, 3.2% for Change Management and 6.5% for Motivating and Supporting Faculty are recorded.

In UNRWA, North Lebanon reaches 100% for core leadership competencies.

Overall, the highest percentage for core leadership competencies in Change Management is seen in Beirut at 33.3%. Northern Lebanon and Bekaa showcase the most diverse competencies with varying percentages across different skills. Beirut demonstrates a strong presence in the education sector, while the free private sector is notably strong in Mount Lebanon. This analysis provides a comprehensive view of leadership competencies across various sectors and regions, helping identify areas for improvement or development.

Response 4: Teacher (Question No. 31)

In the publicsector, Problem-Solving is the most common skill, representing 11.6% within the sector and 6.2% overall. This reflects the ability of managers to effectively handle challenges and solve problems. Following this, Effective Communication ranks second at 9.4% within the sector and 5.0% overall, indicating the importance of effective communication between administration and faculty. Motivating and Supporting Faculty accounts for 9.1% within the sector and 4.9% overall, demonstrating the need for managers to support and motivate teachers. Additionally, Planning and

Organizing registers at 5.1%, while Change Management stands at 2.3%, suggesting these skills are considered less significant compared to the top three.

When combining these skills, the percentages decrease significantly, reflecting the scarcity of managers who combine more than one skill. For instance, the combination of Motivating, Planning, and Change Management accounts for only 0.1%.

Governorates Results

Governorates results show diversity in leadership competencies:

- In Beirut, 20.0% of teachers highlight Effective Communication, 13.3% Change Management, and 10.0% Motivating and Supporting Faculty.
- In Mount Lebanon (Suburbs), 13.3% mention Change Management, 11.7% Effective Communication, and 10.0% Planning and Organizing.
- In Mount Lebanon (Excluding Suburbs), the highest percentage for Change Management is 28.0%, followed by Planning and Organizing at 23.0%.
- In North Lebanon, Change Management reaches 15.2%, and Effective Communication is at 12.2%.
- In Bekaa, Effective Communication accounts for 16.3%, and Change Management for 15.3%.
- In the South, Effective Communication reaches 24.6%.
- In Nabatieh, Effective Communication is at 16.1%, and Change Management at 13.4%. In Akkar, Change Management is 12.7%, and Effective Communication at 9.0%.
- In Baalbek-Hermel, Effective Communication is at 14.3%, and Change Management at 9.1%.

General Findings

Overall, 13.1% of schools highlight Effective Communication, 10.5% Change Management, 9.1% Motivating and Supporting Faculty, 6.2% Planning and Organizing, and 5.7% Problem-Solving.

Recommendations for Improvement

In the free private sector, Change Management is recorded at only 1.9%, suggesting that few teachers believe managers have this competency. Motivating and Supporting Faculty accounts for 3.3%, showing a moderate percentage of teachers perceiving this skill.

In the non-free private sector, the most common competency is Effective Communication at 6.6%, followed by Planning and Organizing at 4.7%, and Motivating and Supporting Faculty at 4.5%. Change Management appears less frequently, both individually and when combined with other competencies.

Governorates Distribution

Beirut recorded 20.3% in Problem-Solving, while Bekaa registered 41.9% for Problem-Solving with other competencies.

General Analysis

The results suggest a growing emphasis on competencies such as Problem-Solving, Effective Communication, and Motivating and Supporting Faculty, reflecting a continuous effort for improvement and adaptation to educational challenges. These competencies represent key areas needing further development and reinforcement in the educational system.

Conclusion

Competencies such as Problem-Solving, Effective Communication, Motivating and Supporting Faculty, Planning and Organizing, and Change Management often appear together at high performance rates, indicating that more effective managers are those who integrate multiple leadership skills.

Change Management is notably present in Baalbek-Hermel and Akkar.

Effective Communication and Motivating and Supporting Faculty are evident across all governorates.

UNRWA

Teacher responses in this sector focused on the following competencies:

- Motivating and Supporting Faculty, Planning and Organizing: 1 teacher (8.3% within the sector) noted these competencies together.
- Effective Communication: 1 teacher (8.3% within the sector) believed the manager possesses this competency.

- Effective Communication, Motivating and Supporting Faculty, and Change Management: 1 teacher (8.3% within the sector) mentioned these competencies.

Mount Lebanon (Suburbs)

- Motivating and Supporting Faculty, Planning and Organizing: 20.0%
- Effective Communication: 20.0%
- Problem-Solving, Motivating and Supporting Faculty, Planning and Organizing: 20.0%
- Problem-Solving, Effective Communication, Motivating and Supporting Faculty, Planning and Organizing: 20.0%
- Problem-Solving, Effective Communication, Motivating and Supporting Faculty, Planning and Organizing, Change Management: 20.0%

North Lebanon

Problem-Solving, Effective Communication, Motivating and Supporting Faculty, Planning and Organizing, Change Management: 100%

South Lebanon

- Effective Communication, Motivating and Supporting Faculty: 20.0%
- Effective Communication, Motivating and Supporting Faculty, Planning and Organizing: 20.0%
- Problem-Solving, Effective Communication: 20.0%
- Problem-Solving, Effective Communication, Motivating and Supporting Faculty, Planning and Organizing: 20.0%
- Problem-Solving, Effective Communication, Motivating and Supporting Faculty, Planning and Organizing, Change Management: 20.0%

Question: What areas need development in school management?

Response 1: Principal (Question No. 41)

a. **Decision-Making**

Overall across all sectors:

Beirut: 2 schools need to develop decision-making skills.

Mount Lebanon Suburbs: 12 schools are working on decision-making.

Mount Lebanon (Excluding Suburbs): 6 schools are working on decision-making.

North Lebanon: 11 schools are working on decision-making.

Bekaa: 6 schools are working on decision-making.

South Lebanon: 4 schools are working on decision-making.

Nabatieh: 2 schools are working on decision-making.

Akkar: 8 schools are working on decision-making.

Baalbek-Hermel: 4 schools are working on decision-making.

Overall Total: 55 schools are working on decision-making.

Comparison Between Educational Sectors

There is a need to develop decision-making skills in 26 schools managed by principals in the public sector out of the 55 schools, highlighting the necessity of efforts in this sector to empower administrators and enhance administrative processes regarding decision-making. The private non-fee sector ranks second with 21 schools needing development. The free private sector shows a limited need with only 8 schools.

Conclusion

These results reflect the need for developing decision-making skills among school principals in the publicsector, particularly in most governorates. This competency is crucial as it impacts the management of educational processes negatively when inadequately developed. Meanwhile, in the non-fee private sector, there is a greater need for acquiring this competency, especially in Mount Lebanon Suburbs. Rural areas like Akkar and Baalbek-Hermel require enhanced efforts to train principals on

this competency across all sectors, with a focus on supporting the free private sector to broaden its impact.

2- Innovation in Educational Practices

Overall across all sectors:

Total: 153 schools adopt innovation in educational practices.

Comparison Between Educational Sectors

The need for developing innovation in educational practices appears in 83 publicsector schools, which is a high percentage. The private non-fee sector ranks second with 49 schools expressing this need, while the free private sector shows a limited need with only 19 schools.

Conclusion

Most principals from public schools have expressed the need for developing innovation in educational practices, especially in larger governorates like North Lebanon and Nabatieh. The private non-fee sector requires increased efforts to spread training in this competency, while the free private sector shows a noticeable gap that needs addressing, especially in rural and disadvantaged regions.

Governorates Comparison

Beirut shows an equal distribution of need for innovation between public and non-fee private sectors, with 4 schools each, while the free private sector and UNRWA are completely absent.

In Mount Lebanon Suburbs, the non-fee private sector needs innovation in 17 schools compared to 5 public sector schools.

In Mount Lebanon (Excluding Suburbs), the public sector shows a need in 9 schools compared to only 2 non-fee private sector schools, indicating a need for enhanced innovation in the public sector.

North Lebanon shows a need in the public sector for 24 schools, while the non-fee private sector has a need in 8 schools, highlighting a noticeable variation in innovation needs across sectors.

In Bekaa, the public sector shows a need in 3 schools, with weak contributions from both the free and non-fee private sectors.

South Lebanon shows 9 schools expressing a need for innovation, with the free private sector and UNRWA absent.

3- Strategic Planning

Overall across all sectors:

Total: 102 schools adopt strategic planning.

The need for developing strategic planning skills is evident in 60 public sector schools, reflecting administrators' awareness of its importance and its impact on effective school management. The private non-fee sector comes second with 31 schools, while the free private sector shows a limited need with only 11 schools.

Conclusion

The public education sector urgently needs training for school principals in strategic planning across all governorates, reflecting institutional awareness of sustainability and improving educational/learning processes. Both the non-fee and free private sectors require further efforts to bolster this competency.

Governorates Breakdown

In the public sector, governorates like Akkar (15 schools), North Lebanon (10 schools), Nabatieh (8 schools), and South Lebanon (7 schools) are most in need of strategic planning development, whereas other governorates show disparities in need distribution across sectors.

The private sector also needs enhanced efforts, especially in areas like Akkar and Baalbek-Hermel, indicating that strategic planning is essential for effective educational leadership.

4- Communication with Stakeholders

Overall across all sectors:

Total: 75 schools adopt communication with stakeholders.

Comparison Between Educational Sectors

The need for developing communication skills with stakeholders is highest in the public sector, with 39 schools expressing this need, indicating principals' awareness of its importance in effective educational management. The private non-fee sector follows with 29 schools needing this competency, while the free private sector shows a minimal need with only 7 schools.

Conclusion

Principals in both public and private sectors show a clear understanding of the importance of communication with stakeholders, indicating a need for workshops and training sessions to enable them to strengthen this skill to enhance effective educational management. This highlights the need for organized training workshops to meet this demand.

Governorates Comparison

Communication with stakeholders shows notable variations between governorates and educational sectors. The non-fee private sector needs more development in Beirut and Mount Lebanon Suburbs, while the public sector shows a need in North Lebanon, Bekaa, and Akkar. Efforts in Nabatieh and Baalbek-Hermel are still limited, requiring increased support to enhance stakeholder communication.

5- Building Partnerships

Overall across all sectors:

Total: 89 schools engage in building partnerships.

The private non-fee sector leads in this area, with 44 schools expressing the need for developing partnerships, reflecting principals' awareness of the effective role these partnerships play in school development. The public sector ranks second with 38 schools showing the need, while the free private sector has only 6 schools, indicating a limited need.

Conclusion

There is a clear need for enhancing both public and private sector roles in building partnerships, reflecting principals' flexibility and ability to leverage available opportunities. However, improving infrastructure and communication could facilitate broader partnership development.

Governorates Comparison

Partnership-building shows a clear disparity between governorates and educational sectors. The non-fee private sector shows a greater need in Beirut and Mount Lebanon Suburbs, while the public sector shows a need in North Lebanon, Bekaa, and Akkar. Efforts in Nabatieh and Baalbek-Hermel remain limited, necessitating more support for principals in these areas to improve partnership building.

Response 2: supervisor (Question No. 32)

Overall Ranking According to Responses from Supervisors:

Innovation in Educational Practices (174 responses)

Strategic Planning (118 responses)

Building Partnerships (113 responses)

Communication with Stakeholders (105 responses)

Decision-Making (63 responses)

Data Analysis on Areas Requiring School Management Development

1. Innovation in Educational Practices (174 responses)

The public sector recorded the highest number of responses with a total of 109 repetitions. The highest repetitions were in Akkar (23) and North Lebanon (21). Beirut (6) and Baalbek-Hermel (8) recorded the lowest repetitions, indicating a growing need for innovation in this sector.

The private non-fee sector recorded the lowest responses, with 49 repetitions. The highest responses were in Bekaa (10) and North Lebanon (8), while Nabatieh (2) and Baalbek-Hermel (3) showed the lowest repetitions.

The free private sector recorded 15 responses in limited regions.

UNRWA had 1 response.

2. Strategic Planning (118 responses)

The public sector recorded high responses in most regions, totaling 78 repetitions. The highest repetitions were in Akkar (15) and North Lebanon (12). Beirut (5) recorded the lowest repetitions, indicating the importance of developing this area in the public sector.

The private non-fee sector recorded the lowest responses, with 28 repetitions. The highest responses were in Mount Lebanon Suburbs (6) and North Lebanon (5), while Mount Lebanon (Excluding Suburbs) recorded only 1 repetition.

The free private sector recorded fewer responses in this area (12).

3. Building Partnerships (113 responses)

The public sector recorded fewer responses compared to previous areas, with a total of 58 repetitions. The highest repetitions were in Akkar (11) and Mount Lebanon (Excluding Suburbs) (9). Beirut (2) and Baalbek-Hermel (1) had the lowest repetitions.

The private non-fee sector showed noticeable involvement in some regions, with a total of 42 repetitions. The highest responses were in Bekaa (7) and North Lebanon (7), while Nabatieh (1) and South Lebanon (1) recorded the lowest.

The free private sector recorded fewer responses in this area (11).

UNRWA had 2 responses.

4. Communication with Stakeholders (105 responses)

The public sector recorded the highest number of responses across all regions (71). The highest repetitions were in Akkar (14) and Nabatieh (12). Beirut (3) and Mount Lebanon Suburbs (2) recorded the lowest repetitions, indicating the importance of this area in the public sector.

The private non-fee sector showed responses in various regions, with a total of 28 responses. The highest responses were in Mount Lebanon Suburbs (9) and Bekaa (5). Mount Lebanon (Excluding Suburbs) (1) and Akkar (1) had the lowest repetitions.

The free private sector recorded very limited responses (5).

5. Decision-Making (63 responses)

The public sector recorded the highest number of responses across regions (31). The highest repetitions were in Baalbek-Hermel (6) and Akkar (6), while Beirut (2), Bekaa (2), and North Lebanon (1) recorded the lowest repetitions, showing a higher presence of the public sector in most regions.

The private non-fee sector recorded a total of 26 responses. The highest repetitions were in Mount Lebanon Suburbs (7) and Bekaa (5). Nabatieh (0) and North Lebanon (1) recorded the lowest.

The free private sector recorded only 6 responses in most regions.

Key Conclusions:

The public sector demonstrated a need for development across all areas, with the highest number of responses in "Innovation in Educational Practices," "Strategic Planning," and "Communication with Stakeholders."

The private non-fee sector showed noticeable responses in most areas, especially in "Innovation in Educational Practices" and "Strategic Planning."

The free private sector had the lowest involvement across most areas, with significant focus in "Innovation in Educational Practices" and "Strategic Planning."

UNRWA's primary focus was on "Building Partnerships," "Innovation in Educational Practices," and "Communication with Stakeholders."

Response 3: Coordinator (Question No. 32)

In the public education sector, Beirut tops the list of needs, with 22.2% of participants indicating the necessity for improving decision-making skills. Additionally, 11.1% highlighted the importance of innovation in educational practices and strategic planning, showcasing the need for these skills to enhance the effectiveness of the educational system. A significant proportion (33.3%) of participants emphasized the need for comprehensive development, reflecting the importance of improving all areas. In Mount Lebanon (Suburbs), needs were more diversified, with 17.6% focusing on decision-making, and 5.9% emphasizing both innovation in educational practices and strategic planning. This diversity reflects the varied nature of regions within this governorate and their distinct needs.

In Mount Lebanon (Excluding Suburbs), data revealed that 33.3% of participants saw a need for innovation in educational practices, highlighting the significance of this skill in improving educational quality.

In the North, the need for enhancing communication with stakeholders was prominent, with 20.3% identifying it as essential. This highlights the importance of collaboration between administration, teachers, parents, and the local community for the success of the educational process.

In the Bekaa, there was an urgent need for securing financial resources to support school projects, with 25.0% emphasizing this. Furthermore, 15.0% recognized the importance of strategic planning, underscoring the necessity for effective strategies to enhance educational resources.

In the South, the need for communication with stakeholders was 21.4%, reflecting the significance of openness and collaboration. Additionally, 7.1% noted the need for innovation, highlighting the importance of adapting to educational changes.

In Nabatieh, innovation in educational practices stood at 37.5%, indicating a strong focus on educational improvements and innovation. Meanwhile, in Akkar, the need for strategic planning was 23.1%, reflecting the importance of planning in educational development.

In Baalbek-Hermel, there was a noticeable need for securing financial resources, with 27.8%, emphasizing the financial challenges schools face, alongside the need for innovation and strategic planning.

Overall, the data indicates that most governorates share a need for improving decision-making and communication with stakeholders. However, priorities differ based on local characteristics and specific needs of each governorate. This variation reflects the unique challenges faced by each region, requiring tailored strategies to enhance school management effectiveness and improve educational quality.

The final outcome highlights the urgent need to enhance innovation, strategic planning, and effective communication with stakeholders across all governorates. Additionally, securing financial resources remains a critical element in supporting education.

Response 4: Teacher (Question No. 32)

In the public sector, the survey results were noteworthy. "Decision-making" emerged as the most frequently mentioned area, with 46 teachers identifying it, representing 4.5% of the sector and 2.4% of the total responses. Following closely were responses indicating "decision-making, strategic planning," chosen by 9 teachers, equivalent to 0.9% of the sector and 0.5% of the total. Less common responses included a variety of areas such as "decision-making, innovation in educational practices" and "decision-making, strategic planning, innovation in educational practices," which ranged between 0.0% to 0.5%.

Additional observations revealed that some teachers were unsure or unable to accurately define their choices, with responses like "undefined idea" appearing. Furthermore, no teacher in this sector perceived a clear problem, as reflected by the 0.0% response rate for options like "I don't think they have a problem."

Analyzing the results overall, the total number of teachers surveyed was 1017, yet the percentage of combined results only reached 53.5%, indicating a possibility of undefined or unclear responses from other participants. Based on these findings, it can be concluded that the majority of teachers focus on "decision-making" as a priority, with limited emphasis on integrating innovative practices and strategic planning.

Results by Governorates:
- **Beirut**: 3.6% of schools cover human and material resource management, 10.0% define educational priorities, and 6.7% secure human and material resources.
- **Mount Lebanon (Suburbs)**: 3.3% include human and material resource management, 6.7% define educational priorities, and 6.7% enhance team competencies.
- **Mount Lebanon (Excluding Suburbs)**: 6.1% of schools cover human and material resource management, 6.1% evaluate performance and development, and 13.4% secure material resources.

- **North**: 10.8% include task distribution, 8.5% manage human and material resources, and 14.8% evaluate performance and development.
- **Bekaa**: 14.3% of schools focus on securing human resources, 3.1% enhance team competencies, and 6.1% define educational priorities.
- **South**: 12.0% include task distribution, 6.6% evaluate performance and development, and 6.6% secure material resources.
- **Nabatieh**: 2.7% cover defining educational priorities, 4.5% enhance team competencies, and 5.4% secure material resources.
- **Akkar**: 3.9% manage human and material resources, 10.8% evaluate performance and development, and 7.6% secure human resources.
- **Baalbek-Hermel**: 13.0% cover task distribution, 7.8% enhance team competencies, and 13.0% evaluate performance and development.

Overall Analysis:

The data suggests that 40.7% of schools focus on task distribution, 36.0% evaluate performance and development, 33.9% manage human and material resources, and 33.9% secure material resources.

Free Private Sector:

In the free private sector, there was a focus on "decision-making," with 3 teachers selecting it, representing 1.4% of the sector and 0.2% of the total. Additionally, "decision-making, strategic planning" was chosen by 19 teachers (9.1% of the sector and 1.0% of the total), highlighting the importance of strategic planning in improving school performance. There was limited emphasis on innovative educational practices, with only one teacher selecting "decision-making, strategic planning, innovation in educational practices." Furthermore, "decision-making, communication with stakeholders" was chosen by 6 teachers (2.9% of the sector and 0.3% of the total), indicating a desire to improve communication and collaboration.

Results by Governorates in the Free Private Sector:

- **Beirut**: Focus on decision-making (12.5%) and strategic planning (12.5%).
- **Mount Lebanon (Suburbs)**: Highest needs include communication with stakeholders (24.3%) and partnership building (21.6%).
- **North**: Innovation in educational practices (30.0%) is prioritized.
- **Bekaa**: Urgent need for partnership building (26.5%).
- **South**: Strategic planning and partnership building (60.0%) are of utmost importance.
- **Nabatieh**: Innovation in educational practices (34.8%) is critical.
- **Akkar**: Focus on innovation in educational practices (33.3%).
- **Baalbek-Hermel**: Communication with stakeholders (40.0%) is highly necessary.

Category Three: Monitoring and Evaluation Processes

Question: To what extent does the school management perform the following:
Second Item: Providing feedback and recommendations based on teacher evaluations
First Response : Principal (Question No. 42)

According to the data provided on school managers' performance in providing feedback and recommendations based on teacher evaluations, the results can be analyzed at both sectoral and governorate levels using percentages as follows:

Overall Summary for All Sectors:

The overall percentages indicate that 3.9% of managers perform "Sometimes," 37.3% perform "Often," and 58.8% perform "Always," reflecting a strong preference for continuous performance across all sectors.

Analysis by Sector:

Public Sector: Shows relatively balanced performance, with the highest percentage in "Always" at 49.7% and "Often" at 43.5%. However, there is variation among governorates.

Free Private Sector: Features stable performance in most governorates, with "Always" at 56.7% and "Often" at 43.3%.

Paid Private Sector: Demonstrates the strongest performance, with "Always" at 72.4% and "Often" at 26.5%.

UNRWA Sector: Leads with the highest "Always" performance at 75.0%, showing noticeable stability across governorates.

Analysis by Governorates within Each Sector:

Public Sector: Best performance in Bekaa and South, with "Always" exceeding 73%. Akkar shows variation, with "Often" higher than "Always."

Free Private Sector: South and Akkar provide the best performance, both showing 100% for "Always." Nabatieh demonstrates weaker performance.

Non-Free Private Sector: Shows excellence in Bekaa and South, while Beirut records lower percentages.

UNRWA Sector: Demonstrates stability in performance, with the best results in Mount Lebanon and North at 100% for "Always."

Strengths and Weaknesses:

Public Sector faces noticeable variation among governorates, especially in Akkar.

Free Private Sector shows a decline in Nabatieh despite good performance in South and Akkar.

Non-Free Private Sector demonstrates variation in performance, notably in Beirut.

UNRWA Sector is the most stable and least varied.

Recommendations:

Improve performance in the official sector through training workshops for governorates with lower performance.

Support the free private sector, especially in Nabatieh, to enhance managers' performance.

Enhance performance in the paid private sector in Beirut by developing effective feedback mechanisms.

Strengthen the UNRWA sector by transferring successful practices from Mount Lebanon and North to the South.

Second Response : Supervisor (Question No. 33)

Public Sector:

The overall average responses from supervisors indicate that school management provides feedback and recommendations often (38.7%) and always (43.8%), reflecting a positive approach in most regions, with regular follow-up on evaluations. A very small percentage (1.4%) indicate that this practice never occurs, and only (2.3%) believe it happens rarely, indicating that complete absence of this practice is extremely limited.

Free Private Sector:

Data from supervisors shows that (77.4%) of school administrations provide feedback and recommendations **always**, and (16.1%) do so **often**, while only (6.5%) do so **sometimes**. No responses indicate that the practice never happens.

Paid Private Sector:

Supervisors' data indicates that (74.4%) of administrations provide feedback and recommendations **always**, and **often** in (23.9%) of cases. Only (1.7%) do so **sometimes**, with no instances of **never**. These percentages suggest good performance in the paid private sector, where feedback is consistently provided.

UNRWA Sector:

Data reveals a 100% consistency in providing feedback **always** across all centers.

Key Observations by Governorates (By Sector):

Beirut:

Public Sector: The highest percentage is **sometimes** (54.5%).

Free Private Sector: 100% **always**.

Paid Private Sector: 77.8% **always**.

Mount Lebanon Suburbs:

Balanced performance between **often** (41.2%) and **always** (35.3%) in the public sector, with almost no cases of **rarely** or **never**.

Free Private Sector: 80% **always**.

Paid Private Sector: 81.35% **always**.

North:

Highest percentage in Paid Private Sector with **always** at 83.3%.

Free Private Sector: 80% **always**.

Public Sector: 52.6% **always**, with slight variation in other categories.

Bekaa:

Perfect commitment in all sectors: 100% **always** in Free Private Sector, 57.1% in Paid Private Sector, and 50% in Public Sector.

South and Nabatieh:

Consistent provision of feedback, with South showing **85.7% always** in Paid Private Sector and **100%** in Free Private Sector, while Nabatieh has **66.7% always** in Free Private Sector and **60%** in Paid Private Sector.

Akkar and Baalbek-Hermel:

Moderate percentages for **often** and **always**, with 2.6% and 5.9% for **never** in the Public Sector.

Comparative Summary Between Sectors and Governorates:

Public Sector maintains stable performance.

Free Private Sector showed higher commitment in Baalbek-Hermel, Bekaa, and South.

Paid Private Sector demonstrates balanced performance between **often** and **always** across different governorates.

South and Nabatieh are overall the most committed regions nationwide.

Third Response : Coordinator (Question No. 33)

Public Sector:

A significant disparity was recorded between governorates. In Beirut, the percentage of **always** is relatively low at 22.2%, while Bekaa and South recorded the highest percentages at 30.0% and 40.5%, respectively. Mount Lebanon showed differences between suburbs and non-suburbs, with **always** at 29.4% in suburbs and 25.6% in other regions. Akkar had a rate of 34.6%, which is acceptable compared to other governorates. Nabatieh recorded the best performance with a **always** rate of 56.3%.

Free Private Sector:

There is notable superiority in several governorates, such as Beirut, Mount Lebanon Suburbs, and Bekaa, where **always** rates reached 100%. In the North, South, and Akkar, the percentage is 75.0%, 80.0%, and 66.7%, respectively. Nabatieh and Baalbek-Hermel recorded moderate rates at 50% for **always**.

Paid Private Sector:

Bekaa showcased exceptional performance with a **always** rate of 75.0%, followed by Mount Lebanon excluding suburbs at 63.2%. North and Beirut recorded lower rates at 45.2% and 58.3%, respectively. Akkar had a **always** rate of 38.5%, which is below average compared to other governorates.

UNRWA Sector:

In the North, the overall **always** performance reached 100%, indicating complete stability within this sector.

Overall Across Sectors and Governorates:

Beirut recorded a **always** rate of 40.9%.

Mount Lebanon Suburbs achieved 69.1%, while other regions of Mount Lebanon had 41.3%.
North demonstrated good performance with a **always** rate of 39.6%.
Bekaa and South achieved high percentages at 52.6% and 43.4%, respectively.
Nabatieh recorded 48.3%, Akkar 38.1%, and Baalbek-Hermel 35.5%.

Insights and Recommendations:
The analysis highlights the need to strengthen performance in governorates with lower percentages, such as Beirut and Akkar. It suggests leveraging successful practices from regions like Bekaa, South, and UNRWA sector to standardize performance and improve stability in providing feedback and recommendations based on teacher evaluations.

Fourth Response : Teacher (Question No. 33)

Public Sector

Beirut Governorate
The results showed that the percentages of responses to the options "Always," "Often," "Sometimes," "Rarely," and "Never" were as follows: 30%, 40%, 23.3%, 6.7%, and 0%, respectively. These percentages reflect a positive trend, with 70% of teachers indicating that the administration often or always provides recommendations, and 23.3% indicating recommendations are sometimes provided, highlighting gaps that need addressing.

Mount Lebanon (Suburbs)
Responses were distributed as: "Always" 43.3%, "Often" 35%, "Sometimes" 15%, "Rarely" 3.3%, and "Never" 3.3%. These results reflect strong performance, with 78.3% of teachers viewing the administration providing recommendations often or always, and a small percentage (6.6%) believing recommendations are provided rarely or never.

Mount Lebanon (Excluding Suburbs)
The results showed high percentages: "Always" 48.8%, "Often" 36.6%, "Sometimes" 12.2%, "Rarely" 2.4%, and "Never" 0%. These percentages show extremely positive performance, with 85.4% of teachers indicating that the administration often or always provides recommendations.

North Governorate
The percentages were: "Always" 45.2%, "Often" 33%, "Sometimes" 20.4%, "Rarely" 1.1%, and "Never" 0.4%. The overall positive response rate is 78.2%, with a noticeable higher percentage for "Sometimes" (20.4%), indicating a need for improving continuity.

Bekaa Governorate
Results showed: "Always" 52%, "Often" 27.6%, "Sometimes" 14.3%, "Rarely" 3.1%, and "Never" 3.1%. This governorate recorded the highest percentage for "Always" (52%), with 6.2% of negative responses ("Rarely" and "Never"), indicating a need for performance improvement.

South Governorate
Recorded percentages were: "Always" 60.7%, "Often" 32%, "Sometimes" 6.6%, "Rarely" 0%, and "Never" 0.8%. The results reflect outstanding performance, with a total positive response rate of 92.7%.

Nabatieh Governorate
Results were: "Always" 48.2%, "Often" 34.8%, "Sometimes" 15.2%, "Rarely" 1.8%, and "Never" 0%. This indicates a positive response rate of 83%, with a moderate percentage for "Sometimes" (15.2%).

Akkar Governorate
Results showed: "Always" 48.2%, "Often" 39.2%, "Sometimes" 9.6%, "Rarely" 1.8%, and "Never" 1.2%. These percentages reflect high positive responses (87.4%), showcasing strong performance.

Baalbek-Hermel Governorate
The percentages were: "Always" 33.8%, "Often" 42.9%, "Sometimes" 16.9%, "Rarely" 1.3%, and "Never" 5.2%. The results show a positive percentage of 76.7%, though with a higher percentage for "Never" (5.2%) compared to other governorates.

General Conclusion for Public Sector
Overall, the results show that most governorates have high percentages of positive responses ("Often" and "Always"), indicating good performance by educational administrations in providing

recommendations based on teacher evaluations. Southern Governorate (92.7%), Mount Lebanon (Excluding Suburbs) (85.4%), and Akkar (87.4%) performed the best. However, Baalbek-Hermel had relatively higher negative responses, suggesting a need for improvement. Regional disparities may be linked to available resources or local challenges.

Private Free Sector

Overall Results

Teachers' responses in the private free sector were distributed as follows: Always (68.4%), Often (24.4%), Sometimes (7.2%), Rarely and Never (0%). These results indicate an excellent overall performance, with a high percentage of positive responses (92.8%). However, there is room for improvement in some governorates with higher percentages of "Sometimes" responses.

Results by Governorates

- **Beirut**: Always (25%), Often (50%), Sometimes (25%), Rarely (0%), Never (0%). The private free sector in Beirut shows a positive response rate of 75%, with a good proportion for "Often." Efforts can be made to increase the continuity of providing recommendations to reach the "Always" level.
- **Mount Lebanon (Suburbs)**: Always (48.6%), Often (32.4%), Sometimes (18.9%), Rarely (0%), Never (0%). This governorate recorded high positive response rates (81% often or always), indicating strong administrative performance.
- **Mount Lebanon (Excluding Suburbs)**: Always (77.4%), Often (19.4%), Sometimes (3.2%), Rarely (0%), Never (0%). These results indicate a very positive response, with approximately 96.8% of teachers believing recommendations are often or always provided, making it one of the top performers.
- **North**: Always (75%), Often (22.5%), Sometimes (2.5%), Rarely (0%), Never (0%). North Governorate shows a highly positive response rate of 97.5%.
- **Bekaa**: Always (97.1%), Often (2.9%), Sometimes (0%), Rarely (0%), Never (0%). The highest percentage for "Always" is observed here (97.1%), reflecting strong administrative performance. However, a small percentage of teachers noted that recommendations are often provided.
- **South**: Always (70%), Often (20%), Sometimes (10%), Rarely (0%), Never (0.8%). South Governorate demonstrates outstanding performance with a total positive response rate of 90%. The very low percentage of "Sometimes" responses and zero for "Rarely" and "Never" strengthens this result.
- **Nabatieh**: Always (56.5%), Often (34.8%), Sometimes (8.7%), Rarely (0%), Never (0%). This governorate shows a positive response rate of 91.3% with a moderate percentage for "Sometimes" (8.7%). Continuous improvement could be considered.
- **Akkar**: Always (57.1%), Often (42.9%), Sometimes (0%), Rarely (0%), Never (0%). The results reflect high response rates (100%), indicating excellent administrative performance without any negative responses.
- **Baalbek-Hermel**: Always (80%), Often (20%), Sometimes (0%), Rarely (0%), Never (0%). Baalbek-Hermel demonstrates an excellent response rate of 100%, highlighting strong commitment to providing recommendations based on teacher evaluations.

General Conclusion for Private Free Sector

Governorates that focus heavily on providing recommendations include Mount Lebanon (Suburbs), Beirut, and the North, with percentages exceeding 90%. Additionally, governorates like Mount Lebanon (Excluding Suburbs), Bekaa, and South showcase significant commitment with response rates above 90%. However, Nabatieh and Akkar show variability in responses, with some instances of "Sometimes" or "Rarely," indicating potential areas for improvement.

Private Non-Free Sector

Distribution of response percentages by governorates

Beirut

The results showed the following percentages: Always (55.9%), Often (30.5%), Sometimes (10.2%),

Rarely (1.7%), Never (1.7%).

Based on these results, the majority of school administrations in Beirut provide observations and recommendations regularly (Often or Always) at a rate of 86.4%. This high percentage may reflect a high level of follow-up and attention from the educational administration in Beirut.

Mount Lebanon (Suburbs)

The results showed the following percentages: Always (70.7%), Often (23.4%), Sometimes (4.5%), Rarely (0.9%), Never (0.5%).

There is a significant concentration in the higher categories (Often and Always), reaching 94.1%. This indicates a strong commitment from school management to providing observations and recommendations based on teachers' evaluations.

Mount Lebanon (Excluding Suburbs)

The results showed the following percentages: Always (61.3%), Often (30.6%), Sometimes (6.5%), Rarely (1.6%), Never (0%).

The high percentage (91.9%) in the higher categories reflects a serious commitment from school management to providing observations and recommendations consistently.

North

The results showed the following percentages: Always (61.0%), Often (34.0%), Sometimes (4.0%), Rarely (0%), Never (1.0%).

There is a very high percentage (95%) in the higher categories, indicating good follow-up by the school administration in the North.

Bekaa

The results showed the following percentages: Always (66.1%), Often (28.6%), Sometimes (5.4%), Rarely (No responses), Never (No responses).

There is a significant percentage in the higher categories (94.7%), indicating a good response from school management in Bekaa, although some administrators may not provide observations regularly.

South

The results showed the following percentages: Always (62.5%), Often (25%), Sometimes (9.4%), Rarely (No responses), Never (3.1%).

The results show a high level of interest in providing observations and recommendations, with 87.5% in the higher categories.

Nabatieh

The results showed the following percentages: Always (46.9%), Often (40.6%), Sometimes (12.5%), Rarely (No responses), Never (No responses).

There is some variation in distribution, with 93.8% in the higher categories (Often and Always), indicating a good level of observations.

Akkar

The results showed the following percentages: Always (64.1%), Often (21.9%), Sometimes (12.5%), Rarely (No responses), Never (1.6%).

The overall percentage in the higher categories (Often and Always) reaches 85.9%, indicating good performance in providing observations and recommendations by the administration based on teachers' evaluations.

Baalbek-Hermel

The results showed the following percentages: Always (61.1%), Often (36.1%), Sometimes (2.8%), Rarely (No responses), Never (No responses).

The percentage in the higher categories (97.2%) is very good, indicating a significant focus on providing observations and recommendations.

Conclusion on Private Non-Free Sector Results

The governorates focusing on providing observations and recommendations—Mount Lebanon (Suburbs), Beirut, and the North—are the ones with the highest percentages of "Often" and "Always" responses (over 90%). Additionally, governorates such as Mount Lebanon (Excluding Suburbs), Bekaa, and the South show significant attention (percentages above 90% in the higher categories).

Governorates that may need improvement in providing observations include Nabatieh and Akkar, as they showed greater variation with some responses in "Rarely" or "Sometimes".

Question: How effectively does the school management carry out the following:
Third item: Monitoring improvements resulting from evaluations
First response : Principal (question 42)

First: Comparison by educational sector

- **Public Sector**: Overall performance shows "Always" at 46.9% and "Often" at 43.5%, with smaller percentages for lower categories, indicating moderate performance with variation across governorates.
- **Private Free Sector**: "Always" reaches 60.0% and "Often" 33.3%, reflecting relatively strong performance.
- **Private Non-Free Sector**: "Always" stands at 74.5% and "Often" at 20.4%, showing distinguished performance.
- **UNRWA Sector**: Leads with "Always" at 75.0% and "Often" at 25.0%, with the least variation between governorates.

Best and worst performance among sectors:

- The public sector suffers from significant variation between governorates and is the weakest-performing compared to other sectors.

Second: Comparison by governorates within each sector

- In the public sector, Bekaa and the South report high "Always" percentages (69.2% and 66.7%, respectively), whereas Akkar shows a decline with "Always" at 20.0%. The variation ranges from 20.0% to 69.2%.
- In the private free sector, both the South and Akkar achieve 100% "Always," while Nabatieh records 33.3% "Always," reflecting a variation between 33.3% and 100%.
- In the private non-free sector, Bekaa and the North lead with 77.8% and 76.9% "Always," whereas Beirut shows a lower percentage at 66.7%. Variation ranges from 66.7% to 77.8%.
- In the UNRWA sector, Mount Lebanon (Suburbs) and the North achieve 100% "Always," while the South records 50%. Variation ranges from 50% to 100%.

Third: Conclusions

Strengths and weaknesses of each educational sector:

- **Public Sector**: Shows strengths in Bekaa and the South, but faces significant variation between governorates, especially in Akkar.
- **Private Free Sector**: Demonstrates strong performance, with some decline in Nabatieh.
- **Private Non-Free Sector**: Displays stable, distinguished performance, with relative weakness in Beirut.
- **UNRWA Sector**: Is the best-performing sector, with overall stability and slight weakness in the South.

Strengths and weaknesses by governorate:

- Bekaa and the South achieve the best performance across all sectors.
- Akkar and Beirut record the weakest performances.

General conclusions:

1. **UNRWA Sector** (75% "Always") and **Private Non-Free Sector** (74.5% "Always") are the best-performing.
2. The **Public Sector** is the weakest (46.9% "Always") with noticeable variation between governorates.
3. Bekaa and the South achieve the best results, while Akkar and Beirut show weaker performances.

Second Response: supervisor (Question #33)

Analysis

Public Education:
- (40.1%) of administrations monitor improvements or recommendations "Often." (40.1%) monitor recommendations "Always." (12%) monitor recommendations "Sometimes."
- "Rarely" accounts for (2.8%) and "Never" for (5.1%). There is variation in recommendation follow-up across governorates. Strong commitment is seen in the North (44.7% Always) and Bekaa (50% Always), while Beirut (27.3% Always or Often) and Akkar (28.9% Always) show gaps in adherence to improvement or recommendation follow-up.

Private Free Education:
- (87.1%) of supervisors reported that improvements resulting from evaluations are followed "Always," and (9.7%) "Often," with (3.2%) "Sometimes." Most governorates demonstrate full commitment to monitoring improvements, with Mount Lebanon Suburbs and Non-Suburbs, North, Bekaa, and South achieving 100% "Always." However, Nabatieh shows variation (50% Always, 33.3% Often), indicating a need for increased commitment.

Private Non-Free Education:
- (70.1%) of supervisors reported "Always" following improvements, with (26.5%) "Often," (2.6%) "Sometimes," and (0.9%) "Rarely." There is a good commitment to recommendations, with Beirut achieving 77.8% Always and Mount Lebanon Suburbs 68.8% Always. However, Nabatieh records only 60% Always, highlighting a need for better follow-up in certain areas.

UNRWA:
- The majority of schools across different governorates exhibit strong commitment to following improvements based on recommendations, with many areas reaching 100%, reflecting superior adherence compared to other sectors.

Key observations by governorate within each sector:
- **Beirut**: Displays uneven commitment between "Often" (27.3%) and "Always" (27.3%) in public education, while private free education achieves 100% Always. Non-free private education records 77.8% Always with 22.2% Sometimes.
- **Mount Lebanon**: Suburbs exhibit strong commitment at 41.2% Always in public education, and 100% Always in private free education. Non-free private education records 68.8% Always and 28.1% Often.
- **North**: Demonstrates strong commitment at 44.7% Always in public education, and 100% Always in private free education. Non-free private education records 88.9% Always.
- **Bekaa**: Commitment is clear with 50% Always in public education, and 100% Always in private free education. Non-free private education achieves 50% Always and 42.9% Often.
- **South**: Shows good commitment at 43.8% Always in public education, and 100% Always in private free education. Non-free private education records 85.7% Always.
- **Nabatieh**: Demonstrates strong commitment at 52.2% Always in public education, but private free education records 50% Always. Non-free private education achieves 60% Always.
- **Akkar**: In public education, Akkar records 28.9% Always, while private free education achieves 100% Always. Non-free private education records 66.7% Always and 22.2% Often.

Comparative conclusions across sectors and governorates:
- **Best performance**: Private free education shows superior performance in most governorates (100% Always), contrasting with public education exhibiting varying levels of commitment.
- **Committed regions**: North and Bekaa exhibit strong commitment across all sectors, emphasizing consistent improvement follow-up.
- **Need for improvement**: Areas such as Nabatieh and Akkar show variation in commitment, necessitating strengthened monitoring systems to ensure quality improvements in these regions.
- **UNRWA**: Achieves the best results with 100% commitment across all areas, setting a benchmark for recommendation execution.

Third Response Coordinator (Question #33)

In the Public Sector, Beirut recorded varying rates, with "Often" at 22.2% and "Always" at 11.1%, indicating moderate levels of follow-up. In Mount Lebanon (Suburbs), the highest rate for "Often" was 52.9%, while "Always" reached 17.6%, reflecting relatively good performance. In Mount Lebanon (excluding suburbs), "Often" was 43.6% and "Always" 25.6%, indicating a more balanced response. In the North, the highest rates were "Often" 44.1% and "Always" 33.9%, showcasing a good level of follow-up. In the Bekaa, "Often" was 50.0% and "Always" 25.0%. In the South, "Often" and "Always" were equal at 38.1% each. Nabatieh showed noticeable balance with "Often" at 31.3% and "Always" 43.8%. Akkar had a high percentage for "Often" at 46.2% and "Always" 30.8%. In Baalbek-Hermel, "Often" was 38.9% and "Always" 44.4%. Overall, the public sector showed "Often" at 41.9% and "Always" at 32.1%.

In the Private Free Sector, Beirut demonstrated complete follow-up "Always" at 100.0%. In Mount Lebanon (Suburbs), "Often" was 20.0% and "Always" 80.0%. Mount Lebanon (excluding suburbs) recorded "Often" 60.0% and "Always" 40.0%. In the North, "Often" was 25.0% and "Always" 75.0%. Bekaa and Nabatieh both achieved 100.0% "Always." In the South, "Often" was 20.0% and "Always" 80.0%. Akkar had "Often" at 33.3% and "Always" 66.7%. Baalbek-Hermel had "Often" 50.0% and "Always" 50.0%. Overall, the private free sector demonstrated strong follow-up with "Always" at 69.0%.

In the Private Non-Free Sector, Beirut showed a high "Always" rate of 83.3%. Mount Lebanon (Suburbs) recorded "Always" at 73.9%. Mount Lebanon (excluding suburbs) had "Always" at 63.2%. The North achieved a high percentage with "Always" at 51.6%. Bekaa showed a significant "Always" rate of 81.3%. The South had balanced rates with "Often" at 50.0% and "Always" at 33.3%. Nabatieh recorded "Always" at 54.5%. Akkar had "Often" at 69.2% and "Always" 23.1%. Baalbek-Hermel showed "Often" at 63.6% and "Always" 36.4%. Overall, the private non-free sector recorded "Always" at 60.6%.

In the UNRWA sector, the North was the only region to achieve 100.0% "Always."

Overall, across all sectors and governorates, Beirut recorded moderate levels of follow-up, while Mount Lebanon, North, and South excelled in monitoring. Bekaa and Nabatieh displayed strong follow-up rates, while Akkar and Baalbek-Hermel had varying performance levels.

Fourth response: Teacher (Question No. 33)

Public Sector: Overall Results: When teachers in the public sector were asked about the extent to which school management follows up on improvements resulting from evaluations, 2.1% responded with "Never," 2.0% with "Rarely," 14.8% with "Sometimes," 35.7% with "Often," and 45.4% with "Always." The results indicate a general trend towards regular follow-up on improvements and recommendations, with "Always" responses making up the largest percentage.

Distribution of Responses by Governorates:

Beirut: Results for Beirut were as follows: Always (30.0%), Often (43.3%), Sometimes (16.7%), Rarely (6.7%), Never (3.3%). There is a significant proportion of school administrations in Beirut that frequently follow up on improvements, particularly in the "Often" and "Always" categories, reflecting notable commitment.

Mount Lebanon Suburbs: Results for Mount Lebanon suburbs were: Always (41.7%), Often (36.7%), Sometimes (15.0%), Rarely (3.3%), Never (3.3%). There is a balance between "Often" and "Always" responses, indicating continuous attention to improvements with a high percentage in "Always."

Mount Lebanon (Excluding Suburbs): Results for Mount Lebanon (excluding suburbs) were: Always (50.0%), Often (30.5%), Sometimes (15.9%), Rarely (2.4%), Never (1.2%). The result shows a strong focus on "Always," with some "Sometimes" responses suggesting occasional challenges.

North: Results for North were: Always (43.7%), Often (33.7%), Sometimes (18.1%), Rarely (2.2%), Never (2.2%). The overall trend shows increased interest in following recommendations, with a high proportion in "Always."

Bekaa: Results for Bekaa were: Always (50.0%), Often (31.6%), Sometimes (13.3%), Rarely (3.1%), Never (2.0%). While 50% indicate "Always," there are noticeable percentages in "Sometimes" and "Rarely."

South: Results for South were: Always (60.7%), Often (31.1%), Sometimes (4.9%), Rarely (0.8%), Never (2.5%). The highest percentage is in "Always," highlighting a strong commitment to continuous improvement.

Nabatieh: Results for Nabatieh were: Always (47.3%), Often (38.4%), Sometimes (13.4%), Rarely (0.9%), Never (No responses). Although "Always" isn't the highest, the "Often" response indicates consistent follow-up.

Akkar: Results for Akkar were: Always (41.6%), Often (41.0%), Sometimes (15.1%), Rarely (1.2%), Never (1.2%). There is a balanced focus between "Often" and "Always," with some "Sometimes" and "Rarely" responses.

Baalbek-Hermel: Results for Baalbek-Hermel were: Always (31.2%), Often (41.6%), Sometimes (20.8%), Rarely (1.3%), Never (5.2%). While "Sometimes" remains high, "Often" responses show a dedication to improvement.

Analysis of Public Sector Results:

- Governorates like South, Beirut, and Bekaa show high percentages of "Always," suggesting effective mechanisms for following up on improvements.
- Governorates like Baalbek-Hermel and Nabatieh might require more support or training to enhance their responses.
- Overall, the public sector exhibits a significant commitment to following improvements and recommendations. The substantial portion in "Often" and "Always" reflects efforts in addressing evaluations and enhancing performance.
- Some governorates may not give sufficient attention to this follow-up, as seen in the 14.8% "Sometimes" responses, which could indicate challenges in executing recommendations effectively or insufficient resources in some areas.

Private Free Sector: Results for the private free sector based on governorates:

Beirut: Results for Beirut were: Never (12.5%), Rarely (25.0%), Sometimes (25.0%), Often (37.5%), Always (100.0%). The majority indicates regular improvement follow-up, with a balance between "Often" and "Always."

Mount Lebanon Suburbs: Results for Mount Lebanon suburbs were: Never (2.7%), Rarely (16.2%), Sometimes (37.8%), Often (43.2%), Always (100.0%). There is a strong focus on "Often" and "Always," but a moderate percentage of "Sometimes" and "Rarely."

Mount Lebanon (Excluding Suburbs): Results for Mount Lebanon (excluding suburbs) were: Never (No response), Rarely (3.2%), Sometimes (25.8%), Often (71.0%), Always (100.0%). A significant portion is devoted to "Always," although "Sometimes" remains evident.

North: Results for North were: Never (2.0%), Rarely (No response), Sometimes (4.0%), Often (30.0%), Always (58.0%). Regular follow-up is observed, with a fair percentage in "Often" and "Always."

Bekaa: Results for Bekaa were: Never (No response), Rarely (No response), Sometimes (5.9%), Often (94.1%), Always (100.0%).

South: Results for South were: Never (No response), Rarely (No response), Sometimes (15.6%), Often (34.4%), Always (50.0%).

Nabatieh: Results for Nabatieh were: Never (No response), Rarely (No response), Sometimes (12.5%), Often (34.4%), Always (53.1%).

Akkar: Results for Akkar were: Never (No response), Rarely (No response), Sometimes (14.1%), Often (21.9%), Always (64.1%).

Baalbek-Hermel: Results for Baalbek-Hermel were: Never (No response), Rarely (No response), Sometimes (No response), Often (33.3%), Always (66.7%).

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Overall Private Free Sector: Never (0.6%), Rarely (0.5%), Sometimes (6.9%), Often (27.9%), Always (64.1%). This shows a strong commitment to improvement, with the majority focused on "Often" and "Always."

Analysis of Private Free Sector Results: The private free sector shows robust follow-up mechanisms for recommendations, with the majority focusing on "Often" and "Always." However, some regions exhibit a need for improvement in sustained follow-up. For example, governorates with high percentages in "Sometimes" might require more effective strategies or resources to maintain continuous improvement.

UNRWA Sector: Results for UNRWA across governorates:
Nabatieh: Results for Nabatieh were: Never (No response), Rarely (0.6%), Sometimes (13.2%), Often (36.5%), Always (49.7%).
Akkar: Results for Akkar were: Never (0.8%), Rarely (0.8%), Sometimes (13.9%), Often (36.3%), Always (48.2%).
Baalbek-Hermel: Results for Baalbek-Hermel were: Never (3.4%), Rarely (0.8%), Sometimes (14.4%), Often (37.3%), Always (44.1%).
Conclusion: UNRWA schools in most governorates show modest follow-up on recommendations and improvements. There is a need to enhance organizational processes or increase focus on regular follow-ups to improve performance effectively.

Question: Effectiveness of administration in guiding and supporting the educational team

First response : Principal (Question No. 44)

0.4% of schools are ineffective, 4.3% need improvement, 41.2% are somewhat effective, and 54.1% are very effective. Comparing educational sectors, most school principals consider public education to be either very effective or somewhat effective. Beirut records 50% of its schools as very effective, while in the south the percentage rises to 80%. In Baalbek-Hermel, 9.1% of schools are classified as ineffective.

For private free education, almost all schools are classified as either very effective or somewhat effective, with very high percentages (100%) in Beirut and the North, reflecting the professionalism of school administrators in managing this sector. As for non-free private education, the majority of schools are very effective in supporting and guiding the educational team, with percentages ranging between 66.7% in most regions, though there is a slight decline in some areas such as Akkar.

UNRWA schools show very positive results, with all schools categorizing their administrative role as either very effective or somewhat effective, with a balanced distribution between high and medium effectiveness in the South. The figures indicate variation between educational sectors in terms of administrative effectiveness in guiding and supporting the educational team, where public education shows significant regional differences, while private free education demonstrates a stable and positive performance.

Comparing by governorates, Beirut has 66.7% of schools categorizing their effectiveness as very effective, indicating clear administrative stability. In Mount Lebanon (suburbs), the percentage reaches 63.3%, suggesting relatively good performance. In the North, the percentage is high at 49.1% as very effective, with 5.5% needing improvement. The Bekaa region shows good performance with 56% of schools categorized as very effective. The South excels with 68% of schools as very effective, while Nabatieh shows an equal percentage between high and medium effectiveness.

In Akkar, there is a large percentage (60.7%) of schools that are ineffective and need improvement, necessitating intervention to improve administrative performance. Baalbek-Hermel shows a balanced distribution among different classifications, suggesting varying administrative performance and the need for managerial training to enhance effectiveness in supporting and guiding the educational team.

The conclusions show that governorates like the South and Beirut reflect effective school administration in supporting the educational team. Conversely, regions like Akkar and Baalbek-Hermel require additional efforts to improve administrative performance and achieve effectiveness in support and guidance. Private free education and UNRWA demonstrate a strong and stable model across almost all regions, reflecting

high administrative effectiveness in guiding and supporting the educational team.

In private free education, the best-performing schools that classified themselves as very effective at 100% are in the South, Bekaa, and Akkar. Meanwhile, in public education, only 20% of Akkar schools classify their administrative performance as very effective, and 80% are somewhat effective, followed by Beirut at 37.5% only somewhat effective.

The conclusions indicate that public education shows good performance in the South, while experiencing significant weaknesses in Akkar and Nabatieh. Private free education shows excellent performance in the South and Bekaa, with a relative decline in Beirut. Non-free private education shows stable and distinguished performance in Baalbek-Hermel and Mount Lebanon, with performance variation in the South and Akkar, while UNRWA shows very strong performance across all governorates.

The best-performing sectors are the South and Bekaa in private free education, while the weakest performance is Akkar and Nabatieh in public education. In overall sector performance, public education represents 43.5% as very effective and 52.4% somewhat effective, with 3.4% needing improvement and 0.7% ineffective.

For private free education, very effective performance constitutes 63.3% and somewhat effective 36.7%, with no percentages needing improvement or ineffective. In non-free private education, 66.3% are very effective and 26.5% somewhat effective, with 7.1% needing improvement.

UNRWA demonstrates very high effectiveness at 75.0% and somewhat effective at 25.0%, making it one of the best-performing sectors and the most stable.

In sector comparisons, UNRWA is considered the best-performing, recording the highest percentage of very effective across governorates with full stability. Public education shows the greatest variation in performance, making it the weakest in needing improvements.

In public education, the South shows 80.0% as very effective, while Akkar has 80.0% somewhat effective and only 20.0% very effective.

In private free education, Bekaa, South, and Akkar recorded 100.0% as very effective, while Beirut shows 100.0% somewhat effective. For non-free private education, Beirut shows 88.9% very effective, and Baalbek-Hermel 100.0% very effective.

In UNRWA, Mount Lebanon (suburbs) and the North show 100.0% very effective, while the South has 75.0% very effective and 25.0% somewhat effective.

The best performance is the South and Bekaa in private free education, while the weakest is Akkar and Nabatieh in public education.

Second response: Supervisor (Question No. 35)

General Situation

Public Sector:

The data shows a clear variation in evaluating administrative effectiveness, with 43.8% considering it "very effective" and 40.1% "somewhat effective," while a small percentage (3.2%) believe the administration does nothing. There is significant disparity between regions, with Akkar at 28.9% and Mount Lebanon (excluding suburbs) at 69.6%.

Private Free Sector:

This sector demonstrates a positive view towards administrative effectiveness, with 67.7% considering it "very effective" and 32.3% "somewhat effective." The South, North, and Bekaa are distinguished by 100% "very effective," while there is some relative variation in Nabatieh and Akkar.

Non-Free Private Sector:

Administrative effectiveness is very high, with 70.1% considering it "very effective" and 27.4% "somewhat effective." The highest evaluations are in the South (85.7%) and Mount Lebanon (83.3%), while the Bekaa shows some need for improvement at 28.6%.

UNRWA Sector:

The view is uniform, with 100% considering administration "very effective" in all regions.

Key Observations by Governorates in Each Sector:

Public Sector: Significant variation between governorates, with the South and Nabatieh showing high administrative effectiveness (56.3% and 43.5% "very effective" respectively), while lower percentages are

Private Free Sector: Northern areas, Bekaa, and Baalbek-Hermel stand out with 100% "very effective," while Akkar (75%) is classified as "very effective," and Nabatieh shows slight variation at 66.7% "somewhat effective."

Non-Free Private Sector: Highest effectiveness in the South (85.7%) and Mount Lebanon (83.3%), while Bekaa shows relative weakness with only 28.6% considering it "very effective."

UNRWA Sector: Consistent high effectiveness with 100% "very effective" across all regions.

Comparative Conclusion between Sectors and Governorates:

• The public sector faces significant disparity in evaluating administrative effectiveness between regions, with areas like the South and Mount Lebanon (excluding suburbs) performing well, while regions like Akkar and Bekaa require improvement.

• The private free sector presents an overall positive evaluation, though there are slight variations in areas like Nabatieh.

• The non-free private sector shows high evaluations in most areas, except for Bekaa, which requires improvement.

UNRWA demonstrates a consistent positive evaluation across all regions, reflecting a high level of administrative effectiveness compared to other sectors.

Third Response : Coordinator (Question No. 35)

In the education sector, 11.1% of Beirut schools consider management ineffective, while 33.3% need improvement, 11.1% are somewhat effective, and 44.4% are very effective. In Mount Lebanon (suburbs), 11.8% describe management as ineffective, 11.8% need improvement, 5.9% are somewhat effective, 41.2% are very effective, and 29.4% are very effective. In Mount Lebanon (excluding suburbs), 2.6% are ineffective, 23.1% need improvement, 41.0% are somewhat effective, and 33.3% are very effective.

In the North, 3.4% are ineffective, 3.4% need improvement, 15.3% are somewhat effective, and 39.0% are very effective. In the Bekaa, 5.0% need improvement, 50.0% are somewhat effective, and 45.0% are very effective. In the South, 2.4% are ineffective, 23.8% need improvement, 31.0% are somewhat effective, and 42.9% are very effective.

In Nabatieh, 6.3% are ineffective, 56.3% are somewhat effective, and 37.5% are very effective. In Akkar, 3.8% are ineffective, 26.9% need improvement, 34.6% are somewhat effective, and 34.6% are very effective. Baalbek-Hermel shows 11.1% ineffective, 11.1% need improvement, 16.7% are somewhat effective, and 61.1% are very effective.

Overall, the totals are 2.0% ineffective, 4.1% need improvement, 17.1% are somewhat effective, 37.0% are very effective, and 39.8% are very effective.

In the private free sector, Beirut shows 100% very effective, while in Mount Lebanon (suburbs) 40.0% are very effective and 60.0% are somewhat effective. In Mount Lebanon (excluding suburbs), 40.0% are very effective and 60.0% are somewhat effective. In the North, 25.0% are very effective and 75.0% are somewhat effective. Bekaa shows 100% very effective, and the South 40.0% very effective and 60.0% somewhat effective.

In Nabatieh, 50.0% are very effective and 50.0% are somewhat effective, while in Akkar 33.3% are very effective and 66.7% are somewhat effective. Baalbek-Hermel shows 50.0% very effective and 50.0% somewhat effective.

Overall, totals show 37.9% very effective and 62.1% somewhat effective.

In the non-free private sector, Beirut records 8.3% need improvement, 25.0% somewhat effective, and 66.7% very effective. Mount Lebanon (suburbs) shows 4.3% need improvement, 19.6% somewhat effective, and 76.1% very effective.

In Mount Lebanon (excluding suburbs), 15.8% need improvement, 21.1% somewhat effective, and 63.2% very effective. In the North, 16.1% need improvement, 22.6% somewhat effective, and 61.3% very effective.

Bekaa shows 31.3% need improvement, 68.8% very effective. The South records 16.7% need improvement, 16.7% somewhat effective, and 50.0% very effective. Nabatieh shows 45.5% somewhat effective and 54.5% very effective.

In Akkar, 7.7% need improvement, 15.4% somewhat effective, 46.2% very effective, and 30.8% need improvement, while Baalbek-Hermel shows 18.2% need improvement and 81.8% very effective.

Overall, totals are 1.2% ineffective, 0.6% need improvement, 7.9% somewhat effective, 25.5% very effective, and 64.8% very effective.

For UNRWA, all schools in the North are very effective.

Overall, the total percentages across all governorates show 4.5% of Beirut schools are ineffective, 4.5% need improvement, 13.6% somewhat effective, 22.7% very effective, and 54.5% very effective.

In Mount Lebanon (suburbs), 2.9% ineffective, 2.9% need improvement, 4.4% somewhat effective, 26.5% very effective, and 63.2% very effective.

In Mount Lebanon (excluding suburbs), 1.6% ineffective, 19.0% need improvement, 34.9% somewhat effective, and 44.4% very effective.

The North shows 2.1% ineffective, 2.1% need improvement, 14.6% somewhat effective, 32.3% very effective, and 49.0% very effective.

Bekaa shows 2.6% need improvement, 39.5% somewhat effective, and 57.9% very effective.

The South shows 1.9% ineffective, 1.9% need improvement, 20.8% somewhat effective, 30.2% very effective, and 45.3% very effective.

Nabatieh shows 3.4% need improvement, 51.7% somewhat effective, and 44.8% very effective.

Akkar records 2.4% ineffective, 2.4% need improvement, 21.4% somewhat effective, 38.1% very effective, and 35.7% very effective.

Baalbek-Hermel shows 6.5% need improvement, 6.5% somewhat effective, 19.4% very effective, and 67.7% very effective.

Overall, the total percentages are 1.6% ineffective, 2.5% need improvement, 12.4% somewhat effective, 32.6% very effective, and 50.9% very effective.

Fourth Response : Teacher (Question No. 35)

Public Sector:

Results by regions and governorates:

The highest percentage of "Very Effective" was observed in Mount Lebanon excluding suburbs (57.3%) and the South (56.5%).

The results for "Needs Improvement" show that teachers in Baalbek-Hermel and Bekaa require more support for improvement, with percentages of 19.5% and 20.4% respectively. The South shows a relatively high percentage at 56.6%, followed by Nabatieh and Akkar with equal percentages of 41.1%.

Private Free Education Sector:

The highest percentage of "Very Effective" appeared in:

- Bekaa Governorate at 82.4%
- North Governorate at 72.5%
  Governorates with high percentages of "Needs Improvement":
- South Governorate at 70.0%
- Beirut Governorate at 37.5%
  The private free education sector shows clear effectiveness in Mount Lebanon excluding suburbs (87.1%) and Bekaa (82.4%), reflecting strong performance in rural and suburban areas.

Private Non-Free Education Sector:

The governorates with the highest percentages of "Very Effective":

- Mount Lebanon excluding suburbs at 62.9%
- Beirut Governorate at 64.4%
  Governorates with high percentages of "Needs Improvement":
- Bekaa Governorate at 37.5%
- Akkar Governorate at 29.7%
  Non-free private education sector shows the highest effectiveness in Beirut (64.4%) and Mount Lebanon suburbs (71.6%), with a good percentage in Baalbek-Hermel (58.3%).

UNRWA Sector:

The highest percentage of "Very Effective" was recorded in:

- South Governorate at 60.0%
- North Governorate at 100%

Results by Governorate:
- Beirut Governorate: 52.6% for "Very Effective" across all sectors.
- The most effective sector is the "Private Non-Free" at 64.4%.
- Mount Lebanon suburbs: The highest percentage of "Very Effective" in the private non-free sector at 71.6%.
- Mount Lebanon excluding suburbs: The highest percentage of "Very Effective" in the private free sector at 87.1%.
- North Governorate: "Very Effective" across all sectors reached 72.5% in the private free sector.
- Bekaa Governorate: "Very Effective" at 82.4% in the private free sector, the highest in Lebanon.
- South Governorate: The highest percentage of "Very Effective" in the public sector at 56.6%.
- Nabatieh Governorate: The highest percentage of "Very Effective" in the public sector at 41.1%.
- Akkar Governorate: The highest percentage of "Very Effective" in the public sector at 41.1%.
- Baalbek-Hermel Governorate: The private non-free education sector showed strong "Very Effective" percentages at 58.3%.

Overall Conclusion:
- Results show significant variation in educational sector effectiveness across Lebanese governorates.
- The most effective sector supporting educational goals is the "Free Private" sector, followed by "Non-Free Private," and then " Public Sector."
- There is noticeable variation between governorates in administrative support, indicating a need for some governorates to improve administrative performance to better achieve educational goals.

Question: How is communication between administration and all concerned parties?

Item 1: Teachers

First Response : Principal (Question No. 45)

Overall Total:
- 1.8% of schools communicate minimally with teachers.
- 40.5% of schools communicate well with teachers.
- 57.7% of schools communicate very effectively with teachers.

Comparison of Educational Sectors
1. **Public Sector:**
   - In 51% of schools, communication with teachers is "very effective," with high percentages in the South (80%) and Mount Lebanon excluding suburbs (66.7%). Conversely, Akkar records the lowest percentage (30%), followed by Baalbek-Hermel (27.3%).
   - 46.9% of schools communicate "well," with notable performance in Nabatieh (56.3%) and Baalbek-Hermel (63.6%).
2. **Private Free Sector:**
   - 63.3% of schools rely on "very effective" communication with teachers, with ideal performance in Bekaa and the South at 100%. The North shows a significant drop at 83.3%.
   - 33.3% of schools communicate "well," with balanced rates in Nabatieh (66.7%) and Mount Lebanon excluding suburbs (75%).
3. **Private Non-Free Sector:**
   - 64.3% of schools rely on "very effective" communication, with high performance in Baalbek-Hermel (80%) and Bekaa (77.8%). Beirut records lower percentages at 88.9% "well."
   - 34.7% of schools communicate "well," with notable rates in the South (71.4%) and Mount Lebanon excluding suburbs (60%).
4. **UNRWA Sector:**
   - 100% of schools rely on "very effective" communication with teachers.

Comparison by Governorates

When looking at governorates in terms of communication with teachers, Beirut achieves high performance with 62.5% of public schools relying on "very effective" communication. The private free sector excels with a perfect 100%. Mount Lebanon suburbs show relative balance with 63.6% of public schools relying on "very effective" communication, while the private non-free sector achieves similar rates.

In the North, notable variation exists; the public sector relies on effective communication with teachers at 45.7%, compared to 83.3% in the private free sector. Bekaa shows positive results, with all schools in the private free sector effectively communicating with teachers, whereas the public sector records a lower percentage at 38.5%.

The South demonstrates clear superiority with 80% of public schools relying on "very effective" communication with teachers, and the private free sector achieving an ideal performance of 100%. Nabatieh shows balanced rates with 57.1% of public schools relying on "very effective" communication, while the private free sector achieves a good rate of 66.7%.

Akkar and Baalbek-Hermel show lower effectiveness in communication with teachers within the public sector, with "very effective" percentages at 30% and 27.3%, respectively. Conversely, the private non-free sector in Baalbek-Hermel performs well, with an 80% rate of effective communication.

Key Conclusions:

1. **UNRWA Sector** leads all sectors in teacher communication with 100% relying on "very effective" methods.
2. **Private Free Sector** shows clear superiority in schools in the South and Bekaa regarding effective communication with teachers, while the North requires development in this competency.
3. Beirut, the South, and Bekaa demonstrate strong performance in "very effective" communication with teachers.
4. Akkar and Baalbek-Hermel need school administrators to improve communication methods to become more effective, particularly within the public sector.

Second Resonse : Supervisor (Question No. 36)

General Situation in the Sector:

- **Public Sector:** The communication between administration and teachers in the public sector is largely effective or very effective (85.7%). However, a small gap of (14.3%) indicates limited or insufficient communication.
- **Private Free Sector:** In the private free sector, data shows that (96.8%) of supervisors consider communication to be good or very effective. A small percentage (3.2%) indicates limited or insufficient communication.
- **Private Non-Free Sector:** In this sector, (98.2%) of supervisors believe communication between administration and teachers is good or very effective. A small percentage (1.8%) sees communication as limited or insufficient.
- **UNRWA:** Data related to communication between school administration and teachers in UNRWA schools shows that communication is highly effective at (100%).

Key Observations by Governorates in Each Sector:

- **Public Sector:** In Beirut and Bekaa, there are challenges in communication with teachers, with the percentage indicating limited communication being (27.3%) in Beirut and (27.8%) in Bekaa. In other regions such as Mount Lebanon, the North, and the South, communication is generally effective or very effective.
- **Private Free Sector:** Across all governorates, except Nabatieh, teacher communication is largely effective, with (100%) of supervisors reporting good or very effective communication.
- **Private Non-Free Sector:** The rates in this sector are similar to the private free sector, with a notable distinction in Baalbek-Hermel where (90.9%) of supervisors report very effective communication.
- **UNRWA:** The UNRWA sector stands out with a very high level of communication between school administration and teachers in both Mount Lebanon (suburbs) and the South, with all supervisors

agreeing on very effective communication. This reflects UNRWA's success in fostering a positive communication culture among educational stakeholders.

Comparative Conclusion between Sectors and Governorates:

The public sector shows notable variation in communication across governorates, with areas such as Bekaa and Beirut facing challenges in improving communication. Conversely, the private free and non-free sectors exhibit largely effective communication across most governorates, with some exceptions in Nabatieh (private free sector) and Mount Lebanon (non-free private sector).

Third response: Coordinator (Question No. 36)

In the education sector, teachers report that 33.3% of schools in Beirut have no form of communication, while 22.2% consider relationships insufficient, 11.1% view communication as limited, and 33.3% rate it as good.

In Mount Lebanon (Suburbs), 11.8% have no communication, 17.6% consider relationships insufficient, 41.2% view communication as good, and 29.4% rate it as very effective.

In Mount Lebanon (excluding suburbs), 2.6% have no communication, 10.3% consider relationships insufficient, 56.4% view communication as good, and 30.8% rate it as very effective.

In the North, 3.4% have no communication, 10.2% consider relationships insufficient, 57.6% view communication as good, and 28.8% rate it as very effective. In Bekaa, 20.0% consider relationships insufficient, 50.0% view communication as good, and 30.0% rate it as very effective.

The South records 7.1% with no communication, 9.5% consider relationships insufficient, 47.6% view communication as good, and 35.7% rate it as very effective.

Nabatieh shows 18.8% considering relationships insufficient, 50.0% view communication as good, and 31.3% rate it as very effective.

In Akkar, 3.8% have no communication, 26.9% consider relationships insufficient, 30.8% view communication as good, and 38.5% rate it as very effective.

Baalbek-Hermel shows 5.6% with no communication, 5.6% considering relationships insufficient, 5.6% view communication as good, and 50.0% rate it as very effective.

Overall, the percentages are as follows: 0.4% have no communication, 5.3% consider relationships insufficient, 13.8% view communication as good, 48.4% rate it as very effective, and 32.1% rate it as extremely effective.

In the private free sector, Beirut shows 100% rating communication as good, while Mount Lebanon (suburbs) also shows 100% effective communication. In Mount Lebanon (excluding suburbs), 20.0% consider relationships insufficient, and 80.0% rate communication as good.

In the North, 25.0% consider relationships insufficient, and 75.0% view communication as good. Bekaa shows 100% viewing communication as good, while the South records 40.0% considering relationships insufficient, and 60.0% view communication as good.

In Nabatieh, 50.0% consider relationships insufficient, and 50.0% view communication as good. In Akkar, 66.7% consider relationships insufficient, and 33.3% view communication as good. Baalbek-Hermel shows 50.0% considering relationships insufficient, and 50.0% view communication as good.

Overall, the percentages are: 27.6% consider relationships insufficient, and 72.4% view communication as good.

In the private non-free sector, Beirut records 8.3% with no communication, 33.3% viewing communication as good, and 58.3% rate it as very effective. Mount Lebanon (suburbs) shows 2.2% with no communication, and 32.6% consider communication good, while 65.2% rate it as very effective.

In Mount Lebanon (excluding suburbs), 42.1% consider relationships insufficient, and 57.9% view communication as good. In the North, 3.2% have no communication, 35.5% consider relationships insufficient, and 61.3% view communication as good.

Bekaa shows 31.3% considering relationships insufficient, and 68.8% view communication as good. The South records 16.7% with no communication, and 16.7% considering relationships insufficient, with 66.7% viewing communication as good.

Nabatieh shows 9.1% considering relationships insufficient, 72.7% viewing communication as good, and 18.2% rate it as very effective. In Akkar, 7.7% have no communication, 15.4% consider relationships

insufficient, 46.2% view communication as good, and 30.8% rate it as very effective.
Baalbek-Hermel shows 36.4% considering relationships insufficient, and 63.6% view communication as good.
Overall, the percentages are: 0.5% with no communication, 3.8% considering relationships insufficient, 8.4% viewing communication as good, 42.8% rate it as very effective, and 44.6% rate it as extremely effective.
In UNRWA schools, all schools in the North view communication as good.
Overall, percentages across all governorates show that 4.5% of schools in Beirut have no communication, 13.6% consider relationships insufficient, 9.1% view communication as good, 22.7% rate it as very effective, and 50.0% rate it as extremely effective.
Mount Lebanon (suburbs) shows 4.4% considering relationships insufficient, and 32.4% view communication as good, while 58.8% rate it as very effective.
In Mount Lebanon (excluding suburbs), 1.6% have no communication, and 6.3% consider relationships insufficient, with 49.2% viewing communication as good, and 42.9% rate it as very effective.
The North shows 3.1% considering relationships insufficient, 6.3% viewing communication as good, 47.9% rate it as very effective, and 42.7% rate it as extremely effective.
Bekaa shows 10.5% considering relationships insufficient, and 39.5% view communication as good, with 50.0% rate it as very effective.
The South records 7.5% considering relationships insufficient, and 7.5% viewing communication as good, with 43.4% rate it as very effective, and 41.5% rate it as extremely effective.
Nabatieh shows 13.8% considering relationships insufficient, and 58.6% view communication as good, with 27.6% rate it as very effective.
Akkar records 4.8% considering relationships insufficient, 21.4% viewing communication as good, 38.1% rate it as very effective, and 35.7% rate it as extremely effective.
Baalbek-Hermel shows 3.2% considering relationships insufficient, and 3.2% view communication as good, while 45.2% rate it as very effective, and 45.2% rate it as extremely effective.
Overall, the percentages are: 0.5% with no communication, 3.8% considering relationships insufficient, 8.4% viewing communication as good, 42.8% rate it as very effective, and 44.6% rate it as extremely effective.

Fourth Response: Teacher (Question No. 36)

Public Sector
The overall results in the public sector indicate that the majority of teachers (47.4% within the sector) believe that communication is conducted effectively. A significant proportion (39.4%) feel that communication is highly effective, reflecting a good level of satisfaction. However, lower percentages highlight challenges in communication, with 11.0% of teachers stating that communication is limited, 1.3% believing relationships are insufficient, and 0.9% indicating that no communication exists at all. The majority have positive interactions with administration, with an overall percentage of 86.8% in the sector.
Governorate Results
Beirut: 2.1% of teachers believe relationships are insufficient, while 11.3% consider communication limited.
Jabal Lebanon (Suburbs): 0.9% view relationships as insufficient, and 8.3% find communication limited.
Jabal Lebanon (Excluding Suburbs): 8.0% consider communication limited.
North: 1.5% consider relationships insufficient, and 10.0% see communication as limited.
Bekaa: 1.6% find relationships insufficient, and 11.2% consider communication limited.
South: 0.6% only feel relationships are insufficient, and 4.1% find communication limited.
Nabatieh: 1.8% believe communication does not exist, and 10.2% find communication limited.
Akkar: 1.2% see relationships as insufficient, and 8.4% consider communication limited.
Baalbek-Hermel: 0.8% indicate no communication exists, and 14.4% find communication limited.
Regarding good or effective communication:
Beirut: 39.2% of teachers consider communication good, and 47.4% believe it is effective.
Jabal Lebanon (Suburbs): 40.4% find communication good, and 50.0% effective.

Jabal Lebanon (Excluding Suburbs): 35.4% view communication as good, and 56.6% effective.
North: 45.9% consider communication good, and 42.0% effective.
Bekaa: 37.2% find communication good, and 50.0% effective.
South: 46.2% see communication good, and 49.1% effective.
Nabatieh: 46.1% consider communication good, and 41.9% effective.
Akkar: 45.8% believe communication is good, and 43.8% effective.
Baalbek-Hermel: 39.0% consider communication good, and 44.1% effective.
Analysis by Governorates
There is slight variation in teacher evaluations of communication across governorates. Areas such as Jabal Lebanon and the North have higher percentages of teachers who find communication good or effective, while regions like Baalbek-Hermel and Nabatieh show concerns about limited communication.
This indicates that communication challenges may be more pronounced in rural or less accessible areas, where resources and opportunities are more limited.
Good or effective communication: Overall, the majority of teachers in most governorates consider communication to be either good or highly effective. Governorates with the highest rates of effective communication were Jabal Lebanon (Excluding Suburbs) and the South, showing the highest percentages of effective communication.
Limited or insufficient communication: While most governorates show positive communication trends, there are still teachers in each governorate who feel communication is limited or insufficient. This varies from region to region. Beirut recorded the lowest percentage of teachers who believed communication was limited (11.3%) compared to areas like Baalbek-Hermel (14.4%).
Conclusion
The results reflect a generally positive picture of teacher-administration communication within the public sector. However, there is room for improvement, especially in schools facing challenges, to ensure comprehensive effectiveness. Over three-quarters of the sample (86.8%) have positive communication to varying degrees (good or highly effective), suggesting a relatively successful communication policy. The smaller percentages indicate potential issues in certain schools or with some administrators.

Private Free Sector by Governorates:
Beirut: Effective communication is at 37.5%, good at 50.0%, and limited at 12.5%. Most communication in Beirut is good, though a smaller percentage considers it highly effective.
Jabal Lebanon (Suburbs): 45.9% of communication is highly effective, 35.1% good, and 18.9% limited. Communication is effectively conducted in nearly half of the cases, with a significant proportion for good communication.
Jabal Lebanon (Excluding Suburbs): 77.4% consider communication highly effective, and 22.6% good. This governorate shows a very high percentage of effective communication, reflecting greater efficiency.
North: 52.5% of communication is highly effective, 45.0% good, and 2.5% limited. Communication is predominantly strong and effective, with a very small percentage reporting limited communication.
Bekaa: 88.2% of communication is highly effective, and 8.8% good, with only 2.9% limited. This region demonstrates an exceptionally high level of effective communication.
South: 20.0% of communication is highly effective, 70.0% good, and 10.0% limited. While most communication is good, there is a smaller proportion of highly effective communication.
Nabatieh: 47.8% highly effective communication, 39.1% good, and 13.0% limited. This governorate shows a balanced distribution of communication categories.
Akkar: 52.4% considers communication highly effective, and 47.6% good. Akkar exhibits nearly equal balance between effective and good communication.
Baalbek-Hermel: 63.9% highly effective communication, and 33.3% good, with only 2.8% limited. Baalbek-Hermel has the highest proportion of highly effective communication among all governorates.
The overall sector results show that 54.1% communication is highly effective, 37.3% good, and 7.5% limited, with only 0.9% reporting insufficient relationships and 0.2% no communication at all. This reflects a generally positive trend with only a small proportion of ineffective communication.

UNRWA:
Highly effective communication reaches 80.0% in the South.
Governorate Comparison
Highest Performance: The North shows the highest performance with 100% of teachers viewing communication as highly effective.
Least Effective: The South, while strong, has the lowest percentage of highly effective communication (80%), with a larger reliance on good communication (20%).
Balanced Performance: Jabal Lebanon (Suburbs) presents a balanced picture with no limited or insufficient communication, maintaining a good balance between good and highly effective communication.
North Governorate
High Effectiveness: 100.0%
All teachers in the North consider communication highly effective, making this governorate the highest-performing.
South Governorate
High Effectiveness: 80.0%
Good: 20.0%
The South governorate shows strong performance with the majority of communication being highly effective.
Overall Results
High Effectiveness: 66.7%
Good: 33.3%
There are no weak or limited communication categories.
Overall, UNRWA schools demonstrate very positive results in communication with all relevant parties.
Governorate Comparison
Highest Performance: The North demonstrates the highest performance, with 100% of teachers considering communication highly effective.
Lowest Performance (relatively): The South has a slightly lower percentage of highly effective communication (80%), with 20% of teachers seeing communication as good.
Jabal Lebanon (Suburbs) shows a balanced performance with no limited or insufficient communication, maintaining a good balance between good and highly effective communication.

How communication is carried out between administration and all stakeholders.
Item Two: Students
Response One: Principal (Question No. 45)

Public Sector
- 6.1% of public schools have limited communication with students.
- 59.2% of public schools have good communication with students.
- 34.7% of public schools have highly effective communication with students.

Free Private Sector
- 6.7% of free private schools have limited communication with students.
- 46.7% of free private schools have good communication with students.
- 46.7% of free private schools have highly effective communication with students.

Non-Free Private Sector
- 5.1% of non-free private schools have limited communication with students.
- 35.7% of non-free private schools have good communication with students.
- 59.2% of non-free private schools have highly effective communication with students.

Overall UNRWA

- 5.7% of UNRWA schools have limited communication with students.
- 49.1% of UNRWA schools have good communication with students.
- 45.2% of UNRWA schools have highly effective communication with students.

Comparison of Education Sectors

1. **Public Sector**
   - 34.7% of schools rely on highly effective communication with students, with higher rates in Jabal Lebanon (excluding suburbs) (55.6%) and the South (53.3%). Conversely, Akkar and Baalbek-Hermel show lower rates of highly effective communication at 15% and 18.2% respectively.
   - 59.2% of schools rely on good communication with students, with notable performance in Baalbek-Hermel (81.8%) and Akkar (75%). The North performs relatively well at 65.7%, followed by the South at 46.7%.

2. **Free Private Sector**
   - 46.7% of schools rely on highly effective communication with students, with a remarkable performance in Beirut (100%) and the South (100%). In contrast, Baalbek-Hermel shows the lowest rate at 33.3%.
   - 46.7% of schools in this sector rely on good communication with students, with balanced outcomes in regions like Jabal Lebanon (excluding suburbs) (50%) and the North (33.3%).

3. **Non-Free Private Sector**
   - 59.2% of schools rely on highly effective communication with students, with distinguished performance in Baalbek-Hermel (80%) and the South (71.4%). Beirut registers 66.7%, while the lowest rates are in Akkar (66.7%).
   - 35.7% of schools rely on good communication with students, with significant percentages in the North (30.8%) and Jabal Lebanon (suburbs) (42.4%).

4. **UNRWA Sector**
   - 75% of schools rely on highly effective communication with students, with perfect performance in all regions such as Jabal Lebanon (suburbs), North, and South at 100%.

Comparison Between Governorates

- **Beirut** achieves the highest rates of highly effective communication with students across all sectors, with public and free private sectors recording high rates at 50% and 100% respectively.
- **Jabal Lebanon (Suburbs)** shows a balanced performance with 44.9% relying on highly effective communication and 42.9% on good communication.
- **Jabal Lebanon (Excluding Suburbs)** has balanced rates between good (43.8%) and highly effective (56.3%) communication.
- **North** shows variation between sectors, with only 20% in the public sector relying on highly effective communication, compared to 66.7% in the free private sector.
- **Baalbek-Hermel** demonstrates weaker performance in the public sector with only 18.2% relying on highly effective communication, whereas the non-free private sector stands out with a 80% rate.

Key Conclusions

1. The non-free private sector leads in highly effective communication with students at 59.2%.
2. UNRWA demonstrates consistency with highly effective communication at 100% across all regions.
3. Beirut, Jabal Lebanon (excluding suburbs), and the South excel as the top-performing regions in highly effective communication with students.
4. Akkar and Baalbek-Hermel require improvements in communication efficiency among school administrators in the public sector to ensure cohesive efforts within the educational system.

Second Response : Supervisor (Question No. 36)

General Situation in the Sector:

Public Sector: Communication between school administration and learners in public schools is generally good. About **61.3%** of supervisors indicated that communication is "good," while **23%** stated it is "very effective." However, **13.8%** considered communication to be "limited," and **1.8%** reported it as "insufficient." This indicates that most public schools work on establishing effective relationships with learners, though there are minor gaps in specific areas that need addressing.

Free Private Sector: Data shows positive communication in free private schools, with **61.3%** of supervisors viewing communication as "very effective" and **32.3%** considering it "good." Only a small percentage (**6.5%**) described communication as "limited." This reflects the focus of free private schools on improving communication with learners.

Non-Free Private Sector: In non-free private schools, a significant proportion of supervisors (**53%**) believe communication is "very effective," while **39.3%** rate it as "good." Only **6.8%** consider communication "limited," highlighting a highly positive communication environment with learners.

UNRWA: Data from UNRWA schools shows a **100%** rate of "very effective" communication, reflecting a supportive educational policy and efforts to enhance relationships with learners.

Key Observations by Governorate for Each Sector:

Public Sector:

Beirut faces notable challenges, with **27.3%** of supervisors describing communication as "limited," and only **18.2%** as "very effective."

North and **South** report significant percentages (**68.4%** and **68.8%**, respectively) of "good" communication, with minor challenges in specific areas.

Mount Lebanon (excluding suburbs) shows highly positive results, with **65.2%** rating communication as "good" and **30.4%** as "very effective."

Bekaa indicates good communication, with **38.9%** reporting "very effective" communication, reflecting efforts to improve relationships in the region.

Free Private Sector:

Beirut faces challenges, as **100%** of supervisors describe communication as "limited."

Bekaa, **Akkar**, and **North** show effective communication, with **100%** of supervisors in Bekaa and Akkar and **80%** in North viewing it as "very effective."

South demonstrates a high level of good communication, with **100%** of supervisors indicating "good" communication.

Non-Free Private Sector:

South exhibits the highest level of communication effectiveness, with **71.4%** of supervisors describing it as "very effective."

Beirut and **Mount Lebanon** present balanced results between "very effective" and "good" communication, with room for improvement.

Comparative Analysis of Sectors and Governorates:

The data analysis reveals that the public sector faces some challenges in specific governorates like Beirut and Bekaa, where a significant proportion of supervisors perceive communication as "limited" or "insufficient." Conversely, the free and non-free private sectors achieve high levels of effective communication with learners, particularly in regions like North and South. Both **South** and **Bekaa** demonstrate the best performance across all sectors.

Public Sector: Communication is generally good (**61.3%**) but requires addressing challenges in some regions.

Free Private Sector: A significant majority (**61.3%**) report "very effective" communication, showcasing a strong focus on improvement.

Non-Free Private Sector: A strong **53%** of supervisors find communication "very effective," with minimal issues.

UNRWA: Communication effectiveness reaches **100%,** demonstrating outstanding performance.

Conclusion: While the public sector shows good overall communication, targeted efforts are needed in regions like Beirut and Bekaa to enhance relationships. Meanwhile, the free and non-free private sectors, along with UNRWA schools, exhibit a commitment to maintaining effective communication, particularly in the North and South.

Third Response : Coordinator (Question 36)

In Beirut, there is a significant disparity in coordinators' opinions regarding how school administrations communicate with students to ensure community support. In public schools, 11.1% stated that communication is nonexistent, while 44.4% described it as limited, and 22.2% indicated that communication is either good or highly effective. In free private schools, all respondents agreed that communication is highly effective. In non-free private schools, opinions were evenly split, with 41.7% each considering communication either limited or effective.

In the suburbs of Mount Lebanon, results showed that 5.9% of coordinators in public schools believe relationships are insufficient, 17.6% think communication is limited, while 52.9% believe it is good, and 23.5% say it is highly effective. In free private schools, 40% stated that communication is good, and 60% found it highly effective. In non-free private schools, 2.2% said relationships are insufficient or limited, while 30.4% rated communication as good and 65.2% as highly effective.

In North Lebanon, 3.4% of coordinators in public schools reported insufficient relationships, 16.9% cited limited communication, 59.3% found it good, and 20.3% highly effective. In free private schools, 50% of coordinators considered communication good, and the other 50% highly effective. In non-free private schools, 6.5% saw communication as limited, while 35.5% found it good and 58.1% highly effective.

In the Bekaa, 5% of public school coordinators reported no communication, 15% indicated relationships are insufficient, while 50% believed communication is good and 30% highly effective. In both free and non-free private schools, 100% of coordinators stated that communication is highly effective.

In the South, 4.8% of public school coordinators said relationships are insufficient, 9.5% described communication as limited, 61.9% believed it is good, and 23.8% considered it highly effective. In free private schools, all coordinators agreed that communication is highly effective. In non-free private schools, 16.7% reported insufficient relationships, 33.3% said communication is limited, and 50% found it highly effective.

In Nabatieh, public school results indicated that 18.8% of coordinators view communication as limited, 68.8% consider it good, and 12.5% believe it is highly effective. In free private schools, 50% of coordinators found communication limited and 50% highly effective. In non-free private schools, opinions were divided, with 9.1% for limited communication, 72.7% for good communication, and 18.2% for highly effective communication.

In Akkar, 3.8% of public school coordinators reported insufficient relationships, 26.9% cited limited communication, 46.2% described it as good, and 23.1% as highly effective. In free private schools, 33.3% considered communication good, and 66.7% highly effective. In non-free private schools, 38.5% pointed to limited communication, 46.2% to good communication, and 15.4% to highly effective communication.

In Baalbek-Hermel, 5.6% of public school coordinators said relationships are insufficient, 11.1% mentioned limited communication, 55.6% considered it good, and 27.8% highly effective. In free private schools, opinions were equally split, with 50% each for good and highly effective communication. In non-free private schools, 63.6% considered communication good, and 36.4% highly effective.

General Conclusions

In the public education sector, results reveal clear disparities among governorates regarding school administrations' communication with students to ensure community support. In Beirut, 33.3% of respondents stated communication is highly effective, while higher levels of limited communication are

observed in governorates like Akkar and Baalbek-Hermel. In the North and Bekaa, results indicate high percentages of good communication.

In the free private education sector, Beirut, Bekaa, and the South show a high consensus on communication effectiveness, with 100% of respondents in these areas confirming that communication is highly effective. In the suburbs of Mount Lebanon, percentages were distributed between good and highly effective communication, suggesting some variation.

In the non-free private education sector, Beirut and Mount Lebanon (both suburban and urban areas) lead in good and highly effective communication levels, exceeding 90%, while Akkar and Baalbek-Hermel report lower percentages of effective communication, indicating challenges in achieving community support.

In UNRWA schools, results from North Lebanon show unanimous agreement on highly effective communication (100%), reflecting a high level of coordination between school administrations and students to ensure community support.

Overall, the findings indicate that urban governorates like Beirut and Mount Lebanon's suburbs tend to achieve higher rates of good and highly effective communication across all sectors. In contrast, rural governorates such as Akkar and Baalbek-Hermel face greater challenges in achieving effective communication, which may require improving communication mechanisms and community engagement strategies.

Fourth Response: Teacher (Question 36)

Public Sector

General Results at the Sector Level

- **Good and Effective Communication:** 52.3% of teachers believe that communication between the administration and students is good, and 30.2% see it as highly effective. The combined percentage (82.5%) reflects the satisfaction of the majority of teachers with the quality of communication.
- **Limited or Insufficient Communication:** 14.8% of teachers find communication to be limited, 0.7% believe relationships are insufficient, and 0.7% report a complete absence of communication.

Results by Governorate

- **Beirut:**
  - The highest percentage for "Good communication" at 50.0%.
  - "Highly effective communication" at 26.7%, reflecting relatively good communication.
- **Mount Lebanon Suburbs:**
  - The highest percentage for "Good communication" at 58.3%, with 20.0% for "Highly effective communication."
- **North Lebanon:**
  - 54.1% for "Good communication" and 24.8% for "Highly effective communication," indicating a good level of communication.
- **Bekaa:**
  - High percentage for "Good communication" at 49.0%, and 30.6% for "Highly effective communication."
- **Baalbek-Hermel:**
  - Moderate percentages for "Good communication" at 50.6% and "Highly effective communication" at 26.0%.

Overall Public Sector:

- The highest percentage for "Good communication" at 52.3%, followed by "Highly effective communication" at 30.2%.

Private Sector by Governorates

- **Effective Communication:**
  Most governorates showed a positive trend toward effective communication, with teachers'

opinions on "Highly effective communication" ranging between 32.7% (in Akkar) and 45.4% (in Beirut). The highest percentage was recorded in Beirut (45.4%), followed by Mount Lebanon Suburbs (42.3%).

- **Limited Communication:**
  A significant proportion of teachers viewed communication as good, with the highest percentages in the North (54.1%) and Mount Lebanon (excluding suburbs) (47.4%). However, there were also teachers who found communication to be limited, with percentages ranging from 8.4% (in Nabatieh) to 16.7% (in the North).
- **Insufficient or Absent Communication:**
  Very few teachers reported a total absence of communication, with minimal percentages across most governorates. Similarly, the percentage of teachers who believed relationships were insufficient was low, ranging from 0.3% (in Mount Lebanon Suburbs) to 5.1% (in Baalbek-Hermel).

Private Sector Analysis by Governorates:
- Most governorates showed a significant proportion of teachers perceiving communication as good to effective, indicating a level of cooperation between schools and students, despite some challenges requiring improvement.
- The North appears to be the most satisfied in evaluating communication, while some other governorates, such as Baalbek-Hermel and Nabatieh, had higher percentages of teachers considering communication limited or insufficient.

Conclusion:
- Results indicate significant success in achieving positive communication with students. However, 17.5% highlight the need for support and improvement in some schools to provide equal experiences for all students.
- More than half of the teachers in the public sector (28.0% of the total sample) point to good communication, and 16.1% of the total sample point to highly effective communication.
- The majority of teachers (82.5%) view communication with the administration positively (good or highly effective), reflecting successful efforts to strengthen communication.
- 17.5% of teachers see communication as needing improvement (limited, insufficient, or absent), indicating challenges for some schools or administrations in building interactive relationships with students.

Free Private Sector
Results by Governorate:
- **Beirut:** The highest percentage for "Good communication" at 50.0%.
- **Mount Lebanon (excluding suburbs):** Distinct percentage for "Highly effective communication" at 64.5%.
- **Bekaa:** The highest percentage for "Highly effective communication" at 64.7%.
- **Akkar:** Mixed results with 71.4% for "Good communication" and 19.0% for "Highly effective communication."

Overall Free Private Sector:
- Close percentages between "Good communication" at 46.4% and "Highly effective communication" at 45.9%.

Non-Free Private Sector
- **Beirut:** The highest percentage for "Highly effective communication" at 55.9%.
- **North Lebanon:** Balanced percentages with 51.0% for "Good communication" and 32.0% for "Highly effective communication."
- **Akkar:** High percentage for "Good communication" at 43.8%.

Overall Non-Free Private Sector:
- 46.0% for "Highly effective communication," and 43.7% for "Good communication."

UNRWA

Results by Governorate:
- **Mount Lebanon Suburbs:** The highest percentage for "Good communication" at 80.0%.

Overall UNRWA:
- Balanced distribution with 50.0% for "Highly effective communication."

General Results:
- Communication between school administrations and students is good or highly effective in most governorates.
- The highest percentage for "Highly effective communication" was recorded in the free private sector (45.9%), followed by the non-free private sector (46.0%).
- Governorates excelling in effective communication include:
  - Mount Lebanon (excluding suburbs) in the free private sector at 64.5%.
  - Bekaa in the free private sector at 64.7%.

Question: How is communication conducted between the administration and all concerned parties?

Section Three: Parents

First response: Principal (Question 45)

Public Education: Total Results

Limited communication: 17.7% of schools.

Good communication: 50.3% of schools.

Highly effective communication: 32.0% of schools.

Free Private Education: Total Results

Limited communication: 10.0% of schools.

Good communication: 50.0% of schools.

Highly effective communication: 40.0% of schools.

Non-Free Private Education: Total Results

Limited communication: 7.1% of schools.

Good communication: 42.9% of schools.

Highly effective communication: 50.0% of schools.

UNRWA: Total Results

Limited communication: 12.9% of schools.

Good communication: 47.3% of schools.

Highly effective communication: 39.8% of schools.

Comparison Across Educational Sectors

Public Education:

Schools show significant variation in communication effectiveness between school administrations and parents. For example:

Beirut: 37.5% of schools achieve "highly effective" communication.

North Lebanon: 31.4% of schools report "highly effective" communication.

Nabatieh and South Lebanon: Higher performance, with "highly effective" communication at 37.5% and 33.3%, respectively.

Akkar: Relatively weaker performance, with 30% of schools categorizing communication as "limited."

Free Private Education:

A majority of schools have effective communication with parents.

Bekaa: 66.7% of schools report "highly effective" communication.

Beirut: Mixed results, with 50% of schools categorizing communication as "good" and the other half as "highly effective."

Non-Free Private Education:

Strong performance in most areas:

Beirut: 66.7% of schools report "highly effective" communication.

Mount Lebanon Suburbs: Balanced results with 45.5% for both "highly effective" and "good" communication.

Akkar: Weak performance, with only 16.7% of schools categorizing communication as "good."

UNRWA:

Outstanding results, with all schools in the South and North categorizing communication as "highly effective," reflecting the strength of administrative systems in this sector.

Findings:

The data reveals disparities in communication effectiveness between school administrations and parents across educational sectors:

Public Education: Shows considerable variation across regions.

Free and Non-Free Private Education: Demonstrates higher levels of communication effectiveness with parents.

UNRWA: Sets a strong example of effective communication strategies across all areas.

Comparison by Governorates:

Beirut: Non-Free Private Education shows outstanding performance, with 66.7% of schools reporting "highly effective" communication with parents.

Mount Lebanon (Surrounding Areas): Public Education demonstrates a balance, with "highly effective" communication reaching 55.6%.

North Lebanon: Public Education reports good communication in 54.3% of schools.

South Lebanon: UNRWA and Public Education stand out, achieving "highly effective" communication with parents.

Akkar: Shows relative weakness in communication with parents in both Public Education and Non-Free Private Education, with high percentages of "limited" communication.

Baalbek-Hermel: Displays balance across all levels, with 36.4% of schools categorizing communication as "good."

Conclusion:

The data highlights the need to strengthen communication mechanisms between school administrations and parents in **Akkar** and **Bekaa** for Public Education. Free and Non-Free Private Education stand out as effective models in achieving strong communication with parents in most governorates. Meanwhile, UNRWA reaffirms the effectiveness of its communication strategies.

Second Response: Supervisor (Question 36)

General Situation in the Sector

Public Sector

Positive communication: 76% of supervisors reported positive communication with parents.

54.8% rated it as "good."

21.2% rated it as "highly effective."

Challenges: 24% of supervisors described communication as "limited" or "insufficient."

Weaker areas: Beirut (36.4% limited communication) and Bekaa (33.3% limited communication).
Free Private Sector
Positive communication: 93.6% of supervisors reported positive communication.
58.1% rated it as "highly effective."
35.5% rated it as "good."
Challenges: The South struggled, with 50% reporting "limited communication."
Strongest areas: Akkar, Beirut, and Baalbek-Hermel, which all reported strong communication with parents.
Non-Free Private Sector
Positive communication: 94.9% of supervisors reported positive communication.
48.7% rated it as "highly effective."
46.2% rated it as "good."
Challenges: Minimal issues, with the weakest area being Mount Lebanon Suburbs, where 9.4% of supervisors described communication as "limited" or "insufficient."
Strongest areas: Akkar and Nabatieh reported very good results.
UNRWA
Outstanding results: 100% of supervisors reported communication with parents as positive and highly effective.

Key Observations by Governorates in Each Sector
Public Sector
Significant variation between regions:
Weaker areas: Beirut and Bekaa showed weak communication (36.4% and 33.3%, respectively).
Stronger areas: Mount Lebanon Suburbs (70.6%) and Nabatieh (65.2%) reported good and effective communication.
Free Private Sector
Weaker area: The South struggled, with 50% reporting "limited communication."
Stronger areas: Akkar, Beirut, and Baalbek-Hermel showed positive results:
Akkar reported 100% "highly effective" communication.
Beirut and Baalbek-Hermel reported 100% "good" communication.
Non-Free Private Sector
Strong results across all areas: Akkar, Mount Lebanon (excluding suburbs), Nabatieh, Beirut, and the South achieved 100% positive communication, combining "good" and "highly effective."
Notable performance: Baalbek-Hermel reported 72.7% "highly effective" communication.
UNRWA
Exceptional results: 100% of supervisors confirmed "highly effective" communication across all areas.

Comparative Analysis by Sectors and Governorates
Sectors
Free and Non-Free Private Sectors: Achieve the highest levels of effective communication with parents, compared to the public sector, which shows significant disparities.
UNRWA: Sets a model of highly effective communication across all regions.
Governorates
Weaker areas: The South and Bekaa struggle with communication in all sectors, indicating the need for interventions to improve parent-administration relationships.
Stronger areas: Akkar and Mount Lebanon demonstrate the best results across all sectors, offering models that could inspire improvements elsewhere.
Conclusion
The analysis highlights:
Disparities in the public sector: Communication effectiveness varies widely by region, with the South and Bekaa requiring targeted strategies to improve relations with parents.

Strong performance in private sectors: Both free and non-free private sectors show consistent success in communication.

UNRWA's exemplary approach: Demonstrates uniformly strong communication across all areas.

Recommendations: Build on the successful models in Akkar and Mount Lebanon to address weaknesses in other regions, particularly in the South and Bekaa.

Third Response: Coordinator (Question 36)

Public Sector

Beirut: Communication between school administration and parents to ensure community support is limited at 33.3%, while highly effective communication is at the same percentage. A lack of communication and insufficient relationship-building is reported at 11.1% each.

Mount Lebanon (Suburbs): Communication is "good" at 47.1%, "highly effective" at 23.5%, with insufficient relationship-building also noted at 23.5%.

Mount Lebanon (Excluding Suburbs): Communication is predominantly "good" at 53.8%, followed by "highly effective" at 23.1%, with minimal insufficient relationship-building at 2.6%.

North: Communication is limited at 37.3%, "good" at 35.6%, and "highly effective" at 22.0%.

Bekaa: Communication varies, with "good" at 35.0%, "highly effective" at 30.0%, and limited communication at 25.0%.

South: The majority of communication is "good" at 57.1%, followed by "highly effective" at 21.4%, with insufficient relationship-building at 16.7%.

Nabatieh: Communication is "highly effective" at 12.5% and "good" at 62.5%.

Akkar: Communication is "good" at 50.0%, followed by limited communication at 26.9%.

Baalbek-Hermel: Communication is "good" at 44.4%, and "highly effective" at 33.3%.

Free Private Sector

Communication is outstanding in all governorates, with "highly effective" and "good" communication reaching:

Mount Lebanon (Suburbs): 60.0%.

Mount Lebanon (Excluding Suburbs): 80.0%.

North: 75.0% "good" and 25.0% "highly effective."

Bekaa and South: Nearly equal distribution between "good" and "highly effective" communication.

Non-Free Private Sector

Communication percentages vary:

Beirut: 66.7% "highly effective."

Mount Lebanon (Suburbs): 65.2% "highly effective."

Mount Lebanon (Excluding Suburbs) and North: "Good" communication ranges from 41.9% to 47.4%.

Bekaa: "Highly effective" communication stands out at 62.5%.

UNRWA Sector

North: Communication is balanced between "good" and "highly effective," each at 50.0%.

General Conclusions

Free Private Sector: Demonstrates the highest levels of effective communication with parents across most governorates, particularly in Mount Lebanon (excluding suburbs) and the North.

The public sector suffers from disparities in the level of communication between governorates, with some areas exhibiting good communication, while others face challenges in establishing adequate relationships with parents.

The private, non-free sector shows improvement in communication levels with parents, particularly in Beirut and Mount Lebanon.

The UNRWA sector demonstrates a good balance of effective and strong communication, with a high level of communication in the North.

Fourth Response: Teacher (Question No. 36)

Public sector
Overall results for the sector
Effective and good communication:
- 48.5% of teachers indicate that communication between administration and parents is good.
- 25.0% believe it is highly effective.
- The overall percentage (73.5%) shows that the majority of school administrations have positive relationships with parents.
  Limited or insufficient communication:
- 22.5% of teachers indicate limited communication with parents.
- 3.7% believe relationships are not adequate.
- 0.3% report a complete lack of communication.

Results by governorate
Beirut Governorate: 56.7% "is good," and 23.3% "is highly effective," indicating good communication with parents.
Mount Lebanon Suburbs: 51.7% "is good," and 20.0% "is highly effective," with a very low percentage of "no communication" at 1.7%.
North Governorate: The highest percentage for "is good" at 50.4%, and 14.8% "is highly effective," but the percentage of "is limited" is high at 31.1%.
Bekaa Governorate: Close percentages between "is good" (44.9%) and "is highly effective" (25.5%).
Ba'albek-Hermel Governorate: 48.1% "is good," and 22.1% "is highly effective," reflecting a moderate level of communication.
Overall public sector: 48.5% "is good," and 25.0% "is highly effective," with a very low percentage of "no communication" (0.3%).
Analysis:
The results generally reflect a positive image of communication between administration and parents, with some areas needing improvement in support and communication. Focus on improving relationships in schools facing challenges will have a significant impact on enhancing student performance and developing an inclusive school environment.
Private free sector:
Results by governorate
Beirut Governorate: Clear variation with 37.5% for both "is limited" and "is highly effective."
Mount Lebanon excluding suburbs: Notable with 51.6% "is good" and 48.4% "is highly effective."
North Governorate: High percentage of "is limited" at 67.5%, with 32.5% "is good."
Bekaa Governorate: Increased "is good" at 50.0% and "is highly effective" at 41.2%.
Overall private free sector: 48.3% "is good," and 39.7% "is highly effective."
Private non-free sector:
Results by governorate
Beirut Governorate: 52.5% "is highly effective," and 37.3% "is good."
North Governorate: 48.0% "is good," and 41.0% "is highly effective."
Akkar Governorate: Close percentages between "is good" (46.9%) and "is highly effective" (35.9%).
Overall private non-free sector: Equal percentages for "is good" and "is highly effective" at 45.1% each.
UNRWA:
Results by governorate
Mount Lebanon Suburbs: 80.0% "is good," and 20.0% "is highly effective."
South Governorate: 80.0% "is highly effective," with 20.0% "is good."
Overall UNRWA: Balance between "is good" at 41.7% and "is highly effective" at 58.3%.
Overall analysis:
"Is good" and "is highly effective" are the most common across governorates and sectors.
Outstanding governorates:
- Mount Lebanon excluding suburbs (Private free and non-free sectors): The highest percentage for "is highly effective" at 48.4%.

- North (Public sector): Higher percentage of "is limited" at 31.1%, indicating a need for improved communication.
  Overall total: 47.2% "is good," and 33.8% "is highly effective," with a very low percentage of "no communication" at 0.3%.

Category Four: Future Needs and Expectations

School's needs to keep pace with change
First Response: Principal (Question No. 53)

In Beirut Governorate, 16 schools require financial support to secure equipment and update facilities. In Mount Lebanon (suburbs), 41 schools need support, while in Mount Lebanon (excluding suburbs), 30 schools are in need. In the North, 51 schools require support, and in the Bekaa, 23 schools need support, as well as in the South. Nabatieh needs 24 schools, and Akkar also requires 24 schools, while Baalbek-Hermel needs 14 schools. The total number is 246 schools in need of financial support.

Analyzing the number of schools requiring financial support, it appears that the public sector is the most in need with a total of 135 schools, followed by the private non-free sector with 81 schools, while the private free sector ranks last with 27 schools. This difference highlights the greater need for financial support in the public sector.

Conclusion: The public sector requires clear financial support to provide sufficient funding for upgrading facilities and improving the educational environment, necessitating strategies to increase financial support for the most needed sectors.

Comparison by governorate reveals significant variation in the need for financial support. In Beirut, 16 schools require support, while in Mount Lebanon (suburbs) there are 41 schools. In Mount Lebanon (excluding suburbs), 30 schools need support, while the North shows a need for 51 schools. In Bekaa and the South, each require 23 schools, while Nabatieh and Akkar need 24 schools. Baalbek-Hermel requires 14 schools, emphasizing the need for enhanced financial support in these areas.

Conclusion: The highest need is in the North Governorate, followed by Baalbek-Hermel, indicating a need for increased efforts to enhance financial support in areas with high numbers.

Regarding training for administrators, the public sector leads with 83 schools in need. The private non-free sector is second with 42 schools, while the private free sector records only 19 schools.

Conclusion: The public sector shows a strong emphasis on developing administrative staff, while other sectors exhibit a noticeable disparity in need. Efforts should be intensified for administrative training to ensure improved administrative performance.

Comparison by governorate shows variation in the number of schools requiring administrative training. In Beirut, 7 schools need training, while Mount Lebanon (suburbs) requires 20 schools. In Mount Lebanon (excluding suburbs), 16 schools are needed. The North leads with 27 schools, while Bekaa requires 15 schools. The South and Nabatieh show close numbers with 12 and 19 schools respectively, while Akkar has 19 schools and Baalbek-Hermel 9 schools.

Conclusion: There are disparities between governorates in the need for administrative training, indicating the need to provide training in areas with greater requirements.

Regarding teacher training, the public sector again leads with 96 schools in need, followed by the private non-free sector with 53 schools. The private free sector records only 20 schools.

Conclusion: Public sector school administrators demonstrate a strong awareness of the importance of organizing teacher training, but there is a significant variation between sectors.

Comparison by governorate reveals that Beirut requires 5 schools, while Mount Lebanon (suburbs) needs 19 schools in the private non-free sector. In Mount Lebanon (excluding suburbs), 14 schools require training. The North leads with 35 schools, while Bekaa needs 8 schools. The South and Nabatieh show very close numbers.

Conclusion: There is a need to enhance teacher training in the public sector, particularly in the North.

Regarding the provision of modern technology, the public sector leads with 114 schools requiring such technology, followed by the private non-free sector with 59 schools. The private free sector requires 16

schools.

Conclusion: The public sector has a significant need for modern technology, while the private free sector requires comparatively less support.

Comparison by governorate shows that Beirut needs 7 schools, while Mount Lebanon (suburbs) requires 17 schools. The North has 39 schools, and Bekaa needs 15 schools. The South records a need for 20 schools.

Conclusion: Greater investment should be directed towards the public sector, particularly in the North and Akkar.

In terms of enhancing partnerships with the local community, the public sector is leading with 33 schools showing interest, while the private non-free sector highlights 19 schools, and the private free sector shows limited interest with 8 schools.

Conclusion: The public sector carries the greatest responsibility in fostering partnerships with the local community, requiring more comprehensive strategies.

Comparison by governorate reveals that Beirut needs 4 schools, while Mount Lebanon (suburbs) has 5 schools. In the North, the public sector leads with 7 schools.

Conclusion: There are significant disparities between governorates, with the North and Nabatieh leading initiatives, whereas regions like Akkar and Baalbek-Hermel require more effort.

For securing administrative staffing shortages, the public sector requires 37 schools, while the private non-free sector comes second with 9 schools.

Conclusion: The disparities between governorates reflect diverse needs, underscoring the need for more equitable resource distribution.

Regarding support for struggling students, the public sector requires support in 80 schools, followed by the private non-free sector with 37 schools.

Conclusion: There is a need to provide support for struggling students, particularly in the private free sector.

Comparison by governorate shows that Beirut needs 7 schools, while Mount Lebanon (suburbs) records 13 schools. The North requires 18 schools.

Conclusion: Variations between governorates necessitate increased resources for supporting struggling students.

In terms of psychosocial support, the public sector leads with 77 schools, followed by the private non-free sector with 31 schools.

Conclusion: The public sector demonstrates the highest need for psychosocial support.

Comparison by governorate reveals that Beirut requires 5 schools, while the North needs 19 schools.

Conclusion: There is a need to enhance psychosocial support across all governorates.

Note: Health counseling, staffing shortages, and training for principals were not addressed.

Second Response: Supervisor (Question No. 39)

The analysis of the questionnaire data reveals a set of essential needs that supervisors consider crucial for managing change and keeping pace with future curriculum development. These needs are distributed across various areas, with differences identified between governorates and educational sectors (public and private), arranged according to the frequency of selection by surveyed supervisors.

Order of school needs based on the total number of responses for each option:

1. Financial support to secure equipment and update facilities (319 responses)
2. Provision of modern technology (253 responses)
3. Teacher training programs (192 responses)
4. Support for struggling students (181 responses)
5. Infrastructure development (168 responses)
6. Psychosocial support (169 responses)
7. Administrative training programs (146 responses)
8. Strengthening partnerships with the local community (116 responses)
9. Sustainability planning (101 responses)
10. Securing teaching staff shortages (77 responses)
11. Securing service personnel and guards (50 responses)
12. Securing administrative staff (Administrators, Librarian, IT) (70 responses)

In detail:

1. Financial support to secure equipment and update facilities (319 responses). The highest needs were in the North (52) and Akkar (46), reflecting urgent financial support needs. Public schools (194) are the most reliant on government funding.

2. Provision of modern technology (253 responses). Highest needs were in the North (39) and Akkar (37), highlighting the digital gap in these areas. Public schools (166) represent the largest proportion, indicating significant technological deficiencies.

3. Teacher training programs (192 responses). The North (32) and Akkar (28) show the highest needs. Public schools (121) lead.

4. Support for struggling students (181 responses). Highest needs were in Akkar (30) and the North (25). Public schools (133) represent the largest group.

5. Infrastructure development (168 responses). Highest needs were in Akkar (28) and the North (24). Public schools (107) lead.

6. Psychosocial support (169 responses). Highest needs were in Nabatieh (26) and the North (22). Public schools (124) represent the majority.

7. Administrative training programs (146 responses). Highest needs were in Akkar (28) and the North (23). Public schools (96) are a priority.

8. Strengthening partnerships with the local community (116 responses). Highest needs were in Akkar (21) and the North (17). Public schools (79) are at the forefront.

9. Sustainability planning (101 responses). Highest needs were in Akkar (17) and the North (15). Public schools (73) are leading.

10. Securing teaching staff shortages (77 responses). Highest needs were in the North (12) and Bekaa (9). Public schools (67) dominate.

11. Securing administrative staff (70 responses). Highest needs were in Nabatieh (13) and the North (9). Public schools (50).

12. Health counseling (56 responses). Highest needs were in Akkar (7) and Bekaa (6). Public schools (34).

13. Securing service personnel and guards (50 responses). Highest needs were in Nabatieh (8) and Beirut (5). Public schools (40).

14. Institutional assessment (31 responses). Highest needs were in Akkar (9) and Nabatieh (5). Public schools (27).

Conclusions

The gap between Lebanese regions is stark, with the North and Akkar leading in needs across various areas, reflecting significant deficiencies in infrastructure, equipment, financial, and technological support. Bekaa and Nabatieh are also regions with substantial shortages. Beirut shows comparatively better infrastructure and services, indicating relative development.

The public sector has a greater focus on needs than the private sector, with the majority of needs coming from public schools, emphasizing their reliance on government funding.

The most urgent needs are updating equipment and technology, reflecting the necessity to enhance schools' ability to adapt to curriculum changes and achieve digital transformation. Training and capacity-building play a pivotal role, highlighting the need to improve competencies and human resource development.

Psychosocial support is a pressing necessity, as responses indicate increased pressures on students and teachers due to economic and social crises.

Securing administrative and teaching staff remains a key challenge, particularly in the public sector.

Institutional assessment and sustainability planning show an awareness of improving institutional performance, though responses remain relatively low compared to other needs.

Third Response: Coordinator

A variety of needs have been identified across different sectors within schools, ranging from infrastructure development to psychosocial support, curriculum development, and community engagement. A recurring theme is the importance of support for struggling students, with many responses highlighting the need for

additional support, especially for students facing academic challenges. Additionally, the importance of financial support, modern technology, and support for struggling students has been emphasized, reflecting the need for improved infrastructure and staff recruitment across most regions.

Priority areas:
- **Infrastructure Development**: Many responses point to the need for improved school infrastructure (buildings, classrooms, facilities). Schools in various governorates, particularly Beirut and the South, require enhanced infrastructure to support reforms.
- **Support for Struggling Students**: A significant portion of responses mentions the need for additional support for struggling students, highlighting the necessity of allocating more resources to assist these students in achieving academic standards. This support was one of the most crucial needs in regions like the South and North.
- **Psychosocial Support**: Psychosocial support for students is frequently mentioned, particularly in regions such as Mount Lebanon and the North, demonstrating increased awareness of addressing students' mental and emotional health. There is also a specific focus on health counseling in the South and North.
- **Sustainability Plans**: Many schools have emphasized the need for sustainability planning, indicating a desire to establish long-term strategies for managing reforms and changes effectively.
- **Community Engagement**: Emphasis is placed on partnerships with local communities, showing the need for stronger collaboration between schools and their surrounding environments, particularly in regions like Beirut and Mount Lebanon.
- **Modern Technology**: Modern technology has been identified as another critical need in various governorates, demonstrating a push towards modernizing education using digital tools and resources. This need is emphasized in Beirut and Mount Lebanon.
- **Financial Support**: Schools in some regions (e.g., Beirut, Mount Lebanon, and the South) noted the necessity of financial resources to secure necessary materials, equipment, and staff for reforms.

Regional Trends:
- **Beirut and Mount Lebanon**: These areas show a broad range of responses, highlighting complex challenges faced by schools, including a mix of infrastructure needs, technology, and social support. Psychosocial support and modern technology are particularly emphasized.
- **Baalbek-Hermel and North**: These regions consistently show needs for psychosocial support and assistance for struggling students, with fewer mentions of infrastructure or financial support compared to other areas.
- **South and Bekaa**: Focuses on supporting struggling students and infrastructure development, suggesting a significant investment is needed in both educational support and physical facilities.

Educational Sector:
Private schools show a wide range of needs, particularly in technology and sustainability planning. Public schools, however, concentrate more on physical resources such as infrastructure improvement and staffing shortages.

UNRWA schools face unique challenges, focusing on struggling student support, though with less emphasis on infrastructure or sustainability planning.

General Conclusions:
1. **Financial Support**: Financial support emerges as one of the most critical needs identified by coordinators across all regions. It is essential for providing modern equipment, upgrading infrastructure, and hiring specialized teachers.
2. **Teacher Shortage**: An ongoing issue, particularly in regions such as North, South, and Baalbek-Hermel. There is an urgent need to recruit or retain qualified teachers.
3. **Psychosocial Support**: Emerges as a priority, especially in Mount Lebanon and the South, highlighting the increasing need to address students' mental and health challenges.
4. **Technology Development**: Increasing importance is placed on technology, especially in Beirut and Mount Lebanon, where there is a shift towards integrating digital tools into the educational process.

5. **Support for Struggling Students**: The need for academic support for struggling students is widespread, especially in the South and North, reflecting reform priorities to close academic gaps.
6. **Community Engagement**: The need for stronger community partnerships is growing, particularly in regions like Beirut and Mount Lebanon, recognizing the importance of collaboration between schools and local communities.

Thus, improving education in Lebanon requires a focus on infrastructure development, specialized staffing, psychosocial support, and financial resources to achieve sustainable reforms.

Public Sector

- **Infrastructure Development (30%)**: This need includes updating school buildings and facilities, providing a more modern and effective educational environment.
- **Modern Technology (25%)**: Emphasizes the importance of equipping schools with the necessary technological devices and programs to support teaching and learning processes.
- **Training Personnel (20%)**: Covers training for teachers and administrators on the latest educational methods and techniques, along with how to effectively utilize technology in education.
- **Student Support (15%)**: Focuses on providing academic and psychological support programs for students who require them, particularly struggling students.
- **Community Engagement (10%)**: Highlights the importance of fostering strong relationships between schools and local communities, utilizing available community resources to enhance educational outcomes.
- **Sustainability Planning (5%)**: Refers to the importance of creating long-term plans to ensure the continuity of development and achievement of educational goals.
- **Institutional Evaluation (5%)**: Stresses the need for regular assessments of school performance and efficiency, to identify strengths and weaknesses and take necessary steps for improvement.
- **Financial Support (5%)**: Underlines the importance of securing financial resources to meet the above-mentioned needs.

Private Sector Free

Survey results show that schools feel the need for a wide range of resources and support to effectively manage change and keep up with continuous developments in education. The most commonly identified needs include:

- **Infrastructure Development (30-35%)**: This need involves updating school buildings and facilities, providing a more modern and effective educational environment.
- **Modern Technology (25-30%)**: Highlights the need for schools to be equipped with technological devices and programs to support the educational process.
- **Training Personnel (15-20%)**: Includes training for teachers and administrators on the latest educational methods and techniques, along with how to use technology effectively.
- **Student Support (10-15%)**: Focuses on providing academic and psychological support programs for students who need them, especially struggling students.
- **Community Engagement (5-10%)**: Emphasizes the importance of fostering strong relationships between schools and local communities, utilizing available resources to enhance education.
- **Financial Support (5-10%)**: Highlights the importance of securing financial resources to meet the above-mentioned needs.

Fourth Response: Teacher (Question No. 40)

Public Sector:

Results by Governorates

- **Beirut**: Financial support is the most significant need at **43.3%**, with a notable requirement for psychological and social support at **16.7%**.
- **Mount Lebanon (Suburbs)**: The main focus is on infrastructure at **35.0%**, with a need for financial support at **13.3%**.
- **Mount Lebanon (excluding suburbs)**: Laboratory equipment and technology are the most significant needs at **53.7%**.
- **North**: The most common need is financial support at **41.1%**, along with additional equipment.
- **Bekaa**: Financial support remains a primary requirement at **44.9%**.

- **South**: Financial support is the most prominent need at **49.2%**.
- **Nabatieh**: Focus is placed on both material and psychological support at **60.7%**.
- **Akkar**: Financial support and modern technology are essential needs at **50.0%**.
- **Baalbek-Hermel**: Financial support represents the largest percentage at **44.2%**.

Private Free Sector: Needs vary between governorates, with financial support or infrastructure development being the most important.

Non-Free Private Sector: Needs in this sector include infrastructure development, modern technology, and financial support.

UNRWA: Needs focus on infrastructure development, with percentages ranging from **40.0% to 60.0%** in some governorates.

General Conclusions:
- **Financial support** is the most prominent need across all governorates and educational sectors.
- **Infrastructure development** and **modern technology** are urgent necessities in many governorates.
- **Psychological and social support** requires additional focus, especially in rural areas.

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