



Foundations for **BUILDING FORWARD BETTER**

An Education Reform Path
for Lebanon



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**BUILDING FORWARD
BETTER**

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EXECUTIVE SUMMARY

Human capital development is a critical determinant of economic growth, equity, and prosperity, but outcomes in this domain are worryingly low in Lebanon, risking the future of generations of children. Lebanese children lag behind their peers in human capital development—measured according to the World Bank (2020c) Human Capital Index—suggesting that the future productivity of the labor force and the country’s trajectory for equitable growth is at risk (World Bank 2020b). The Human Capital Index indicates that children born in Lebanon today will reach, on average, only 52 percent of their potential productivity when they grow up. This is lower than the average estimates for the Middle East and North Africa (MENA) region (57 percent) and upper-middle-income countries (56 percent). Lebanon’s poor performance on the Human Capital Index is largely attributed to the education outcomes calculated for the index. If actual years of schooling, which average approximately 10.2 years in Lebanon, are adjusted for actual learning, effective years of schooling are 40 percent less—on average, only 6.3 years of actual learning (World Bank 2020b). The most recent school closures were due to the COVID-19 pandemic, with schools being closed over 75 percent of the school year between January 2020 and February 2021.¹ This will likely lead to a further and significant decrease in learning: effectively, students are facing a lost year of learning (Azevedo et al. 2021).

Learning and skill development are essential components used to build human capital, but education quality and equity have been declining in Lebanon. The Lebanese education system enrolls nearly 1.25 million students, of which almost 60 percent attend private schools (MEHE 2021). The private school sector receives approximately a 25 percent share of public financing,² yet it is subject to minimal regulation and quality assurance. The burden of education in Lebanon falls on parents’ shoulders; they pay a combined US\$1.5 billion a year, with the Government paying US\$1.2 billion a year.³ School completion rates in primary (78 percent) and lower secondary (59 percent) schools are declining (Abdul-Hamid and Yassine 2020). In addition, school completion is highly unequal among economic groups, with only half of 18-year-olds from the lowest economic quantiles completing school. The out-of-school rate for primary and secondary school-age children is extremely high (21 percent) (CAS 2020). Since 2012, Lebanon has experienced one of the largest influx of Syrian refugees—more than 356,000 Syrian refugee children

1 One hundred fifty-four days fully closed (World Bank and UNICEF 2021).

2 This funding includes direct (subsidies) and indirect (tuition vouchers for civil servants) payments to private schools and amounts to US\$310 million.

3 Households’ private expenses comprise fees for private schools or out-of-pocket expenses in public schools, such as transportation costs and textbooks.

enrolled in formal and non-formal education in 2019 (NLG 2019). Latest surveys find 40 percent of primary age and 90 percent of secondary age Syrian refugee children out of school (CAS 2020). In addition to access, quality is an increasing concern in Lebanon. Results from an internationally comparable large-scale assessment (Programme for International Student Assessment, or PISA) show that two-thirds of Lebanese students do not achieve basic literacy, very low according to international standards (OECD 2019). The limited learning achieved in an inefficient and inequitable education sector and recent crises have translated into a mismatch of skills and labor market needs and a spike in unemployment rates. For example, 32 percent of employed youth are engaged in occupations with qualification requirements below their level of education: that is, they are overeducated (CAS 2020). The skills mismatch is directly related to the quality of higher education, a sector that is currently not regulated for quality standards that would ensure that a quality education and the demanded skills are conveyed.

The current socioeconomic crisis, the effect of the COVID-19 health pandemic, and the recent Port of Beirut explosion will likely mean decreased funding available for education—putting even more stress on the sector in the coming years. Government spending on education has long been insufficient, at less than 2 percent of Gross Domestic Product (GDP) in 2020, which is well below the Organisation of Economic Co-operation and Development (OECD) average of 4.4 percent (2016) and among the lowest in the MENA region (EdStats). Recent macroeconomic factors have put additional strains on the system, such as the increase in teacher salaries to account for inflation, potential tuition fee hikes, and less job security for education administrators and teachers—all factors that limit the quality of education.⁴ The Port of Beirut explosion, which occurred a few weeks before the start of the academic year, and on the heels of an already troublesome previous year with extended school closures, added to the challenges that affected institutions and students already faced; it exacerbated resource constraints, because funding will need to be tailored to the emergency reconstruction and rehabilitation phase.

Although more investments in education are urgently needed, change can be brought only through a comprehensive reform agenda that rests on political will and stakeholder commitment. Years of crises, ongoing political and social unrest, and recent events in Lebanon have led to a largely inefficient and inequitable education sector that provides only low levels of learning and skills and a skills mismatch to the job market. This has led to limited human capital development and struggling economic growth. A survey of 231 finance ministry officials, central bank officials, and other economists representing 53 countries, including all G20 nations, on their perspectives on COVID-19 fiscal recovery packages revealed that education is among the best fiscal stimulus expenditures (Hepburn et al. 2020). Not focusing on and investing in education means missing an opportunity for economic growth and shared prosperity. Such a loss risks the future of generations of children. More investments in education are urgently needed in Lebanon, as is a comprehensive reform agenda focused on learning for all and recentering the education sector on students. This report provides a short outline of recommendations for comprehensive education reform.

4 See, for example, Information International 2017.



STRATEGY & CURRICULUM

Use evidence-based education sector analysis and public engagement to design a 5-year strategic plan.

Revise the curriculum and teaching and learning materials to refocus on learning and 21st century skills.



GOVERNANCE & ACCOUNTABILITY

Improve synergies and coordination between MEHE and CERD.

Consolidate an information system that includes learning assessment outcomes and make it available to the public.

Regulatory conduct and share a sector analysis with the public.

Introduce a quality assurance system to better regulate the private and public sector.



DIAGNOSTICS

Undertake analysis of learning assessments.

Set targets for schools and students and provide additional resources to 100 lowest performing schools.



FINANCING

Restructure education sector financing to prioritize the public sector and ensure equitable resource allocation towards supporting the poorest households, whose children are at highest risk of school dropout or never enrolled.

ADEQUATE PROGRAMS

ECD

Improve the quality of ECE by developing and applying ECE quality standards to all ECE institutions (including non-formal ECE), and pass the compulsory Kindergarten (KG1) decree through the Council of Ministers to allow every child to have a good learning start.

YOUTH

Improve the performance of higher education by passing of the law to establish a national quality assurance agency for higher education, regulate remote learning in light of the recent need for online learning, and reform governance and financing of the public university towards a results-based performance contract.

Anticipate and match labor market needs with updated higher education curricula, in close partnership with the private sector.

Develop and implement a higher education management information system to increase oversight of the private sector, ensure collection of quality data and facilitate regulatory processes.



TEACHERS



Improve teacher utilization by adopting policies to align pupil-teacher ratio (currently 9:1) to international standards (estimated at 25:1), increase teacher workload to at least 20 hours per week and up- and re-skill teachers.

Reform teacher training to focus on school-based professional development, coaching and structured pedagogy as well as continuous assessments using online education platforms.

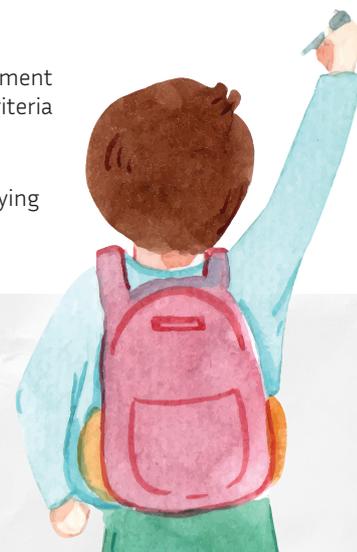


SCHOOLS

Harmonize school improvement guidelines to strengthen school-based management in partnership with parent-teacher associations and provide incentives for quality improvements.

Elevate the role of a principal from a teacher with added responsibilities to an agent of school change and improvement by establishing terms of reference and setting objective criteria for selection of principals and professional development.

Sanction bullying and school violence and create safe bullying reporting.



RECOMMENDATIONS

الموجز

ان تنمية رأس المال البشري هو مؤشر حاسم للنمو الاقتصادي والعدالة والازدهار. ولكن النتائج في هذا المجال في لبنان منخفضة بشكل مثير للقلق، مما يعرّض مستقبل أجيال من الأطفال للخطر. يبين مؤشر رأس المال البشري الصادر عن البنك الدولي (2020c) أن الأطفال اللبنانيين يتخلفون عن أقرانهم على صعيد تنمية رأس المال البشري، مما يشير إلى أن مستقبل إنتاجية القوى العاملة ومسار البلد نحو النمو المنصف في خطر (World Bank 2020b). كما يشير مؤشر رأس المال البشري إلى أن الأطفال المولودين في لبنان اليوم سيصلون، كمعدل، إلى ٥٢ بالمائة فقط من إنتاجيتهم المحتملة عندما يكبرون. وهذا أقل من متوسط التقديرات المحتملة للأطفال في منطقة الشرق الأوسط وشمال إفريقيا (٥٧ في المائة) والبلدان ذات الدخل المتوسط الأعلى (٥٦ في المائة). ويعود أداء لبنان الضعيف في مؤشر رأس المال البشري إلى حد كبير إلى النتائج المحققة على صعيد التعليم والمعتمدة في حساب المؤشر. فإذا تم تعديل سنوات الدراسة الفعلية، التي يبلغ متوسطها حوالي ١,٢ سنوات في لبنان، على أساس التعلم الفعلي، فإن سنوات الدراسة الفعلية تكون بمعدل أقل بنسبة ٤٠ في المائة، ما يساوي ٦,٣ سنوات فقط من التعلم الفعلي (World Bank 2020b). وقد أدت جائحة كورونا مؤخراً إلى إغلاق المدارس لمدة توازي أكثر من ٧٥ بالمائة من العام الدراسي وذلك ما بين كانون الثاني ٢٠٢٠ وشباط ٢٠٢١، ويرجح أن يؤدي ذلك إلى مزيد من التراجع في مستوى التعلّم: ففعلياً، يواجه الطلاب في لبنان سنة ضائعة من التعلّم (Azevedo et al. 2021).

إن التعلم وتنمية المهارات من المكونات الأساسية المستخدمة في بناء رأس المال البشري، غير أن جودة التعليم والإنصاف شهدت تدهوراً في لبنان خلال الأعوام الماضية. يبلغ عدد الطلاب المسجلين في نظام التعليم اللبناني حالياً حوالي ١,٢٥ مليون طالب، ينتسب حوالي ٦٠ بالمائة منهم إلى المدارس الخاصة (MEHE 2021). ويحظى قطاع التعليم الخاص حوالي ٢٥ بالمائة من التمويل العام للقطاع،^٢ وذلك في ظل غياب الحد الأدنى من التنظيم لهذا القطاع وضمان الجودة. ويقع عبء التعليم في لبنان على عاتق الأهل، حيث ينفقون حوالي ١,٥ مليار دولار أميركي في السنة، في حين تنفق الحكومة اللبنانية ١,٢ مليار دولار أميركي في السنة.^٣ كما لوحظ تراجع بمعدلات اتمام

١ أغلقت المدارس بالكامل في لبنان لمدة مائة وأبعة وخمسون يوماً (World Bank and UNICEF) (2021).

٢ يشمل هذا التمويل (الإعانات) المباشرة وغير المباشرة (قسائم الدعم المالي لموظفي القطاع العام) لتغطية أفساط المدارس الخاصة وبلغ التمويل ٣١ مليون دولار أميركي.

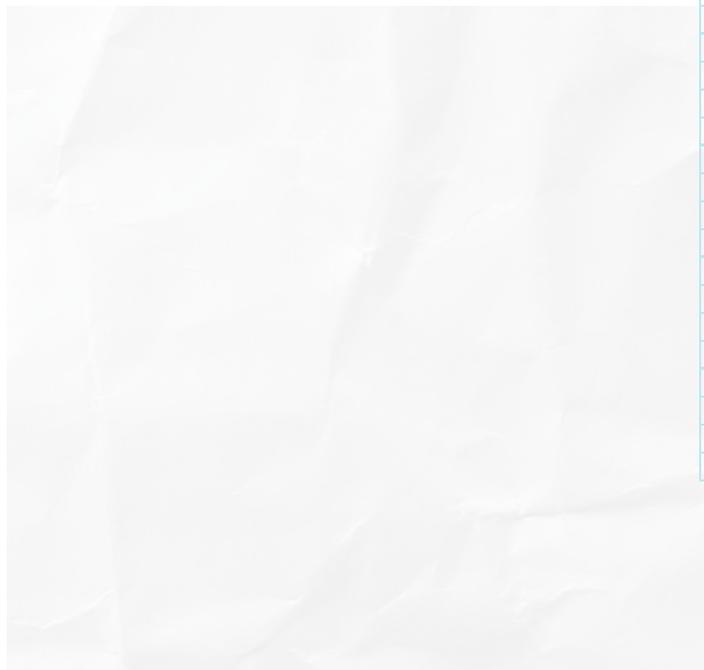
٣ تشمل النفقات المعيشية الخاصة بالأسر رسوم المدارس الخاصة أو النفقات الخاصة في المدارس الرسمية، مثل تكاليف النقل أو الكتب المدرسية.

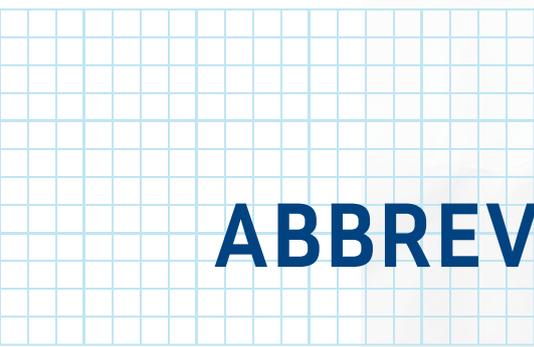
مرحلة التعليم الابتدائي (٧٨ بالمائة) ومعدلات اتمام مرحلة التعليم الثانوي (٥٩ بالمائة) (Abdul-Hamid and Yassine 2020). بالإضافة الى ذلك، يفتقد الاكمال المدرسي الى التكافؤ بين الفئات الاقتصادية في المجتمع، حيث أن ٥٠ بالمائة فقط من الشباب الذين يبلغ عمرهم ١٨ عاماً والذين ينتمون الى الفئات الأكثر فقراً، يكملون تعليمهم المدرسي. كما يلحظ ارتفاع حاد بمعدلات الأطفال الذين هم خارج نظام التعليم في المرحلتين الابتدائية والثانوية (CAS 2020). وقد شهد لبنان منذ عام ٢٠١٢ أكبر تدفق للنازحين من سوريا- حيث التحق أكثر من ٣٦٥,٠٠٠ طالب سوري بالتعليم الرسمي وغير الرسمي عام ٢٠١٩ (NLG 2019). وتبيّن أحدث الاستطلاعات أن حوالي ٤٠ بالمائة من الأطفال السوريين اللاجئين في سن التعليم الابتدائي و ٩٠ بالمائة من الأطفال السوريين اللاجئين في سن التعليم الثانوي غير ملتحقين بالمدرسة. وبالإضافة الى القلق من تدني نسب الالتحاق المدرسي، يواجه التعليم في لبنان قلقاً متزايداً حيال جودة التعليم. وتبيّن نتائج مشاركة تلامذة المدارس الرسمية والخاصة في اختبار برنامج تقييم التلامذة الدولي (PISA) أن ثلثي الطلاب اللبنانيين لا يتقنون القراءة والكتابة الأساسية، وهذه نسبة منخفضة جداً وفقاً للمعايير الدولية (OECD 2019). فقد أدى التعلّم المحدود الذي تم تحقيقه في قطاع التعليم غير الفعّال وغير المنصف تزامناً مع الأزمات الأخيرة التي شهدتها البلد، إلى التفاوت ما بين مهارات الشباب وخريجي الجامعات واحتياجات سوق العمل وإلى ارتفاع في معدلات البطالة. وهذا ما يؤكّده توظيف ما يقارب ٣٢ بالمائة من الشباب في أعمال ووظائف تتطلب مؤهلات دون مستوى تعليمهم: أي أن تعليمهم يفوق متطلبات الوظيفة (CAS). وينتج عدم تطابق المهارات بشكل مباشر ما بين التعليم وسوق العمل عن تراجع جودة التعليم العالي، وهو قطاع يفتقد لآليات ومعايير للجودة حالياً والتي من شأنها أن تضمن توفير التعليم الجيد الذي يؤمن المهارات المطلوبة للطلاب والخريجين.

من المرجح أن تؤدي الأزمة الاجتماعية والاقتصادية الحالية، وتأثير جائحة كورونا، بالإضافة الى انفجار مرفأ بيروت في آب ٢٠٢٠ الى تراجع التمويل المتاح للتعليم - مما يضع المزيد من الضغط على القطاع التربوي في لبنان في السنوات القادمة. لم يكن إنفاق الحكومة على التعليم كافٍ منذ فترة طويلة، حيث شكل أقل من ٢ في المائة من الناتج المحلي الإجمالي في عام ٢٠٢٠، وهي نسبة أقل بكثير من متوسط الانفاق على التعليم في بلدان منظمة التعاون الاقتصادي والتنمية والذي يبلغ ٤,٤ في المائة (٢٠١٦) ويُعدّ من بين أدنى معدلات الانفاق على التعليم في منطقة الشرق الأوسط وشمال إفريقيا (EdStats). لقد سبب الوضع الاقتصادي في لبنان مؤخراً ضغوطات اضافية على نظام التعليم منها على سبيل المثال ضرورة زيادة رواتب المعلمين في ظل التضخم الاقتصادي، واحتمال زيادات في الأقساط المدرسية، وتضاؤل الأمن الوظيفي للمعلمين والاداريين والعاملين في قطاع التربية والتعليم - هذه كلها عوامل تساهم في تراجع جودة التعليم في القطاع. وأدى انفجار مرفأ بيروت، الذي وقع قبل أسابيع قليلة من بداية العام الدراسي في ٢٠٢٠، وفي أعقاب عام سابق حافل بالتحديات الاقتصادية والاجتماعية

وتزامناً مع إغلاق المدارس لفترات طويلة، إلى تفاقم التحديات التي أثرت على المؤسسات التعليمية والطلاب؛ كما أدى إلى تقليص في الموارد المتاحة لدعم القطاع حيث أنه جرت تخصيص أي تمويل متاح لدعم جهود إعادة الإعمار وإعادة التأهيل الطارئة.

وعلى الرغم من الحاجة الماسة إلى مزيد من الاستثمارات في قطاع التربية والتعليم، لا يمكن إحداث التغيير المنشود إلا من خلال وضع جدول أعمال واضح يهدف إلى عملية إصلاح شاملة تعتمد على الإرادة السياسية والتزام أصحاب المصلحة. فقد أدت سنوات من الأزمات والاضطرابات السياسية والاجتماعية المستمرة والأحداث الأخيرة في لبنان إلى قطاع تعليم غير فعّال وغير عادل إلى حد كبير، يوفر فقط مستويات منخفضة من التعلّم والمهارات ولا يُنتج تطابقاً بين مهارات الخريجين ومتطلبات سوق العمل. وقد أدى ذلك إلى نمو محدود في رأس المال البشري وإلى نمو اقتصادي متعثّر. ويعتبر التعليم من أهم نفقات التحفيز المالي حسب ما كشفت دراسة استقصائية شملت ٢٣١ مسؤولاً من وزارات مالية وبنوك مركزية وغيرهم من الاقتصاديين الذين يمثلون ٥٣ دولة، بما في ذلك جميع دول مجموعة العشرين، واستطلعت وجهات النظر حول حزم التعافي المالي بعد جائحة كورونا (Hepburn et al. 2020). فإن عدم التركيز على التعليم والاستثمار فيه يعني تضييع فرصة للنمو الاقتصادي والازدهار المشترك، مما يؤدي إلى خسارة تهديد مستقبل أجيال من الأطفال. فهناك حاجة ماسة للتوافق على أجندة إصلاح شاملة في التعليم في لبنان، كما هناك حاجة ماسة للتوافق على أجندة إصلاح شاملة تركز على إتاحة التعليم والتعلّم للجميع وإعادة تمحور قطاع التعليم حول الطلاب. ويقدم هذا التقرير موجزاً بالخطوط العريضة للتوصيات لإصلاح شامل لقطاع التعليم في لبنان.





ABBREVIATIONS

CERD	Center for Educational Research and Development
ECE	Early Childhood Education
EGRA	Early Grade Reading Assessment
GDP	Gross Domestic Product
MEHE	Ministry of Education and Higher Education
MENA	Middle East and North Africa
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
TIMSS	Trends in International Mathematics and Science Study

RECOMMENDATIONS FOR REFORM

Short-Term Reform Recommendations

Lebanon has one of the lowest human capital indicators in the region, and it is expected to decline further, given school closures for almost a year due to COVID-19 and various ongoing crises. The country is facing a lost year of learning, which will have lasting negative effects on learning outcomes, from an already low baseline of only 6.3 learning-adjusted school years. Most recent estimates suggest that up to one additional learning-adjusted years of schooling may be lost, on average, as a result of ongoing school closures (Azevedo et al. 2021).⁵ To mitigate learning loss, the Ministry of Education and Higher Education (MEHE) originally introduced remote learning through an online platform, as well as television broadcasts at the end of school year 2019–20 (April–June 2020). However, television broadcasts did not continue for the 2020–21 year.⁶ Incorporating lessons learned from this year's school closures to reach more students going forward will be essential. Given the country's electricity and connectivity challenges, doing so will require additional investments and political will beyond the education sector.

Other countries have demonstrated good practices with radio programs in resource-deprived areas. Catch-up classes at the start of the new school year are critical to ensure that student learning continues to move forward and learning loss is mitigated. These catch-up classes are particularly important for the most marginalized, disadvantaged, and younger children, who did not benefit as much from remote learning. They can help ensure equity in learning. In addition, classroom assessments will be an important tool for teachers to gauge student learning levels and to ensure teaching in the next school year starts at the level of the student. Creating a conducive learning environment for all children will mean providing more psychosocial support for children, to support their return to school after more than a year.

5 Schools were closed over 75 percent of the school year between January 2020 and February 2021.

6 It is estimated that only about half of public-school students benefited from online learning during the 2019–20 academic year (MEHE 2020).

The explosion in the Port of Beirut has exacerbated school infrastructure shortages. More than 55,000 students were directly affected because of damages to facilities in Beirut and its surroundings (World Bank 2020a). Before the explosion, the Government was already struggling to meet demand for school construction, expansion, rehabilitation, and provision of furniture and equipment to schools. The ongoing Support to Reaching All Children with Education Program, which the World Bank manages and is cofinanced by the United Kingdom's Foreign Commonwealth, and Development Office and REACH Trust Fund, is helping to address some of these needs, although additional effort will be required to cover the new needs.

Port infrastructure damage will refocus already limited funding urgently needed to support educational priorities. The task of "recovering" personnel (teachers and administrators) displaced by the explosion adds to the recovery challenges. Further pressure results from the need to channel the limited educational funding to physical school rehabilitation and reconstruction at a time when funds need to help students catch up on lost learning. The blast has affected approximately one-quarter of the national student population. In the medium term, the effect of multiple crises on education will show up in lower test scores, repeated grades, and increased numbers of dropouts. The public and private education systems will need to determine how to maintain a seat for every child (Lebanese and non-Lebanese), ensure appropriate health and safety measures needed because of the pandemic, and support communities as they recover physically, psychologically, and financially from the effects of the explosion.

Reform approach

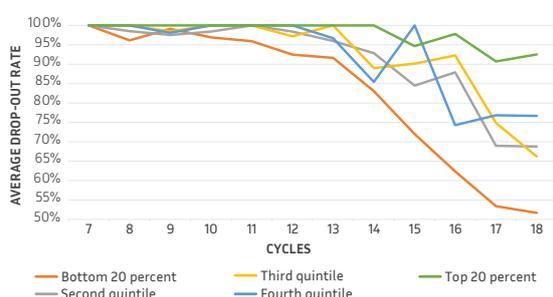
- MEHE's back-to-school plan for 2020–21 was an excellent starting point, but more systematic planning at the district level, in close collaboration with regional directors, was needed during the school year because the response required local solutions (for example, updating of facilities, deployment of teachers, delivery of materials, and close monitoring of health developments).
- The emergency reconstruction and rehabilitation needs of education institutions damaged in the recent explosion were addressed with support from the international community.

Medium- to Long-Term Reform Recommendations

FINANCING: RESTRUCTURING EDUCATION SECTOR FINANCING TO BE MORE EFFICIENT AND EQUITABLE AND TO PREVENT FURTHER LEARNING LOSS

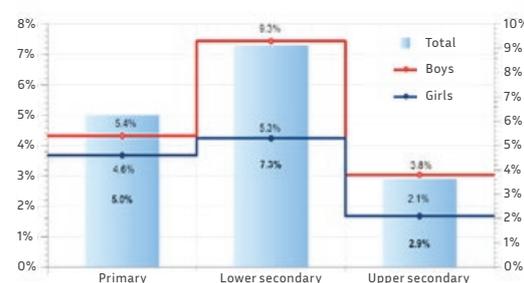
The Lebanese education sector is highly inequitable. The large share of students attending private schools (about 60 percent) is unique in the region and is grounded in a history in which private schools existed long before public schools. For both public and private schools, completion rates in primary (78 percent) and lower secondary (59 percent) schools are declining (Abdul-Hamid and Yassine 2020). School completion is highly unequal, with only half of 18-year-olds from the lowest economic quantiles still in school (figure 1). The risk of dropping out of primary school before age 12 is estimated at 8.3 percent (figure 2). A contraction of the economy and its consequent effect in terms of reduced household incomes and curtailed expenditure can significantly increase pressures on children to discontinue schooling or supplement it with remunerated work. This is more prevalent among boys, particularly those of lower socioeconomic status, who leave school in search of economic opportunities, often without basic skills needed for the labor market. The out-of-school rate for primary and secondary school-age students is extremely high (21 percent) compared to regional and international averages (CAS 2020). Since 2012, Lebanon has experienced one of the largest influx of Syrian refugees—with more than 356,000 Syrian refugee children enrolled in formal and non-formal education in 2019, and around 309,000 Syrian school-age children out of school (NLG 2019). Latest surveys find 40 percent of primary school-age and 90 percent of secondary school-age Syrian refugee children out of school (CAS 2020). Most Syrian refugees are enrolled in public schools, at a much larger rate than Lebanese children (Center for Educational Research and Development [CERD] and MEHE data).⁷

Figure 1. Average Dropout Rate per Cycle⁸ in 2016



Source: CAS, 2015.

Figure 2. School Dropout by Socio-economic Quintile



Source: UNICEF, 2019.

7 For more information about CERD data, see the CERD website at <https://www.crdp.org/>. For more information about the Ministry of Education and Higher Education's Project Management Unit (PMU) data, see the Reaching All Children with Education website at <http://www.racepmulebanon.com/>.

8 A cycle within the Lebanese education system defines a group of grade levels. Cycle 1 includes grades 1 to 3 (Primary grades), Cycle 2 includes grades 4 to 6 (Primary grades), and Cycle 3 includes grades 7 to 9 (Lower secondary grades).

The estimated increase in the poverty rate (including a doubling of extreme poverty from 10 percent to more than 22 percent) is expected to result in a concomitant increase in dropouts, disproportionately among the poorest and most marginalized students, as well as shifts from private to public schools. In the 2020–21 school year alone, around 55,000 students (11 percent of public sector students) transitioned from private to the public schools, putting additional strain on a public education sector that already faced severe constraints in terms of available school infrastructure, education quality, and service delivery.⁹ The expected contraction of the economy and increase in the poverty rates will likely lead to more parents shifting their children to public schools in the coming years, as well as higher student dropout rates, especially from the most marginalized households.¹⁰ These large-scale shifts will change the Lebanese education sector fundamentally, necessitating reevaluation of education sector financing (World Bank 2020b). As more children shift to public schools, there is an opportunity to renew commitment to and trust in the public schools. This requires a change in perception that public schools are only outlets for the poor and refugees and a shift toward deep reform of the public school system.

Parents carry the biggest burden of education costs, and public spending in education is both insufficient and inefficient. The Government of Lebanon spends US\$1.2 billion on education (less than 2 percent of GDP), and families spend an additional US\$1.5 billion on education, which makes education provision highly unequal. The proportionately high private expenditure on education effectively leads to large inequities, and educational success is a function of socioeconomic background (World Bank 2017). In addition, public spending levels are insufficient by international comparison. Government expenditure on education has decreased from 2 percent of GDP in 2019 to 1.8 percent in 2020 (World Bank 2017). Lebanon falls short of the minimum international benchmarks for public education financing agreed at the World Education Forum 2015. These call for countries to allocate at least 4 to 6 percent of GDP to education in order to achieve Sustainable Development Goal 4 of inclusive and equitable quality education (UNESCO 2015). Not only is public spending inefficient in absolute terms, it is also internally inefficient: leading to large inequities in the education sector. More than US\$250 million a year is spent on subsidies to private schools in the form of allowances to civil servants to send their children to private schools (World Bank 2017). Public spending should aim to ensure an equitable, quality public education sector. This practice of non-merit-based support has effectively exacerbated inequities in the education sector. In addition to civil servant allowances, non-merit-based subsidized support is also provided to some private schools, known as free private schools, which receive US\$60 million in public funds annually. This accounts for roughly one-quarter of Government spending on education.

Reform approach

Refocus education sector financing to prioritize the public sector and equitable resource allocation.

- Reevaluate and consider elimination of the subsidy to civil servants for private schooling. These savings could be used to increase public provision of education and provide for critically needed quality inputs to public education to ensure more equitable service provision, including on school infrastructure, materials, and teachers.
- Ensure accountability for public funds spent in the private school sector. Review and better target the subsidy program to free private schools, ensuring that students who enroll in free private schools are from low-income families, particularly in areas where there are no public schools available, while ensuring quality education at these subsidized schools.

9 Most public schools are located in the poorest areas, where demand is greatest.

10 Extreme poverty is expected to double from 10 percent to more than 22 percent by end of 2021 (World Bank 2020c).

- Prepare costed models and financial scenarios with the support of development partners, aligned with the goals of the Lebanese education system to ensure that all children (Lebanese and non-Lebanese students) are learning.
- Engage in a public debate about adequacy, equity, and efficiency in education spending and strategic directions for the education sector and accompanying investments.

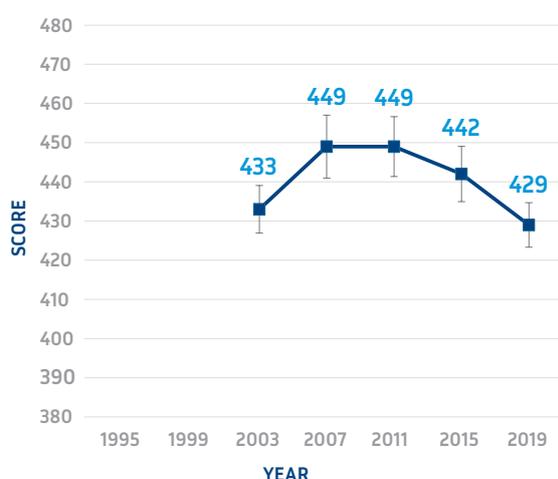
Support the poorest households, whose children are at highest risk of school dropout.

- Provide safety net programs for extremely poor households. This could entail covering direct and indirect costs of education, such as school supplies and equipment for children. This support will decrease school dropouts.

DIAGNOSTICS: UNDERSTAND THE FACTORS OF THE LEARNING CRISIS THROUGH DIAGNOSTICS TO PROPOSE EVIDENCE-BASED SOLUTIONS

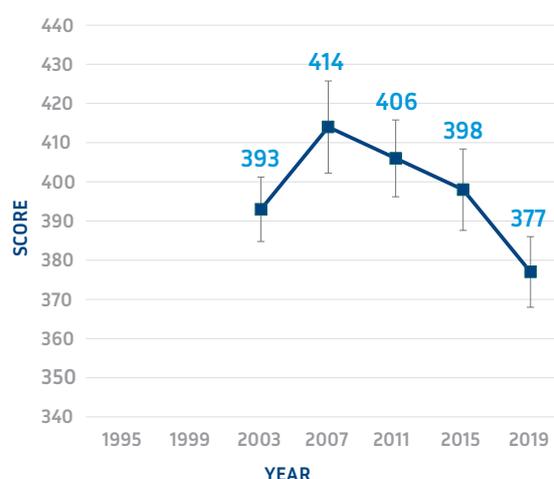
Overall, learning outcomes in Lebanese schools are low and declining. Recent Programme for International Student Assessment (PISA) (OECD 2019) results show that Lebanon is one of the lowest ranked countries, with more than two-thirds of Lebanese students not achieving basic literacy. Only 1 percent of students in Lebanon were among the students who perform well in reading (compared with an Organisation for Economic Co-operation and Development (OECD) average of 9 percent), none of whom came from low socioeconomic backgrounds. In Lebanon, low- and high-performing students are often clustered in the same schools more often than the OECD average, indicating that there are a few high-performing schools and many low-performing schools (Gajderowicz and Jakubowski, forthcoming). The PISA 2018 results show that there are differences of more than three years of schooling between students in the top and bottom income quintiles (OECD 2019).

Figure 3. Trends in Math Achievement 1995-2019 for Grade 8



Source: IEA 2020.

Figure 4. Trends in Science Achievement 1995-2019 for Grade 8



Source: IEA 2020.

Table 1. TIMSS 2019 Average Mathematics Achievement Country Ranking

Country	Rank	Average scale score
Singapore	1	616
Taiwan, China	2	612
Korea, Rep.	3	607
Japan	4	594
Hong Kong SAR, China	5	578
Bahrain	24	481
United Arab Emirates	26	473
Iran, Islamic Rep.	29	446
Qatar	30	443
Lebanon	32	429
Jordan	33	420
Egypt	34	413
Oman	35	411
Kuwait	36	403
Saudi Arabia	37	394
South Africa (9)	38	389
Morocco	39	388
International average		490

Source: IEA 2020.

Note: TIMSS = Trends in International Mathematics and Science Study.

Table 2. TIMSS 2019 Average Science Achievement Country Ranking

Country	Rank	Average scale score
Singapore	1	608
Taiwan, China	2	574
Japan	3	570
Korea, Rep.	4	561
Russian Federation	5	543
Bahrain	22	486
Qatar	25	475
United Arab Emirates	26	473
Oman	30	457
Jordan	31	452
Iran, Islamic Rep.	32	449
Kuwait	34	444
Saudi Arabia	35	431
Morocco	36	394
Egypt	37	389
Lebanon	38	377
International average		480

Source: IEA 2020.

Note: TIMSS = Trends in International Mathematics and Science Study.

Learning outcomes in international assessments are low and have been declining for the past decade. Figures 3 and 4 show how the results on the Trends in International Mathematics and Science Study (TIMSS) mathematics and science tests for grade 8 students have consistently declined for the past decade. By international comparison, Lebanon has been scoring among the lowest performing countries internationally. Table 1 shows Lebanon ranking 32 among the 39 participating countries in the TIMSS 2019 grade 8 mathematics assessment, and table 2 shows Lebanon ranking 38 out of 39 participating countries in the TIMSS 2019 grade 8 science assessment.

Differences in the quality of individual schools are very large—more than in other countries—while overall quality is low. In the PISA 2018, 313 schools from Lebanon took part.¹¹ The difference in scores between the best and poorest performing school is over 400 points—hardly any other country shows such a large difference between schools. In reading, the average score was 556, and the lowest school average result was 153 (which means that students are almost illiterate). Despite generally better average outcomes, private schools also have problems with quality of learning. The 100 lowest performing schools in the PISA sample had an average score of 257 in reading. Of these, 91 percent were public and 9 percent were private schools. The large gap between average students and students from disadvantaged schools has a strong effect on their future educational trajectory, economic outcomes, and success later in life.

Violence and bullying are prevalent in many schools across Lebanon, directly impacting the students' persistence in school and academic achievement. About 32 percent of students in Lebanon reported experiencing bullying in schools (Gajderowicz and Jakubowski, forthcoming). Bullying among children in Lebanon varies according to gender, age, and the type of school the students were enrolled in (World Bank forthcoming). Generally, bullying is negatively correlated with student performance (IEA 2016). Bullying is also more prevalent in Lebanon than in OECD countries (on average, 29 percent of students reported being bullied at least a few times a month in Lebanon). Regardless of gender, scores in both mathematics and science decline with increased frequency of bullying, although boys experience bullying more often than girls in Lebanon (Gajderowicz and Jakubowski, forthcoming). The difference between students almost never bullied and those experiencing bullying about weekly is a gap equivalent to around one year of formal education. School violence inflicted by school personnel and peers has also been reported in recent World Bank research to be among the most difficult challenge students face in school (World Bank forthcoming) and if it is not addressed, children will learn less and are more likely to drop out.

Reform approach

- Focus on improving school performance, which could entail focusing on the 100 lowest-performing schools and designing a turnaround school improvement plan (don't punish, rather favor an "all-hands-on-deck approach").
- Evaluate and improve the quality of teaching and teaching methods and propose clear interventions to support effective teaching that leads to better learning.
- Commit to a new national curriculum framework, set ambitious reading targets, and support schools and students in meeting them. Crowd-source donor funding and cross-collaborate on efforts to achieve the targets.

11 Refugees were not included in the nationally representative sample that participated in PISA.

- Create a safe and nurturing learning environment for students that fosters respect, kindness, and harmonious collaboration for every child to thrive. Engage all stakeholders, including teachers, parents, and students, in a public discourse and address bullying in a prompt and enforceable manner and create safe bullying-reporting mechanisms.
- Undertake a deep analysis of PISA results and other recent international assessments—Early Grade Reading Assessment (EGRA) and Trends in International Mathematics—and Science Study) and link analysis to sector planning.

TEACHERS: IMPROVE TEACHER UTILIZATION AND SUPPORT TEACHERS TO ENSURE HIGH-QUALITY EDUCATION SERVICES

Although Lebanon has a very low student-teacher ratio, ineffective use of teachers and little continuous workforce training—in such areas as socioemotional skills—hinder student learning. The student-teacher ratio for basic education in public schools in Lebanon is 10.7 (Abdul-Hamid and Yassine 2020), which is much lower than international standards and suggests a surplus of teachers (OECD 2020). Within the teaching force, efficiency gains could be made through better allocation of teachers and ensuring workloads commensurate with international norms. The expected transition of more students to public schools provides an opportunity to increase the student-teacher ratio to 25:1 without requiring additional teachers, while also looking at better utilization of teachers in the system. Teachers with fixed-term contracts (civil servants), on average, spend 10 to 15 hours on teaching tasks (World Bank 2017), compared with international benchmarks of 20 hours (OECD 2020). Teacher salaries account for 84 percent of total public expenditures in education, which is above the international OECD average of 80 percent (OECD 2020). There is heavy reliance on contract teachers, which is not cost-effective in the long term. Teachers receive little continuous training on pedagogy and soft skills. This has become a more pressing concern in light of the recent Port of Beirut explosion and the COVID-19 pandemic, as adequate training on socioemotional skills and online teaching have become essential.

Reform approach

Ensure better use of the current teacher workforce.

- Adopt policies to align student-teacher ratio (currently 9:1) to international standards (estimated at 25:1), which will increase the efficiency of service provision and free resources to support quality inputs. This could include:
 - *Increasing teaching hours in the classroom to at least 20 hours per week, as per international standards.* Evidence shows that teachers in public schools spend only around a third of their time teaching (World Bank, forthcoming), which is equivalent to approximately 12 hours of teaching a week. More actual teaching time will ensure that necessary remedial teacher support for struggling students can take place, while mitigating overall learning loss for all students.
 - *Taking opportunity of the current hiring freeze in the public service.* The pause could be used to redeploy staff and build new talent through up- and reskilling, as well as revisiting teacher deployment practices to align them with overall system goals.

Ensure better education services through better teacher training and coaching.

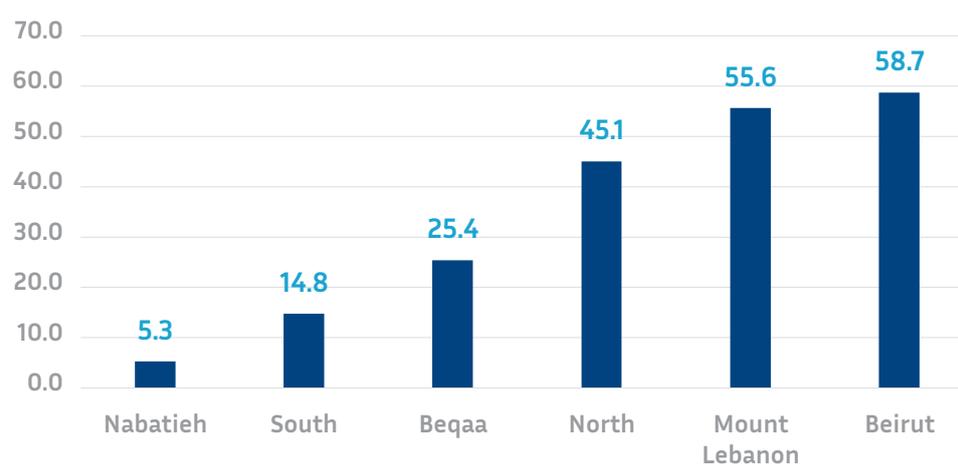
- Build on current pilots to reform teacher training to focus on school-based professional development, coaching, and structured pedagogy and on inculcating a culture of collaboration.

- Refocus teacher deployment, professional development, and career management to be aligned with overall education sector goals, with merit-based advancement.
- Offer short-term training on teaching and continuous assessment using online education platforms.

SCHOOLS: IMPROVE THE LEARNING ENVIRONMENT AND ACCOUNTABILITY AT THE SCHOOL LEVEL

Many school buildings are in need of rehabilitation and refurbishment if they are to provide an environment conducive to learning. Many school buildings in Lebanon are rented buildings that were not designed as schools. In some regions in the country, more than half of the school buildings (59 percent) are rented structures (figure 5).¹² MEHE has committed to spending approximately US\$155 million to construct, expand, and rehabilitate up to 665 schools, enlarging the public system capacity by approximately 45,000 seats by 2021. This work will include the addition of new classrooms; updating of schools to conform to water, sanitation, and hygiene standards; and ensuring that schools are more inclusive, particularly for students with disabilities. Additional school construction is currently done on a need basis to fill individual gaps. MEHE has a school rehabilitation plan that involves equipping schools with desks, chairs, and boards, in addition to information and communications technology equipment and laboratories.

Figure 5. Percentage of Rented School Buildings by Region



Source: World Bank 2017.

¹² Beirut has the highest number of rented buildings in the region (59 percent), followed by Mount Lebanon (56 percent), and the North (45 percent). Nabatieh has the least percentage of rented buildings (5.3 percent), followed by the South, where only 15 percent of school buildings are rented (World Bank 2017).

In Lebanon, school-based management is currently in the pilot phase in a few schools. To address the challenges in learning, many countries have given decision-making authority to schools, because this has been shown to increase accountability, efficiency, and responsiveness to local needs (Gertler, Patrinos, and Rubio-Codina 2007). The Japan International Cooperation Agency evaluated pilot school management initiatives in Lebanon in 2018 and recommended that harmonized guidelines for school-based management be prepared. A recent school management study revealed that more than half of the principals (ranging from 52 percent of principals in two-shift public schools to 63 percent in free private schools) said they did not receive professional development in 2016-17 (World Bank forthcoming). Those who received training typically underwent one to five days. More support needs to be provided to principals to become effective school leaders.

The Lebanese Government provides few guidelines and limited criteria for public and private school principal selection. International research shows that school leaders can be effective in delivering results at the school level if adequately trained and held to high standards. There is no examination system or licensing process to establish a pool of qualified candidates for the position. Beyond the Government's simple formal qualification guidelines and criteria, the selection process in private and public schools is mostly informal and often determined by compatibility of religion between the school and the principal, support from local political leaders, and personal connections. In addition, the role of the principal is de facto mostly that of a teacher with added management responsibilities. Under a highly centralized system, public school principal decision-making power is limited, and principals do not see themselves as instructional leaders in their schools responsible for helping teachers improve their instructional methods and for improving the curriculum (Karami Akkary 2014).

Reform approach

- Harmonize school improvement guidelines to strengthen school-based management in partnership with parent-teacher associations and provide incentives for quality improvements.
- Elevate the role of a principal from a teacher with added responsibilities to an agent of school change and improvement by establishing standardized terms of reference and quality assurance mechanisms.
- Set objective criteria for selection of principals and their career path and professional development, including incentive schemes based on international good practices.

EDUCATION STRATEGY AND CURRICULUM: HAVE A STRATEGIC PLAN AND AN UPDATED CURRICULUM THAT FOCUSES ON LEARNING AND IS LINKED TO EDUCATION GOALS

It is critical that the sector determine what will be needed in the future to ensure the provision of quality education and that human capital in Lebanon is preserved and promoted. Planning is critical for the sector to mobilize scarce resources and work toward a shared vision of learning for all. The international community in Lebanon has been playing an important role in supporting the sector, funding an average of US\$300 million a year beyond the Government's budget. MEHE recently indicated a shift by developing a five-year

plan focused on system changes and better learning outcomes for children in inclusive environments. Such a plan should build on past experience and use evidence from recently completed studies (Abdul-Hamid and Yassine 2020; World Bank 2020c; UNICEF, forthcoming; World Bank, forthcoming). The recent sociopolitical unrest in the country has yet again shown the importance of involving key stakeholders in planning efforts.

The current curriculum and textbooks are outdated and do not equip students with the skills needed to succeed in the labor market. The last curriculum reform, defining and setting learning and competency targets and translating them into teaching and learning materials, was undertaken almost 25 years ago, during the 1996-97 school year. Adjustments have been made since then, but they are still based on a long-outdated curriculum that does not provide students with the skills needed for the job market of today and the future. For example, the quantity of content in many textbooks is not commensurate with the time allotted for learning—especially as teaching and learning have moved from content-centric memorization to more skills-based, reflective learning over the past few decades. This is evident in the large skills mismatch that employers report. A recent stakeholder consultation convened by the American University of Beirut concluded that the current curriculum “does not foster critical thinking, analysis, problem resolving, and citizenship value” (Issam Fares Institute 2019). Updating the curriculum will also mean developing new textbooks and teaching materials and providing support to students in learning the skills and achieving the proficiencies set out in the curriculum. The long-awaited curriculum reform is critical for the development of the sector and ensuring that students engage in learning that prepares them for today’s rapidly changing labor market.

Reform approach

Use evidence-based education sector analysis and public engagement to design a five-year strategic plan.

- Plan stakeholder engagement using evidence from recent studies in the sector and international good practices.
- Support MEHE with preparation of an education forum to serve as a consultative platform for the preparation of the five-year strategic plan.

Update the curriculum and teaching and learning materials to refocus on learning and 21st century skills.

- Publicly debate and commit to a new national curriculum framework embedded in the national strategy.
- Commit to a new national curriculum framework and set ambitious learning and reading targets and support schools and students in meeting them.

GOVERNANCE AND ACCOUNTABILITY: ENHANCE COORDINATION AND SYNERGIES IN MEHE WITH A STRONG REQUIREMENT FOR TRANSPARENCY AND ACCOUNTABILITY

The Lebanese education sector lacks the regulatory framework to hold public and private institutions accountable to outcomes and learning. Better regulation of the system and coordination within MEHE (planning, data systems, and teacher management) will improve the governance and efficiency of Lebanon's education system and reduce fragmentation between formal and informal service delivery. Lack of coordination and transparency in the sector have delayed many the necessary reforms and developments within the sector. In addition to reform of the curriculum and learning assessments, research and evaluation are critical operations within the sector that are the mandate of CERD. Other units within MEHE are in charge of administration and policy making. Close coordination between CERD and MEHE are critical for the achievement of critical milestones in the development of the sector.

In addition, a unified education management information system is critical to help MEHE make evidence-driven policy decisions. Until recently, CERD and MEHE each had its own information system, with schools having to report the same data to each entity. Moreover, the data are for the most part not analyzed systematically and are not made available to the public. The current systems have the capacity to provide important data that would provide all stakeholders with the information needed for planning within the sector. As an important first step, MEHE and CERD have endorsed a unified information management system framework in March 2021. This will effectively unify the systems, with MEHE's student information management system becoming the main source of education information over the school year 2021–22. This will not only streamline reporting for schools but will increase efficiencies in the administration of the system and evidence-based policy making.

There is little oversight of and no quality assurance mechanism for the private school sector, leading to private schools operating with little accountability, variable quality standards, and a decline in the quality of education. The PISA 2018 results indicate that, although students in public schools are an average of two years behind their peers in private schools, many private schools also have quality-related challenges. Private schools in Lebanon constitute 9 percent of the lowest performing schools in the country (OECD 2019), and those private schools have an average student score of 257 points in reading (Gajderowicz and Jakubowski, forthcoming). The absence of a regulatory system for private education in Lebanon makes it almost impossible to hold private schools accountable for the education services they provide. The quality of private education service delivery is mixed, which is further compound by little oversight and standardized quality assurance applied to teacher selection and deployment. Parents make large, high-stakes investment in education, especially private education, but the returns are high only in some schools.

Reform approach

- Evaluate current governance structures and their conduciveness to effective planning in the education sector. This intervention will strengthen coordination within the sector, avoid duplication, and facilitate unified evidence-based policy discussion and reform.
- Implement one consolidated education data information system and make it available to the public to spur a national dialogue that includes all stakeholders.
- Develop student learning assessments (both formative and summative) in order to identify struggling students and design catch-up classes and outreach activities to communities and stakeholders.
- For evidence-based policy making, continuously conduct and share a sector analysis with the public that addresses first and second shifts in public schools and technical and vocational education and training.
- Better regulate the private and public sectors for greater accountability by introducing a quality assurance system that ensures quality standards across the sector, and inform parents.

EARLY CHILDHOOD EDUCATION (ECE): MAKE GOOD ECE AFFORDABLE AND AVAILABLE FOR ALL

ECE can set the educational trajectory of children and is thus especially critical for children from families with limited economic, cultural, and educational resources. International evidence shows that children who arrive at primary level ready to learn perform better and are more likely to complete their education than those not ready. Differences in vocabulary between children of parents with different educational attainment level can already be substantial at the age of two. These differences translate into future educational achievement, attitudes, and behavior (Morgan et al. 2015). International evidence suggests that ECE can bring large benefits for children from disadvantaged backgrounds but requires appropriate interventions ensuring the high quality of educational services (Meloy, Gardner, and Darling-Hammond 2019).

Although enrollment in ECE is relatively equitable within Lebanon and among the highest in the region, evidence points at little learning conveyed in ECE in the country. Lebanon's gross enrollment rate in ECE increased from 77.8 percent in 2015 to 85.9 percent in 2017 and is one of the highest in MENA. Compared with other levels of education, where the gap between disadvantaged and better-off children is significant, enrollment in ECE in Lebanon is more equal. In other words, analysis according to quintile shows a fairly equal distribution of children. Although enrollment in ECE shows positive trends, the quality of ECE programs is uneven. The ECE curriculum aims to

prepare students for a smooth transition to grade one and equip them with some basic skills to get a head start. However, Lebanese early grade students underperform their peers in Jordan in all subtasks of the EGRA. A recent early-grade reading assessment in Lebanon that also analyzed the connection between early-grade reading skills and attendance in preschool showed no positive effect on reading, highlighting that the quality of ECE needs to be improved (QITABI 2017).

Reform approach

- Improve the quality of ECE by introducing quality assurance standards to ensure learning is taking place in all ECE centers. In addition, pass the compulsory kindergarten decree through the Council of Ministers, which will introduce free and compulsory ECE education for all students in Lebanon.
- Develop and apply ECE quality standards to all ECE institutions and bridge formal and informal ECE programs for a smooth transition to primary school.

YOUTH: ENSURE ADEQUATE SCHOOL-TO-WORK TRANSITION AND PREPARATION OF THE FUTURE WORKFORCE

The increased unemployment in the country indicates a clear mismatch of skills supply and labor market demand. Approximately 32 percent of employed youth are in occupations with qualification requirements below their level of education, and 21 percent are in occupations with qualification requirements above their level of education (CAS 2020). The skills mismatch is directly related to the quality of higher education, which is not regulated. The rate of unemployment has skyrocketed in recent months in light of the multiple crises in the country, with even the most solid businesses having laid off thousands of employees. This indicates a pressing need to rethink the sector to better align demands (locally, regionally, and globally) with supply.

In higher education, 20 percent of the total education budget for general, vocational, and higher education is channeled to one university: Lebanese University, enrolls 40 percent of higher education students in the country, but there is no quality assurance system in place or an accountability mechanism for performance-based financing. The recent crises in the country, particularly the Port of Beirut explosion, have hit the higher education sector hard, because most higher education facilities in the country are located within Beirut and the greater Beirut areas. The rebuilding and rehabilitation of the higher education infrastructure, compounded by the expected decrease in demand for higher education, is expected to threaten the existence of some long-standing universities in the country. Lebanese University is the only public higher education institution in the country from among more than 50 institutions with branches spread across the country, but it lacks a clear vision and strategy for improving service delivery. The outdated sector vision and

strategy presents an opportunity to reform the sector and implement the good practices outlined in Law No. 285/2014, formulated for the purpose of regulating higher education institutions in the country.

Reform approach

Improve the performance of higher education.

- Review and reform public higher education spending in light of adequacy, efficiency, and equity, including revisiting spending targeted at specific institutions.
- Revise the governance and financing mechanism of public and private universities from a norm-based approach to a results-based performance contract, which links funding to outcomes, such as graduation rates and employment outcomes.
- Support the passing of the law that MEHE drafted to establish a national quality assurance agency for higher education. Within the scope of this law, it is expected that quality will be increased at Lebanese University and all private universities.
- Support the regulation of remote learning in higher education in light of the recent and persisting need for online learning ensuring quality standards.

Anticipate and match labor market needs with updated higher education curricula.

- Institutionalize an ambitious program to equip the future Lebanese workforce with skills to thrive in a modern digital economy. This may be achieved through several approaches, including the following:
 - Establishing close partnerships between higher education institutions and the private sector (local, regional, and global).
 - Developing a national qualifications framework to identify local needs within the labor market (Some majors may need to be upgraded and others introduced).
 - Implementing a higher education management information system that would (1) increase oversight of the private sector; (2) ensure collection of quality data on higher education institutions, students, and graduates (much needed for evidence-informed policy making), and (3) secure the approval process for degrees and certificates that private higher education institutions issue by increasing trust between academia and the public.

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