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# TWO YEARS AFTER SAVING A GENERATION



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# Foreword

**I**n the last two years, the COVID-19 pandemic has wreaked havoc in Latin America and the Caribbean. The region has suffered a triple curse, as it faced the largest combined impact in health, economic and educational terms. The disproportionate impact of the pandemic on people’s lives, livelihoods, and human capital formation represents, without doubt, one of the worst crises in LAC’s history. As we seek to rebuild better and foster more inclusive and sustainable growth, the main concern, nonetheless, is not the heavy toll of the pandemic, but the future of an entire generation of children and young people who have endured this massive shock.

Prior to the pandemic, LAC was well-known to be one of the most unequal regions in the world. Disparities were notable not just in terms of income but, more importantly, in terms of opportunities. Education had been the great equalizer, steadily helping build a fairer society. But it simply vanished with the sudden closure of schools across the region and prolonged suspension of in-person learning.

In other words, the outbreak of the coronavirus widened existing gaps in access to high-quality education, teachers, and schools between students with resources – those with access to Internet, a computer at home, and a school that could quickly implement virtual education through online platforms – and more vulnerable students – those that did not have access to Internet, nor a computer at home or a school that could deliver virtual learning. This brought about a new segregation pattern, leading to a crisis within a crisis.

This report is the first evidence-based assessment of this educational catastrophe in Latin America and the Caribbean. The report intends to systematically document the impact that COVID-19 has had on the region’s education sector two years after. The 24 months since the outbreak of the pandemic in March 2020 is described sequentially, focusing firstly on the features of the “triple curse”, and then on the direct impact on schooling, learning and skills development. The report also addresses significant cross-sectoral impacts, namely those related to digital and transferable skills.

In addition to assessing the impact, we must find ways to improve outcomes and promote a better future for all. The main goal of this report is to raise the alarm that we must all act jointly and urgently...to save a generation. A generation that has suffered like no other and that depends on our commitment to the education recovery agenda now. The report sets out a clear and simple dual strategy, focused on the return to schooling and the learning recovery. We can still revert learning losses and, most importantly, seize the moment to build better and more inclusive and resilient education systems.

We can invest and act now or leave an entire generation behind. The choice is ours.

**Carlos Felipe Jaramillo,**

*Vice President, Latin America and the Caribbean, World Bank*

**Jean Gough,**

*Regional Director for Latin America and the Caribbean, UNICEF*

# List of acronyms

<b>CABA</b>	<i>Ciudad Autónoma de Buenos Aires</i> (Autonomous City of Buenos Aires)	<b>ICFES</b>	<i>Instituto Colombiano para la Evaluación de la Calidad de la Educación</i> (Colombian Institute for Education Quality Assessment)
<b>CCT</b>	Conditional Cash Transfer	<b>ICILS</b>	International Computer and Information Literacy Study
<b>CXC</b>	Caribbean Examinations Council	<b>ICT</b>	Information and Communications Technologies
<b>DIA</b>	<i>Diagnóstico Integral de Aprendizajes</i> (Comprehensive Learning Diagnostics)	<b>IPNV</b>	In-Pandemic, no Vaccination Available
<b>DR</b>	Dominican Republic	<b>IPVA</b>	In-Pandemic, Vaccination Available
<b>EAP</b>	East Asia and the Pacific	<b>LAC</b>	Latin America and the Caribbean
<b>ECA</b>	Europe and Central Asia	<b>LAYS</b>	Learning-Adjusted Years of Schooling
<b>ECE</b>	Early Childhood Education	<b>LFR</b>	Leadership for Renewal
<b>EGMA</b>	Early Grade Mathematics Assessment	<b>LLECE</b>	<i>Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación</i> (The Latin American Laboratory for Assessment of the Quality of Education)
<b>EGRA</b>	Early Grade Reading Assessment	<b>LMIC</b>	Lower Middle-Income Country
<b>EMIS</b>	Education Management Information System	<b>LSE</b>	Lower Secondary Education
<b>ENDO</b>	<i>Encuesta Nacional Docente</i> (National Survey of Teachers)	<b>MENA</b>	Middle East and North Africa
<b>ERCE</b>	<i>Estudio Regional Comparativo y Explicativo</i> (Regional Comparative and Explanatory Study)	<b>MIA</b>	<i>Medición Independiente de Aprendizaje</i> (Independent Learning Assessment)
<b>EWS</b>	Early Warning System	<b>MPL</b>	Minimum Proficiency Level
<b>GDP</b>	Gross Domestic Product	<b>NA</b>	North America
<b>GSL</b>	Global School Leaders	<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>GTO</b>	Guanajuato (State of Mexico)	<b>OOSP</b>	Out-of-School Population
<b>HCR</b>	Human Capital Review	<b>PERCE</b>	<i>Primer Estudio Regional Comparativo y Explicativo</i> (First Regional Comparative and Explanatory Study)
<b>HFPS</b>	High-Frequency Phone Survey	<b>PIRLS</b>	Progress in International Reading Literacy Study
<b>IAD</b>	Inter-American Dialogue		
<b>ICCS</b>	International Civic and Citizenship Education Study		

<b>PISA</b>	Programme for International Student Assessment	<b>SES</b>	Socio-Economic Status
<b>PNAD-C</b>	<i>Pesquisa Nacional por Amostra de Domicílios Contínua</i> (National Continuous Household Survey)	<b>SMS</b>	Short-Message Service
<b>PP</b>	Pre-Pandemic	<b>SoR</b>	Science of Reading
<b>PPP</b>	Purchasing Power Parity	<b>SSES</b>	Survey on Social and Emotional Skills
<b>RIMA</b>	<i>Recopilación de Información para la Mejora de los Aprendizajes</i> (Data Collection for Improving Learning Outcomes)	<b>TaRL</b>	Teaching at the Right Level
<b>RtI</b>	Response to Intervention	<b>TERCE</b>	<i>Tercer Estudio Regional Comparativo y Explicativo</i> (Third Regional Comparative and Explanatory Study)
<b>SA</b>	South Asia	<b>TIMSS</b>	Trends in International Mathematics and Science Study
<b>SSA</b>	Sub-Saharan Africa	<b>TV</b>	Television
<b>SAEB</b>	<i>Sistema de Avaliação da Educação Básica</i> (Basic Education Assessment System)	<b>UNDP</b>	United Nations Development Program
<b>SDG</b>	Sustainable Development Goal	<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>SEG</b>	<i>Secretaría de Educación de Guanajuato</i> (Ministry of Education of the State of Guanajuato)	<b>UNICEF</b>	United Nations Children's Fund
<b>SERCE</b>	<i>Segundo Estudio Regional Comparativo y Explicativo</i> (Second Regional Comparative and Explanatory Study)	<b>USE</b>	Upper Secondary Education
		<b>WBG</b>	World Bank Group
		<b>WHO</b>	World Health Organization



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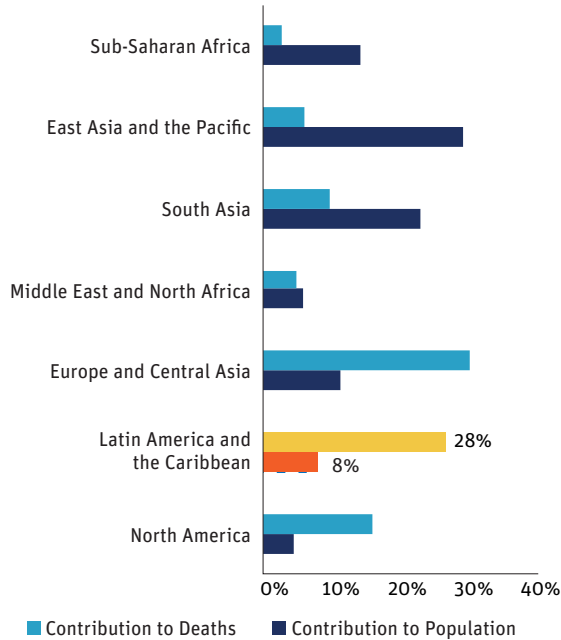
## Executive summary



## Key Takeaways

- **LAC has endured one of the longest spells of school closures.** The region was hit disproportionately hard in health, economic, and educational terms. In the region, an entire generation of students – approximately 170 million – were fully deprived of in-person education for roughly 1 out of 2 effective school days to date.
- **The effects of the pandemic on the education sector of the region have been severe:**
  - The overall impact on the out-of-school population was limited by the end of 2021 thanks to protective policies, but more data are needed to fully assess this impact in 2021/2022 as millions of children and teenagers are at risk of dropping out for falling behind academically.
  - Expected and real learning losses are very high, and more severe for earlier grades, younger children, and children from lower socio-economic backgrounds. Average primary education scores in reading and math would fall to levels of more than 10 years ago, in a context where improvements were already very slow. About 4 in 5 sixth graders may not be able to adequately understand and interpret a text of moderate length.
  - Learning losses would translate into a decrease of about 12 percent in lifetime earnings for a student at school today.
  - Psychosocial health and well-being have also been greatly affected.
- **The incipient recovery must focus on returning to schooling and, especially, recovering and accelerating learning:**
  - The return to schooling agenda should encompass: (i) safely and sustainably reopening all schools; (ii) re-enrolling all students; and (iii) preventing dropouts.
  - The recovering and accelerating learning agenda must comprise: (i) prioritizing and consolidating curricula; (ii) assessing learning levels; and (iii) implementing at scale learning recovery strategies and programs.
- **In a nutshell, this agenda entails the urgent and comprehensive implementation of four commitments:**
  - A commitment to place the education recovery at the top of the public agenda.
  - A commitment to reintegrate all the children that abandoned school and ensure they stay in it.
  - A commitment to recover lost learning and ensure the socio-emotional well-being of children.
  - A commitment to value, support and train teachers.

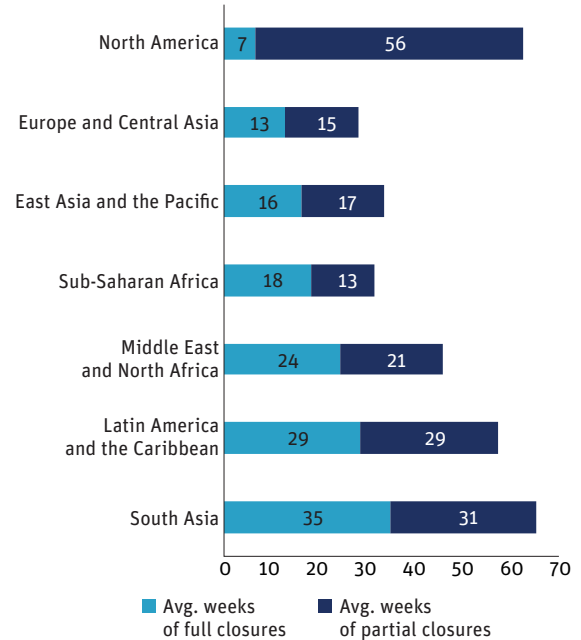
**Figure ES.1. Contribution to global totals for population and number of COVID-19 related deaths, by region (%), March 2020 – March 2022**



Source: Own elaboration on the basis of information from WHO COVID-19 Dashboard. Updated as of March 31, 2022.

**M**ore than two years have passed since the COVID-19 pandemic hit the Latin America and the Caribbean (LAC) region leaving a gigantic trail of scars and wounds along the way. LAC was hit disproportionately harder in health, economic, and educational terms. The region has experienced, on average, more COVID-19 deaths per capita than any other region in the world. In fact, while being home to only 8 percent of the global population, LAC more than triples that share when it comes to COVID-19-related global deaths - 28 percent (Figure ES.1). LAC has also suffered from the largest hit in economic activity and presents the worst economic prospects in terms of recovery than any other region. The economic decline had serious repercussions for LAC, most notably through the sizeable impact on the labor market, especially from 2019 to 2020, where unemployment rate for the region grew, on average, 53.6 percent. Last but not least, LAC has suffered from an inordinate intensity of an unprecedented phenomenon: the closing of educational institutions. LAC schools have been fully or partially closed for a dismal 58 weeks, featuring as the third most affected region after South Asia and North America (Figure ES.2). In the region, an entire generation of students – approximately 170 million – were deprived of in-person education for roughly 1 out of 2 effective school days to date.

**Figure ES.2. Number of school weeks with schools fully and partially closed, by region, March 2020 – March 2022**

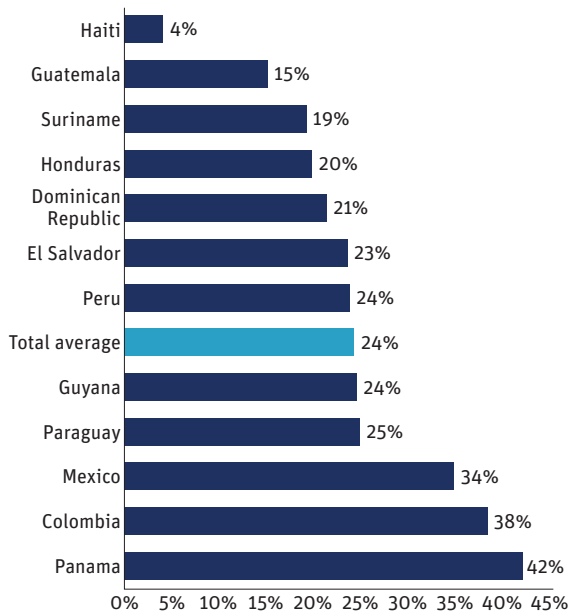


Source: Own elaboration on the basis of UNESCO's Global Monitoring of School Closures. Updated as of March 31, 2022.

While the pandemic took a toll on education systems across the LAC region, notable efforts were made to continue delivering education remotely while schools were closed. To ensure teaching continuity, governments across the region were forced to combine a series of distance learning strategies. Most of the countries (or sub-national entities in federal countries where education is decentralized) developed online platforms to ensure education delivery. This was the most universal delivery channel. The second most used delivery method was TV, with roughly 85 percent of the systems offering this modality. Other learning channels used - including radio programs, social networks, short-message service (SMS) via cell phones, or printed material - were a bit less prevalent, but still widely used. Moreover, many governments scaled up support to teachers and encouraged the involvement of parents and caregivers, as their participation and support for children's learning during this lockdown period was essential.

**Despite these commendable investments made to support learning continuity, the remote learning response faced several limitations, especially affecting the most vulnerable countries and groups.** The distance learning response package faced several challenges, limiting its

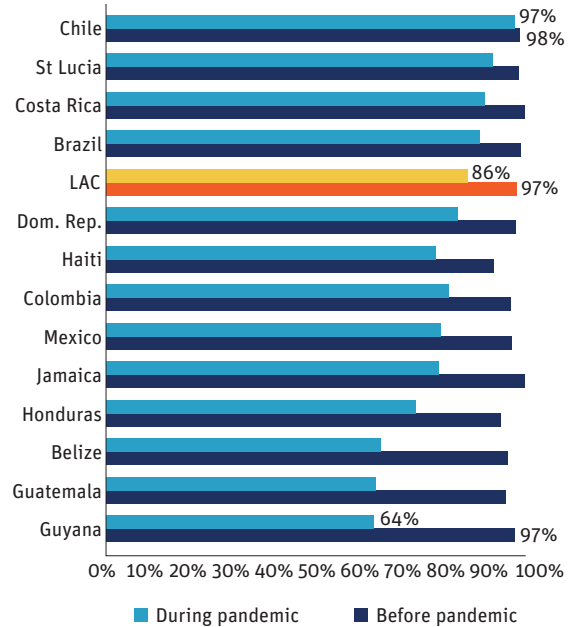
**Figure ES.3. Internet access across LAC, selected countries (%), latest available year**



Source: Own elaboration based on Barron-Rodriguez et al. (2021a). Note: Data for 20 LAC countries including the latest available data for each country.

reach, participation, and quality. Five types of constraints were particularly relevant in LAC: (i) the uneven state of connectivity in the region; (ii) the limited access to devices needed for distance learning, especially for vulnerable groups; (iii) the complexities in the implementation of the specific response strategy, subject to the different strengths, limitations, and requirements of each distance learning channel; (iv) the lack of teacher preparedness for remote learning; and (v) institutional constraints. In fact, recent data compiled for 12 countries in LAC show that roughly only 1 in 4 households have access to Internet (Figure ES.3) with noteworthy differences across countries. For example, while 40 percent of all households in countries like Panama and Colombia report having Internet access, such indicator is below 15 percent in countries like Guatemala and Haiti. The quality of the connectivity is also an important constraint for schooling and learning, and vulnerable groups such as Afro-descendant students have significantly lower access to the Internet and a computer at home, as compared to their non-Afro-descendant peers. Emerging regional evidence confirms that remote education delivery, especially with the multiple limitations mentioned above, has fallen short of ensuring engagement in education activities at home, and quality of learning. It has therefore become patent that, even under

**Figure ES.4. Attendance rates before and during the pandemic, selected countries (%), February 2020 vs. May/July 2021**



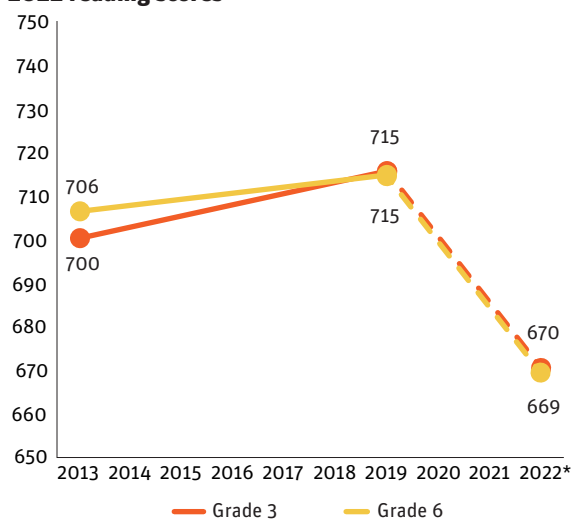
Source: Own elaboration on the basis of WBG's HFPS microdata library.

the best scenario, remote learning was far from being a perfect substitute to face-to-face education.

**The relatively limited available evidence so far on the impact of the pandemic on schooling points to an important attendance shock during remote learning for all children and youth, stronger for the most vulnerable.**

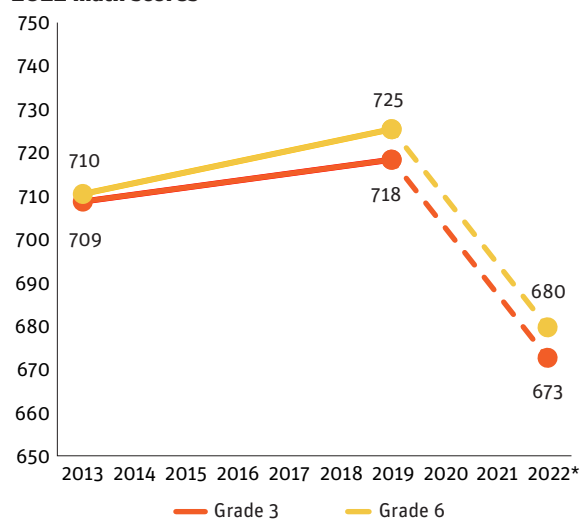
Before the COVID-19 outbreak, the out-of-school population (OOSP), both in absolute terms and as a share of the school age population, was consistently decreasing over time across education levels. Evidence collected from the High-Frequency Phone Survey (HFPS) showed that, as of mid-2021, when most of the schools in the region were still fully or mostly closed, school attendance had decreased, on average, 12 percent from its pre-pandemic values (Figure ES.4), with important differences across countries. This decrease was sharper for lower-income groups.

**By the end of 2021, as schools were reopening, the overall impact on schooling appeared limited in selected countries, with a very small increase in the 6-to-14-years-old OOSP population, but the risks of future dropouts for children and teenagers require continuous attention.** By the end of 2021, in selected countries and using other indicators, the overall impact on attendance/

**Figure ES.5. TERCE 2013, ERCE 2019 and simulated 2022 reading scores**

Source: Own elaboration based on the UNESCO [website](#) and World Bank estimates based on Azevedo et al. (2022).

Note: The country level mean scores between official UNESCO results and the baseline values for ERCE 2019 used in the simulation tool differ slightly because the simulation tool estimated baseline values for 2019 using grouped data.

**Figure ES.6. TERCE 2013, ERCE 2019 and simulated 2022 math scores**

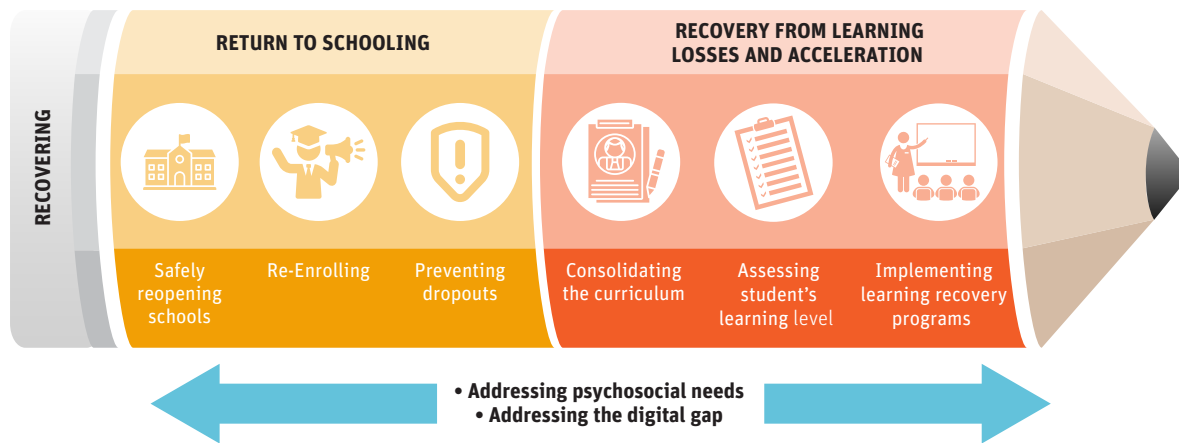
enrollments rates appeared limited. Reduced opportunity costs of schooling, cash transfer policies, automatic promotion rates, among other factors, may have played a role in this outcome. Yet, data for four countries, representing about 40 percent of the 6-to-14-years-old school age population of the region, reveal an average small increase in the 6-to-14-year-old OOSP. Additionally, the relatively slow economic recovery, limited engagement and attendance during school closures, mental distress and learning losses may lead to large shocks in dropouts in 2022 and beyond, which could reverse the overall trends in OOSP, for both children and teenagers and, especially, the most vulnerable.

**While the ultimate effects on enrollment and drop-out may not be yet clear at this point, the pandemic is expected to have had a large impact on learning outcomes and skills development, eroding the already weak foundations of LAC's education systems.** Prior to the irruption of COVID-19, the region was already characterized by a deep learning crisis. According to results from the “best pre-pandemic” measure of student achievement in the region – ERCE 2019 results – the average student in LAC suffered from a profound lack of core foundational skills, namely literacy and numeracy. By mid-primary education (3<sup>rd</sup> grade), roughly half of the students in the region were below minimum proficiency levels (MPL) in both math and language; by the end of primary education, the situation worsened significantly: 69 percent of 6<sup>th</sup>-graders were

below MPL in reading and a dismal 83 percent were below MPL in math. The arrival of the pandemic is expected to have led to *a crisis within a crisis*. A strong negative impact on learning is expected because of the limited reach, engagement in and quality of remote learning.

**Simulations using observed data on the length of school closures to date forecast large learning losses for the region, confirmed by early evidence.** Updated estimates using different assumptions on the extent of partial reopening and the effectiveness of remote learning show a loss of between 1 and 1.8 learning-adjusted years of schooling (LAYS), with a loss of 1.5 LAYS under an intermediate scenario. These learning losses translate to a significant decrease in earnings and productivity equivalent to a decrease of about 12 percent in lifetime earnings for a student at school today under an intermediate scenario. Under an intermediate scenario, mean ERCE scores are expected to decrease by around 6.3 percent (or 45 points) in both grades and subjects. The simulation results for 3<sup>rd</sup> and 6<sup>th</sup> grade imply that every country would have worse mean scores than in 2013. Put differently the mean scores in reading and math would fall to levels of more than 10 years ago (Figures ES.5 and ES.6), in a context where improvements were already very slow. In weighted terms, the proportion of 3<sup>rd</sup> and 6<sup>th</sup> graders not able to adequately understand and interpret a text of moderate length is expected to have increased, on average, from 37 to 50 percent and from 62 to 82 percent, respectively.

Figure ES.7. The road to recovery and acceleration in LAC



And increases in learning poverty are the steepest in the world. According to the very latest World Bank estimates, the proportion of “learning poor” may have increased from 52 percent in 2019 to 79 percent as a result of the pandemic. Recent evidence collected on São Paulo, and more recently on the Mexican State of Guanajuato, seems to further buttress the simulated estimates. While scores and score scales are not comparable, percentage decreases in primary education (ranging from about 8 percent to 19 percent) are comparable or even sharper; and grade 5 results for São Paulo are equivalent to scores from 10 years ago or more. While evidence is very scarce, transferable skills, which include skills like problem-solving, resilience, and communication skills and are shown to influence the ability to accumulate skills in the future, including foundational ones, have also been negatively impacted.

**On average, early grades, younger children, and children from lower socio-economic status have been disproportionately affected by learning losses according to early evidence, setting the stage for a generational crisis and increased inequality.** Results from São Paulo show much starker declines for grade 5 than for grades 9 and 12, and data from Mexico also show steeper drops in primary than secondary education. The still very limited evidence on pre-primary education also points to important losses. Data from Mexico also show steeper declines for lower-income students, with losses of 32 percent in math scores for lower-income students vis-à-vis 25 percent for higher-income students. And other evidence in the region and outside points to sharper decreases for the most vulnerable groups. Female students also appear to have been more impacted by learning losses, suggestive of

unequal distribution of responsibilities in the household. In combination with the impact on schooling, these learning losses lay the ground for a major generational crisis, if the right policies are not implemented, with a dual focus on schooling and learning recovery starting from a very young age. This is even more true for the most vulnerable students, who are at an especially great risk of dropping out in the near future without urgent learning support, with huge potential implications for inequality.

**The pandemic has also affected psychosocial health and well-being of teachers and students, while showing the importance of digital skills.** Recent evidence on the post-pandemic points to a deterioration of well-being of children and teenagers across education levels, hindering their readiness to learn and pointing to a *mental health crisis within the crisis*. At the same time, the pandemic also revealed large gaps in digital skills, while providing some opportunities for enhancing those skills. More than ever before, education systems and schools were pushed to adopt tools that implied a certain degree of digital ability. This caused great strain on teachers, students, and parents, while also enhancing exposure to these skills and opportunities for strengthening tools and strategies to develop these critical competences.

**While recovery has started, the gravity of the crisis requires comprehensive and sustained action, and this report attempts to make a significant contribution to this crusade by providing clear directions to education policymakers in LAC, building on the response so far.** The document builds on a previous similar effort one year ago, this time gathering three international organizations like the

**Figure ES.8. The four commitments of the education recovery in LAC**

<b>Schooling: Leave no one behind and prevent dropouts</b>	<b>Learning and well-being: Recover and enhance foundational skills and well-being</b>	<b>Teachers: Value and support teachers</b>	<b>Advocacy and financing: Place education recovery at the top of the public agenda</b>
<ul style="list-style-type: none"> <li>• Reopen all schools in a sustainable way.</li> <li>• Support inclusive information campaigns on school re-enrollment, deploy cash transfer programs and ensure learning materials, information, and services are accessible to all, especially those most vulnerable.</li> <li>• Implement early warning systems to identify and monitor students at risk of dropping out.</li> <li>• Address psychosocial health and well-being of students.</li> <li>• Address digital divides, with a focus on connectivity, digital skills and institutional capacity.</li> </ul>	<ul style="list-style-type: none"> <li>• Consolidate curricula with focus on foundational (and transferrable) skills.</li> <li>• Assess learning levels, with summative and formative assessments.</li> <li>• Scale up initiatives and programs to recover from learning losses, with focus on teaching at the level of the student and building on pre-existing and new strategies and programs.</li> <li>• Address psychosocial health and well-being of students.</li> <li>• Address digital divides, with a focus on connectivity, digital skills and institutional capacity.</li> </ul>	<ul style="list-style-type: none"> <li>• Address human resource gaps and strengthen teacher professional development.</li> <li>• Strengthen teachers' pedagogical and digital skills.</li> <li>• Support health and well-being of teachers.</li> </ul>	<ul style="list-style-type: none"> <li>• Fund schools' safety protocols, digital upgrades, and all programs and measures at scale.</li> <li>• Mobilize multiple stakeholders in the delivery and financing effort.</li> <li>• Look for efficiency gains in use and allocation of resources, through better data, technological innovations and institutional reforms for service delivery improvements.</li> </ul>

World Bank Group (WBG), the United Nations Children's Fund (UNICEF), and the United Nations Educational, Scientific and Cultural Organization (UNESCO) which, partnering with the Inter-American Dialogue (IAD), join forces here to elevate the pitch (and underscore the sense of urgency) for the sizeable schooling and learning recovery agenda ahead. In fact, if urgent and sustained action is not taken, an entire generation may suffer profound and long-lasting consequences on their human capital accumulation.

**The main policy recommendation is clear: recovery must focus on two essential strategies, returning to schooling and recovering from learning losses (Figure ES.7).** The "return to schooling" aims at ensuring, as a first priority, that all schools re-open and that all children who were attending education prior to the pandemic can get back to, and stay in, school. Two key reasons substantiate the key rationale for this strategy. First and foremost, COVID-19 poses limited health risks for younger populations. Second, foundational skills are not adequately developed at home. Once students are in school, they also need to be learning and recover from the massive learning losses, therefore actions also need to be taken to offset those losses and accelerate ("recovery from learning losses and acceleration"). To be successful, this dual schooling and learning agenda will require addressing the psychosocial challenges triggered by the pandemic, as well as

continuing to address the digital divides that have been hampering the response. Embedded in all these priorities is the support to teachers and principals, and ensuring adequate and efficiently used resources, to make their implementation possible.

**Returning to schooling and recovering from learning losses entails the implementation of four commitments, aligned with this agenda (Figure ES.8) and the priorities put forward by the WBG, IAD, UNESCO and UNICEF.** These commitments include: (i) a *commitment to schooling* – so as to ensure that no student is left behind and/or drops out; (ii) a *commitment to learning and well-being* – to prioritize foundational skills and foster appropriate levels of human capital formation along the way; (iii) a *commitment to teachers* – to make sure teachers are valued and supported throughout; and (iv) a *commitment to advocacy and financing* – insofar as the education recovery agenda is a responsibility of all and needs sufficient, and wisely used, resources for its implementation. The report provides an actionable roadmap to ascertain which are solid measures, programs, interventions and strategies to achieve the three first commitments, while flagging risks and opportunities to achieve the fourth commitment.

**The first step to support a return to schooling is to get back to in-person education by finalizing the school**

**reopening process and make it sustainable.** To ensure a safe return to in-person education, it is essential to apply context-appropriate health and hygiene protocols and to prioritize teachers in the vaccination process. School reopening strategies need to be coherent, flexible, and clearly owned by, and communicated to, all stakeholders. In the process of prioritizing school reopening, opening early childhood education and primary education institutions should be a top priority, for all the above.

**Open schools are not enough to ensure schooling: countries need to make sure they have in place a set of smart policies to spur enrollment and attendance.**

While enrollment and attendance data are still limited, all efforts must be made to ensure re-enrollment and prevent dropouts in 2022 and 2023, and prevent current or future disconnects with schooling, building on what has worked so far, and with special emphasis on the most vulnerable children and youth. Three main interrelated reasons will make these efforts especially critical: (i) opportunity costs of schooling may increase again, following changes in the labor market; (ii) financial constraints may remain binding, or even increase as focus goes back to face-to-face education, because of the slow recovery; and (iii) learning gaps accumulated during school closures will become fully apparent. In this context, the focus should be on smart policies to spur re-enrollment and attendance. Building on good practices reviewed in this report, interventions should build on different incentives, with emphasis on keeping and enhancing the demand for schooling. These interventions could include information campaigns for re-enrollment; scaling up cash-transfers, softening their conditionalities; ensuring accessible materials and services for all; and targeting additional support for specific vulnerable groups, while ramping up policies to recover from learning losses. Examples of effective cash transfer policies can be found in many countries in the region, including Brazil, Mexico, and Colombia. These policies should be complemented by early warning systems to identify the students most at risk of dropping out.

**First and foremost, the return-to-schooling strategy must be accompanied by an aggressive strategy to recover and enhance foundational skills.** In view of the massive learning losses, and expected impacts on dropouts, this is an even more burning priority than schooling itself at this stage. This strategy must include three critical priorities: (i) *curricular consolidation with a focus on foundational, and transferable, skills*, stating what students should learn; (ii) *assessment of students' current learning levels* to properly diagnose the breadth, depth,

and characteristics of learning losses; and (iii) building on the curricular decisions and on the evaluation of learning losses, *interventions that can help provide the needed (and presumably accelerated) learning recovery*. Underlying institutional and service delivery constraints will also need to be addressed, and countries should as much as possible prioritize existing practices and programs, improving and scaling them up building on emerging lessons.

**Countries should keep prioritizing foundational skills.**

Building on efforts made so far during the pandemic, they should focus on foundational, and transferable, skills in their curricula in the short and longer term, and proficiency in these skills should be measured. The pandemic may be an opportunity to reiterate the importance of transferable skills and how to enhance them across the life-long learning cycle, while refocusing teaching and learning on foundational skills.

**Learning assessments should be urgently re-prioritized, with a focus on formative assessments.**

Complementary assessment efforts need to be urgently stepped up everywhere to diagnose the real learning levels of students, including recent learning losses, with a strong focus on formative assessments. In the last decade, countries like Brazil, Chile, Mexico, and Uruguay introduced assessments that are made available for the schools and teachers to administer, score, analyze, and use to improve pedagogical practices, and some other countries have taken initial steps along this line. Formative assessments have the potential to be integrated with pedagogical approaches, measure transferable skills and to be replicated and scaled up at a relatively low cost. At the same time, international, regional and/or national standardized assessments should continue to be fostered to generate comparable data for benchmarking learning losses, and inform educational policies, in the context of a strengthened evaluation culture where assessments work together to ultimately improve learning.

**Learning recovery programs should be scaled up.**

Learning losses are expected to be widespread, and learning heterogeneity to have increased, requiring a scale-up of reforms, initiatives, and programs to recover. This can build on evaluated pre-existing programs (Figure ES.9), and new programs introduced as a response to the pandemic, to the extent that they start being monitored and evaluated. All programs should focus on foundational literacy and numeracy skills. Good monitoring and evaluation systems and strengthening institutional capacities to implement at scale will be critical.

Countries willing to implement learning recovery programs at scale will need to pay attention to critical questions and features which are conducive to scalability. While information on unit costs is missing for most types of programs, based on critical features to adapt and scale up and evidence of results, programs like “Teaching at the right level” may be especially promising to both recover and accelerate, but other programs may be less demanding in terms of training requirements. Targeted instruction has strong potential to also accelerate learning in the long run. Supporting a prompt recovery in early childhood education will help tackle lack of readiness to learn.

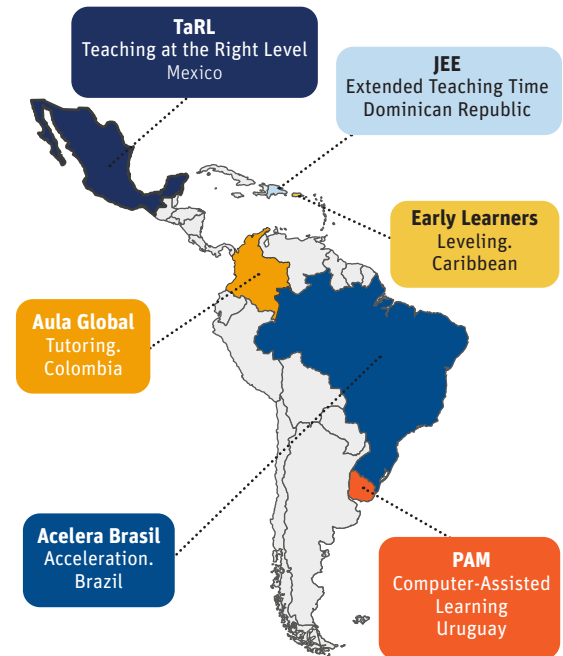
Recovering and enhancing schooling and learning will also require a strong focus on psychosocial health and well-being. Countries should put in place diagnostic assessments to provide timely data on the effects of the pandemic on psychosocial health and well-being and design strategies to address them. Some countries such as Chile and Ecuador have strived to promote balanced recovery approaches which include aspects related to well-being.

Recovering and enhancing learning will also require a strong focus on digital divides. At the same time, efforts to connect families and schools should continue, with focus on both the access and quality of the Internet access, which are still very uneven in the region. This needs to be combined with proper equipment and devices and the enhancement of digital skills of students and teachers and entail the needed institutional strengthening. Periodic assessments of digital skills should be supported.

Teachers need to be supported throughout the recovery effort. Scaling up diagnostic assessments and learning recovery programs will require sufficient teachers and strengthening teacher professional development. Teachers, tutors, and other implementers need to be trained and supported on how to target instruction, by teaching at the right level of students. Teachers’ digital skills also need to be strengthened to make the best use of technological solutions, including through digital competencies frameworks. Finally, as first responders, teachers also need to be trained to provide psychosocial support to students and their own health and well-being need to be supported.

Finally, countries also have an important advocacy and funding agenda ahead of them with opportunities for partnerships and efficiency improvements. A broad-based commitment and response are essential to avoid that the exogenous shock suffered by the 170 million students in LAC that went through a real educational turmoil end up

**Figure ES.9. Examples of learning remediation and recovery programs in LAC**



Source: Mancebo and Vaillant (2022).

becoming an educational tragedy with large economic and social implications. The region needs to protect education budgets first. The schooling and learning recovery package has a “price tag”. Improving school safety has a cost and so implementing at scale programs to support attendance and recover from learning losses. It is estimated that \$47 billion is required to connect the region to the Internet for educational purposes by 2030. Notwithstanding the primary role of ministries of education and public funding, the response can also build on the many partnerships and alliances between ministries, the public and private sector, and governments and civil society developed during the crisis. Further strengthening and developing these partnerships for education is an opportunity provided by the crisis. Finally, there is also potential for efficiency improvements, to complement additional funding efforts. Countries can build on data and technology to improve service delivery through strengthened information and monitoring and evaluation systems, platforms to enhance targeted learning or, yet innovative and sustainable uses of remote and hybrid learning. While the agenda of needed institutional reforms is much larger, the pandemic crisis and response has also shown how important it is to support principals and align incentives and capacities across stakeholders to implement successful responses. Countries could also capitalize on these efforts to use resources more efficiently.







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# Introduction

**I**t has been over two years since the COVID-19 pandemic first hit the Latin America and the Caribbean (LAC) region. What initially began as a health crisis of unknown origin and consequences eventually shook the very foundations of a region with structural weaknesses and a high level of inequality in both opportunities and income. The health crisis led to a spike in contagions and deaths, disproportionately affecting the region. LAC's contribution to worldwide deaths due to COVID-19 was far larger than its share of worldwide population. The health crisis led to an immediate emergency situation for the economy with the sudden and massive shutdown to normal life in order to prevent the spread of the virus. Transport, businesses, tourism: all came to a completely and sudden stop. And education, the most critical component for building human capital and skills for life, was not an exception.

**The impact of the pandemic to the education sector was, however, of a different nature: it led to a silent crisis.** Education did not show people dying intubated in over-crowded and poorly resourced health institutions. Education did not mimic the massive loss of jobs and income for many people, especially the most vulnerable populations. But it engendered a tragedy whose real costs to the generation of students attending schools back in March 2020 will only be fully felt in probably decades. The voices of the 114 million students that were, only one year into the pandemic, still unable to receive in-person education, were never duly heard. And the size of the damage has not been fully assessed yet. A silent crisis, a generation at risk.

**This report is an attempt to raise awareness about “the great equalizer that vanished”<sup>1</sup> and to continue ensuring a sense of urgency for addressing the crisis, while providing clear directions to education policymakers in LAC on how to move forward building on the response so far.<sup>2</sup>** The education process, usually subsumed within the two critical outcomes of schooling and learning, is in fact a fundamental vehicle for skills development which simply cannot be put “on hold”. School helps build foundational skills, like critical literacy and numeracy abilities for functional mind growth. But it is also the house where to build critical competences for life, from transferable skills to the new set of 21<sup>st</sup> century skills, like digital and green skills. Most importantly, along the skills formation process, the equalization of opportunities that takes place is paramount. While the recovery has started, it is yet too timid, and the task ahead is daunting. Underpinned by

a sense of urgency, the report aims at providing an update on the impact of the pandemic on the education sector, extracting lessons on the response so far and building on those for an agenda for action.

**The report builds on a previous similar effort one year ago but joining efforts, this time around, to amplify messages for impact.** This study is born as a series of concerted actions taken by a group of institutions devoted to investing in human capital to build stronger and resilient societies. The World Bank Group (WBG), the United Nations Children's Fund (UNICEF) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) join forces here to deliver a document that could help provide clear recommendations for the sizeable schooling and learning recovery agenda ahead. In doing so, the three institutions partner with the Inter-American Dialogue (IAD) for advocacy through a series of webinars that help disseminate these efforts through their superb network of educational policy-makers, practitioners, and academicians.

**The report has a simple but powerful structure designed to use the available evidence to date to substantiate the roadmap offered as a critical tool moving forward.** Chapter 1 is diagnostic in nature. The chapter attempts to take stock of the 24+ months since the virus outbreak in the region by dissecting the core elements of the health, economic, and educational shocks generated by the pandemic. When zeroing in on the characteristics of the disruption stemming from COVID-19, the chapter focuses on two core aspects: (i) the specific dimensions why the LAC region could be considered an “outlier” region; and (ii) the particular dynamics of the remote learning response. Chapters 2 and 3 focus sequentially on two core outcomes of the educational service delivery: schooling and learning, while also looking at some other outcomes, with focus on skills development. Both chapters adopt a similar approach first presenting an overview of the pre-pandemic situation, to then portraying a data-based assessment of the impact of the pandemic to date. Chapters 4 and 5 mimic the treatment of their predecessor chapters but focusing on the schooling and learning recovery (and acceleration) agenda. Again here, the treatment attempts to distill the critical elements that should be prioritized in the implementation of this strategy. Chapter 6 concludes with a summary of the key policy recommendations and critical commitments moving forward.

1 See the blog by Jaime Saavedra Chanduvi on this at <https://blogs.worldbank.org/education/schools-great-equalizer-vanished>.

2 Even though all levels of education were deeply affected by the pandemic, this report focuses on *compulsory education* (pre-primary, primary and secondary). Nonetheless, many of the challenges and policies discussed in this document are also relevant to post-secondary/tertiary education.



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## Chapter 1

# The COVID-19 pandemic: The heavy toll of the crisis for LAC and the remote learning response

**M**ore than two years have elapsed since the initial outbreak of, arguably, one of the most disruptive global threats to humankind in the world's history: the **COVID-19 pandemic**. The SARS-CoV-2<sup>3</sup> variant of the coronavirus, first identified at the end of 2019 in the city of Wuhan (China), was declared officially a worldwide pandemic on March 11, 2020. Ever since then, countries all over the planet were, for once in the history of the world, united around the same unique priority: combating the virus. To address this crisis, countries all around the world and in LAC had to resort to multiple strategies to contain the pandemic. In education, this translated into a complete shutdown of educational institutions, with countries having to change, from one day to the other, the delivery modality of education from in-person to remote and design a strategy to do so. This chapter sets the stage for the report by reviewing the health, economic and education consequences of the pandemic in LAC and the core distance learning response package that countries of the region had to put together to maintain learning continuity during school closures.

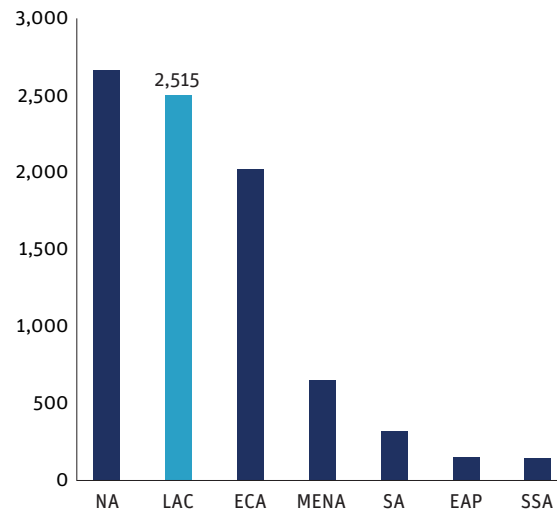
## 1.1 A health and economic crisis like no other...disproportionately affecting LAC

**Countries all around the world have had to set up all sorts of strategies to contain the spread of the disease.**

In the absence of a vaccine, the most widespread modality to halt transmission rates was the application of a generalized strict lockdown. Heavy restrictions limiting movement, economic activities, and social services were massively imposed in all corners of the globe. Although these measures had varying degrees of effectiveness to curtail transmission rates, they were not effective in ending the pandemic altogether. In fact, even in the light of substantial progress in vaccination to date, the pandemic continues to wreak havoc with waves of contagions and deaths.

**The pandemic hit almost everywhere, but some regions of the world, notably the LAC region, were disproportionately affected.** As of the beginning of March 2022, LAC was the region with the third largest total number of COVID-19 registered cases. The four most populous LAC

**Figure 1.1. Total cumulative number of deaths per million people, by region, 2020 - 2022**



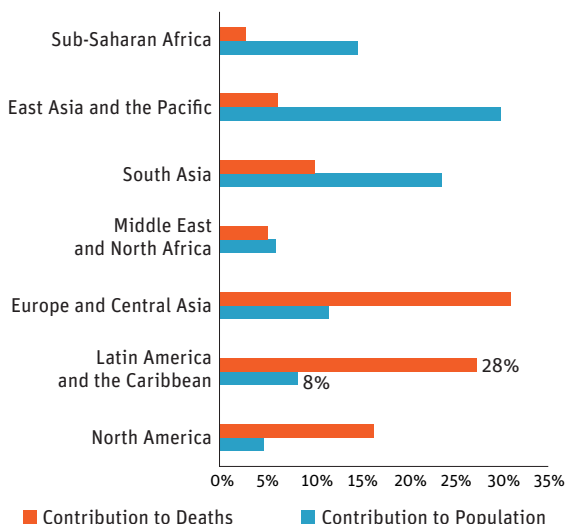
Source: Own elaboration on the basis of information from WHO COVID-19 Dashboard. Updated as of March 2, 2022.

countries – Brazil, Mexico, Argentina, and Colombia - were amongst the top 20 countries with the largest number of people infected in the world.<sup>4</sup> The region was also in third place when adjusting the contagions indicator by population size (i.e. cases per million people). The sanitary picture is, however, far worse when we analyze COVID-19-induced deaths. LAC is the second region with the largest cumulative number of deaths to date (Figure 1.1) with a small difference to the first one (North America/NA), located in the same continent. In fact, while being home to only eight percent of the global population, LAC more than triples that share when it comes to COVID-19-related global deaths - 28 percent. The LAC region presents the second highest ratio between the share of total deaths and the share of total population, a dismal 3.3 value (Figure 1.2). Taken in conjunction with the NA region - comprising the United States and Canada - the Americas is the continent that has been, by far, the most lethally affected to date. As of today, one LAC country, Peru, heads the world ranking with the largest number of deaths per million people. And even when considering excess mortality due to COVID-19, new evidence points out to Bolivia, another South American country, as being the country with the largest excess mortality rate, and the Andean countries (Bolivia, Peru,

<sup>3</sup> The SARS-CoV-2 acronym stands for *severe acute respiratory syndrome coronavirus 2*. This virus causes respiratory illness, is highly transmissible, and may eventually lead to death. Fatality rates are disproportionately higher for: (i) the elderly (ages 70+); and (ii) individuals with comorbidities.

<sup>4</sup> For daily updates, see the COVID-19 Dashboard from the World Health Organization (WHO), at <https://COVID19.who.int/>. Latest update for this report is as of March 2, 2022.

**Figure 1.2. Contribution to global totals for population and number of COVID-19 related deaths, by region (%), 2020-2022**

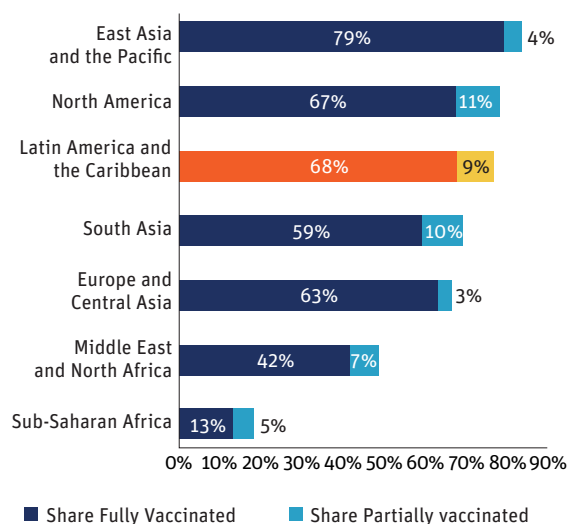


Source: Own elaboration on the basis of information from WHO COVID-19 Dashboard. Updated as of March 2, 2022.

Ecuador) as having been disproportionately affected by excess mortality due to COVID-19<sup>5</sup>.

**Whilst the death toll in LAC has been devastating, some countries in the region have regained control over the immediate health crisis through increased access to vaccines and significant vaccination rates.** As of the end of April 2022, 68 percent of the population in the region has been fully vaccinated<sup>6</sup>, and an extra 9 percent partially vaccinated against COVID-19 (Figure 1.3). Compared to other regions, vaccination rates were low at the start of the pandemic, but greatly increased during the last year to have a larger share of the population vaccinated. Most importantly, however, average regional vaccination figures conceal a large variation among countries. While countries like Chile and Cuba - with 91 and 88 percent of people fully vaccinated, respectively - are atop of the regional ranking, countries like Haiti - with one percent of its population vaccinated - and Jamaica - 23 percent - are very far behind.<sup>7</sup> In general, vaccination rates in LAC show that larger countries in the South America sub-region have been

**Figure 1.3. Share of population fully and partially vaccinated, by region (%), 2020-2022**



Source: Own elaboration on the basis of Our World in Data, April 2022.

more successful in acquiring vaccines and vaccinating its population when compared to countries in the Caribbean.<sup>8</sup>

**The health crisis was just the tip of a giant iceberg that permeated all areas of people's lives, most notably their livelihoods, and here again, LAC was the region most severely impacted.** In fact, when comparing across world regions, we observe that LAC faced a double curse: not only has the region experienced the most severe economic recession to date due to the pandemic, but prospects for recovery in the coming years are projected to be the lowest. In fact, as Figure 1.4 shows, taking 2018 as the base year for measuring the evolution of the growth rate of the Gross Domestic Product (GDP), LAC is the region that experienced the largest decline in 2020 and where forecasted rebound through 2023 will only be at 5 percent of GDP annual growth, 5 times lower than, for example, the East Asia and the Pacific (EAP) region. The world economy is now in a worse position than what was previously expected. In addition to a global economy that has not fully recovered from the pandemic, Russia's invasion of Ukraine

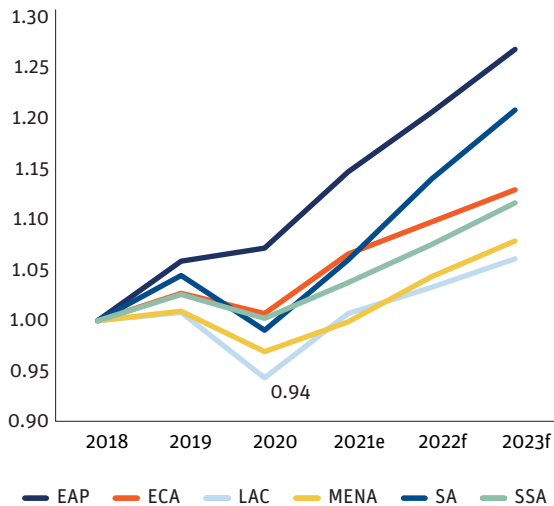
<sup>5</sup> The *excess mortality due to COVID-19* is a concept that has been used in the literature to document the total number of deaths, directly or indirectly, attributable to the pandemic. For the latest systematic review and data compilation from around the world to date, see COVID-19 Excess Mortality Collaborators (2022).

<sup>6</sup> Full vaccination, in this report, refers to the application of the two doses of the vaccine. Partial vaccination refers to one dose.

<sup>7</sup> See WBG COVID-19 vaccine deployment tracker at <https://COVID19vaccinedeploymenttracker.worldbank.org/tracker>. Another very useful complementary source is "Our world in data" at <https://ourworldindata.org/>.

<sup>8</sup> On August 11, 2021, the Pan American Health Organization (PAHO) issued a statement - <https://www.paho.org/en/news/11-8-2021-paho-director-appeals-caribbean-people-get-vaccinated-observe-protective-measures> - addressing the concerning vaccine hesitation in the region, with specific reference to the Caribbean, causing new spikes and outbreaks of the virus.

**Figure 1.4. Index of real GDP growth rate, by region, 2018-2023 (est.)**

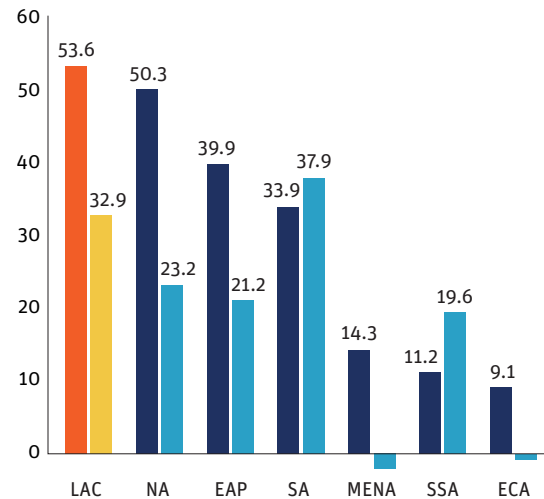


Source: Own elaboration on the basis of WBG's Global Economic Prospects, January (2022) (<https://www.worldbank.org/en/publication/global-economic-prospects>).

has worsened these economic forecasts which are now accompanied by high inflation rates.

**The economic fallout had serious repercussions for LAC, most notably through the sizeable impact on the labor market.** Between 2019 and 2020, LAC was the region with the largest increase in unemployment rates with a dismal 53.6 percent rise in just one year (Figure 1.5), reaching an 11.5 percent average rate of unemployment for the region.<sup>9</sup> Only when comparing the latest estimates for the two-year period comprising 2019-2021, does LAC not come on top. Still, even this two-year average shows an increase in the unemployment rate of 32.9 percent, just one percentage point shy of that for the South Asia (SA) region. In a nutshell, LAC is still an “outlier of the pandemic”, a region where negative effects got exacerbated, leaving deep scars on economies and societies in what was already the second most unequal region in the world prior to the pandemic.<sup>10</sup>

**Figure 1.5. Increase in the unemployment rate during the pandemic, by region (%), 2019-2020 and 2019-2021**



Source: Own elaboration on the basis of IMF's October (2021) World Economic Outlook Database (<https://www.imf.org/en/Publications/WEO/weo-database/2021/October>).

## 1.2 The COVID-19 pandemic and its impact on LAC's education systems to date

**The COVID-19 pandemic triggered not only a worldwide health and economic crisis, but a profound shock to the education sector.** Ever since the pandemic was declared in mid-March 2020, there was one aspect where education systems around the world overlapped fully: their uniform reaction. Almost all<sup>11</sup> countries around the world mandated the complete shutdown of educational institutions (henceforth, “school closures”<sup>12</sup>) and the sudden move of the delivery of education to distance or remote learning<sup>13</sup>. Interestingly, the seemingly equal response to a fairly similar timing of the pandemic (on or around March 2020) generated an unequal effect on regions across the world, depending on: (i) which hemisphere they were located in; and (ii) how their school calendars were organized. Since LAC is the only region whose geographical extension (from Argentina and Chile in the South to Mexico and The Bahamas in the North) spreads across almost equally between the Northern and Southern hemispheres, countries' school calendars vary widely

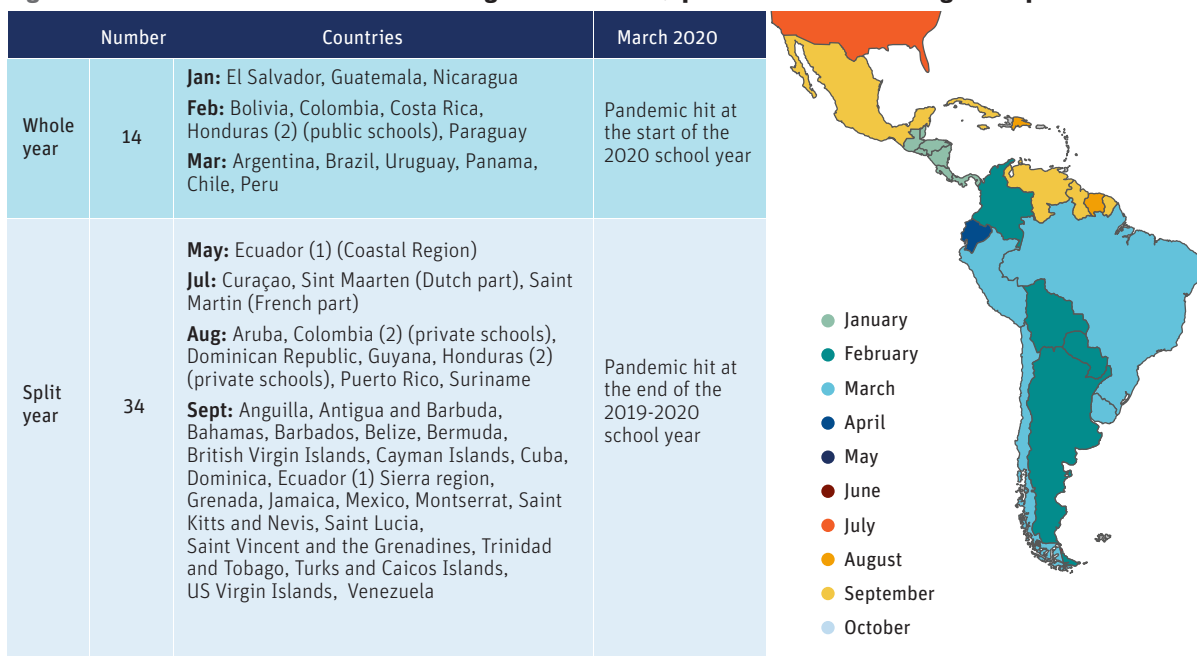
<sup>9</sup> See IMF (2021).

<sup>10</sup> According to the latest update from the World Inequality Database, the most unequal region in the world is the Middle East and North Africa (MENA) region, with LAC coming in second place. See <https://wid.world/news-article/2020-regional-updates/>.

<sup>11</sup> A handful of countries did not follow this pattern. In LAC, Nicaragua for example decided not to close schools at all.

<sup>12</sup> The pandemic led to the generalized shutdown of all sorts of educational institutions (including early childhood, primary, secondary, and post-secondary education institutions). For simplicity, this book refers to this phenomenon with the expression school closures.

<sup>13</sup> Remote learning refers to the teaching and learning process that takes place at a distance, away from the physical school environment. It is a shift from the traditional face-to-face learning. In this report, the expression “distance learning” is used interchangeably with the more established “remote learning”.

**Figure 1.6. School calendars in LAC and timing of the COVID-19 pandemic: Understanding the implications**

(1) Ecuador has different school calendars depending on the region - May-Feb for the Coastal region; Sept-June for the Sierra region. (2) Honduras and Colombia have different school calendars depending on the type of schools - Feb-Nov for the public sectors; Aug-May for the private sector.

Source: Own elaboration on the basis of UNESCO Institute of Statistics (<http://data.uis.unesco.org/#>) and <https://elordenmundial.com/mapas-y-graficos/inicio-del-ano-escolar-en-el-mundo/>. Discrepancies between the table and the map may exist due to the averaging process for each data source.

(Figure 1.6). Hence, while most countries in the Southern Cone – from Chile in the West to Brazil in the East and many Central American countries – had just started their school year 2020, many others in the Caribbean and some in Central America were starting their last quarter of school year 2019/2020. Overall, whereas all 45 countries in LAC had to stop and move to distance learning, students in one-third of these countries (14) were hit at the beginning of their whole-year school year, while those in the other two-thirds (34<sup>14</sup>) were hit at the end of their split-year school year<sup>15</sup>.

**School closures occurred globally following the outbreak of the pandemic but were especially long in LAC.** Beyond the challenges with different academic calendars across the region, more than two years into the

pandemic show LAC as the region with the largest length of full school closures, alongside the SA region. On average, LAC students had their schools fully closed for a dismal 29 school weeks, roughly 7 full months. When considering partial school closures<sup>16</sup>, LAC has had a combined average length of 58 weeks, well exceeding a full year of learning and in-person interaction between students and teachers (Figure 1.7). When disaggregating school closure statistics even further, we find that, on average, LAC schools were closed (or mostly closed) for half of the effective number of school days in the last 2 years (47%). This appalling number increases to 64 percent when considering partial school closures (Figure 1.8).<sup>17</sup>

14 Given that Ecuador and Honduras have dual school calendars, they are taken as two different school systems/countries for the purpose of the calculation of the number for split-year school calendars.

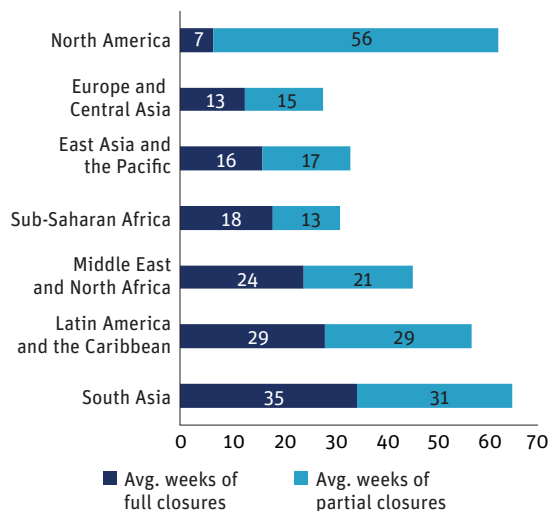
15 Difference in school calendars, given the timing of the pandemic, gave countries with split-year calendars a bit of an edge as they had the possibility of bearing only a partial-year impact of distance learning before entering the summer break, giving them a few more months to adjust with schools closed due to the academic break before entering their new school year 2020/2021.

16 The “partially closed/open schools” category in the UNESCO data is defined as schools that are neither fully closed nor fully open or on academic break.

17 Reporting accurate data and information on the type and intensity of school closures has been challenging for many different reasons, including the unpredictability of the pandemic and the various government responses. Additional challenges lay in the definition of “partially open” school systems and the monitoring of the actual reopening process. There exist variations in the degree of the reopening beyond the “open”, “partially open” and “closed” systems with varied impact on schooling and learning that warrants a differentiated analysis. Further, many countries have rolled out the reopening of schools in different phases, geographic areas, and grades. Last but not least, the *actual* reopening of schools may have not necessarily mean that students attend. This report has undertaken a massive effort to provide a detailed picture for both the type and the intensity of school closures. The methodology is described in Annex 1.2.



**Figure 1.7. Number of school weeks with schools fully and partially closed, by region, March 2020 - March 2022**

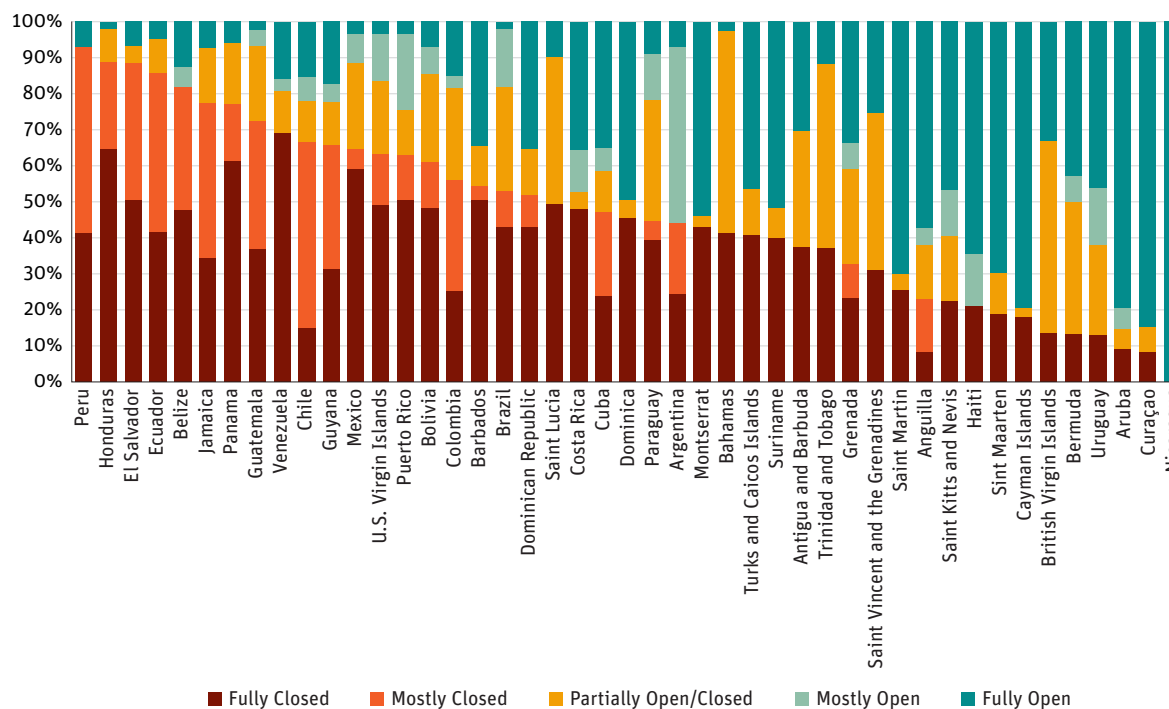


Source: Own elaboration on the basis UNESCO's Global Monitoring of School Closures. Updated as of March, 31, 2022.

During the time already elapsed since the start of the pandemic, progress in the school reopening process has not been linear and has been closely linked to the dynamics of the health crisis. At the beginning of the pandemic, with a virus deemed lethal, unknown, and for which no vaccine existed at the moment, most countries in LAC decided to close schools and offer distance learning. By the end of March 2020, 98% of LAC countries that were not on academic break had their schools completely closed<sup>18</sup>, affecting more than 95% of the total enrollment in compulsory education in LAC. During the second semester of 2020, schools progressively began to open. By December 2020, roughly half of the countries not on academic break (largely Caribbean countries) still had schools fully or mostly closed<sup>19</sup>. At the start of 2021, a second wave of COVID-19 cases led to a temporary setback in the school reopening process. By end-March 2021, exactly one year since the virus outbreak, the situation in LAC resembled very closely that of 6 months back. During the remainder of 2021, with progress in vaccination, including boosters (third doses) already in several countries, the school reopening process showed progress once again. By March 2022, 87% of countries had schools

**Figure 1.8. School closure intensity (%) by country, March 2020 - March 2022**

(share of school weeks, by intensity of closure)

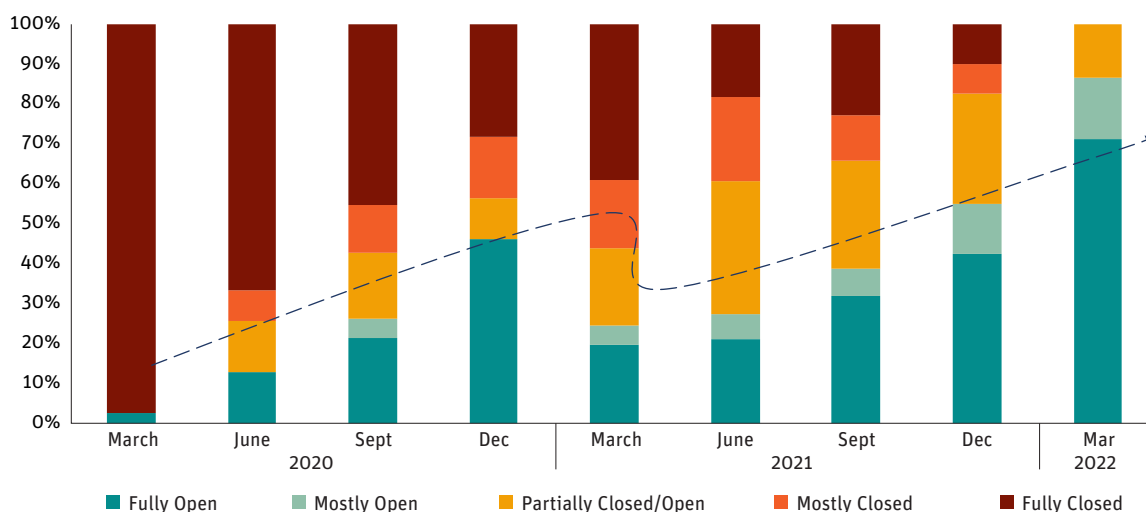


Source: Own calculations based on UNESCO and UNICEF's LAC COVID-19 Education Response Updates from March 1, 2020 through March 31, 2022.

18 Of the 45 countries in LAC, schools were completely closed in 40 countries, on academic break in 4 countries and open in one country.

19 Eleven countries were completely closed, 6 countries mostly closed, 4 countries partially open/closed, 18 countries fully open and 6 countries on academic break.

**Figure 1.9. Dynamics of school closures and reopening in LAC countries, by end of quarter (% of total school weeks by status), March 2020 – March 2022**



Source: Own calculations based on UNESCO and UNICEF's LAC COVID-19 Education Response Updates from March 1, 2020 through March 31, 2022.

fully or mostly open, with the remaining school weeks being partially open/closed (Figure 1.9).

**Whilst the average length of school closures for the region is concerningly long, as compared to the rest of the world, the variation in length across countries in LAC is large.** The information provided in the previous paragraph has been calculated using a country-wide average for LAC, estimated from a total of 45 countries in the region. However, such average masks significant differences.

In fact, 7 countries in LAC had their schools closed for more than three-fourths of the net school time in the last two years<sup>20</sup>, including Mexico, the second most populous country in LAC, with roughly 35 million students of compulsory education age. Conversely, 11 countries had their schools closed for less than one-fourth of the school time to date (Figure 1.10). The School Closure Index<sup>21</sup>, which measures the intensity of the school closure in LAC countries, shows that, on average, countries in Central America (including Mexico)<sup>22</sup> were the ones to suffer the longest school closure spells and countries in the Caribbean the

ones to suffer the shortest, with countries in South America being somewhere in between. In fact, 5 of the top 10 countries of the School Closure Index – Belize, El Salvador, Guatemala, Honduras, and Panama – are located in Central America (Figure 1.11), whereas only 2 of the 10 countries with the shortest school closures – Nicaragua and Uruguay<sup>23</sup> – are not located in the Caribbean.

**Data on the length and intensity of school closures across LAC indicate that countries and governments in the region approached school closures and reopening in different ways.** As was shown, the majority of small island states in the Caribbean were the ones to close less and/or reopen earlier, arguably due to their insular situation, which gave them an edge in terms of border closing and virus spread. Still, some specific Caribbean islands like The Bahamas, Jamaica, Puerto Rico, and the U.S. Virgin Islands were among the top 15 countries with longest spells of school closures. The massive and pervasive school closures have been heterogenous in nature, not only across countries but similarly within. Many countries, including Bolivia,

20 Net school time is equivalent to the actual days of each country's individual academic calendar excluding academic break.

21 The index was created using 5 categories of school closure, as follows: (i) "fully closed" (100% of schools closed); (ii) "mostly closed" (67%+ of schools closed); (iii) "partially closed/open" (ranging from 33% and 67% of schools closed/open); (iv) "mostly open" (67%+ of schools open); and (v) "fully open" (100% of schools open). The index then is built around a maximum value of 400 and a minimum value of 0, and is calculated as per the following formula:

$$\text{School Closure Index} = (\% \text{ of effective school days that schools were "Fully Closed"} * 4) + (\% \text{ of effective school days that schools were "Mostly Closed"} * 3) + (\% \text{ of effective school days that schools were "Partially Closed/Open"} * 2) + (\% \text{ of effective school days that schools were "Mostly Open"} * 1) + (\% \text{ of effective school days that schools were "Fully Open"} * 0).$$

22 With the exception of Nicaragua that did not close schools.

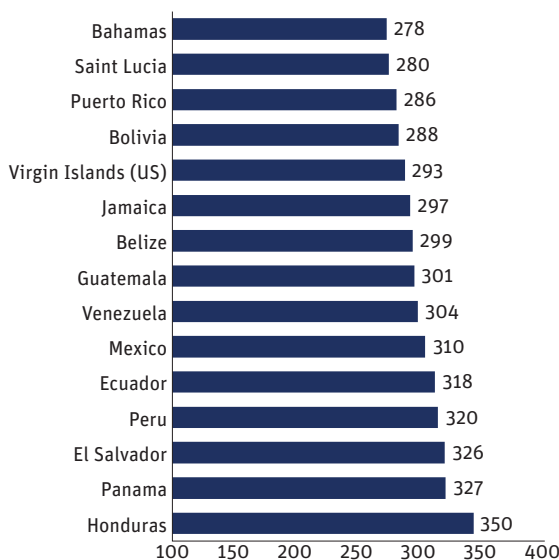
23 In the case of Nicaragua, although all schools never officially closed, student attendance was irregular for several months due to fear of COVID-19 infection. Schools in Uruguay were reopened early, between May and June of 2020, and they remained open, except for April 2021. During remote learning periods, students participated actively through the educational platforms of the CEIBAL Plan.

**Figure 1.10. Summary of school closures for LAC, by country (share of school weeks with schools fully or mostly closed to date)**

School Weeks with Closed or Mostly Closed Schools (% of total)	Number of countries	List of countries
> 75%	7	Belize, Ecuador, El Salvador, Honduras, Jamaica, Panama, Peru
50-74%	13	Barbados, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Guatemala, Guyana, Mexico, Puerto Rico, Saint Lucia, Venezuela, and Virgin Islands (US)
25-49%	14	Antigua and Barbuda, Argentina, Bahamas, Costa Rica, Cuba, Dominica, Grenada, Montserrat, Paraguay, Saint Martin, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, and Turks and Caicos Islands
< 24%	11	Anguilla, Aruba, Bermuda, British Virgin Islands, Cayman Islands, Curacao, Haiti, Nicaragua, Saint Kitts and Nevis, Sint Maarten, Uruguay

Source: Own calculations based on UNICEF, 2021. LAC COVID-19 Education Response Updates from March 1, 2020 through March 31, 2022.

**Figure 1.11. School closure index: Top 15 LAC countries**



Source: Own calculations based on UNICEF, 2022a. LAC COVID-19 Education Response Updates from March 1, 2020 through March 31, 2022.

School Closure Index = [Fully Closed (% of effective school days) \* 4 + Mostly Closed (% of effective school days) \* 3 + Partially open/closed (% of effective school days) \* 2 + Mostly Open (% of effective school days) \* 1 + Open (% of effective school days) \* 0].

Chile, Ecuador, Mexico, Panama, Paraguay, Peru, and Uruguay, initiated the school reopening process in rural areas with lower transmission rates and COVID-19 prevalence. Other countries like Colombia empowered sub-national levels to reopen. Some governments also prioritized return to school for specific groups, including for vulnerable students

and placed emphasis on inclusive practices and provision of adapted learning materials to relevant groups. Some governments also prioritized school reopening for different grades. Evidence from the first year of the pandemic indicates that LAC countries, on average, tended to prioritize return to school for students at the secondary education level. This pattern was slightly different from a few other regions, such as EAP, Europe, and Central Asia (ECA), and the Middle East and North Africa Region (MENA) that rather tended to prioritize return for pre-primary and primary levels (Figure 1.12). Further analysis of and lessons on the school reopening strategy are provided in Chapter 4.

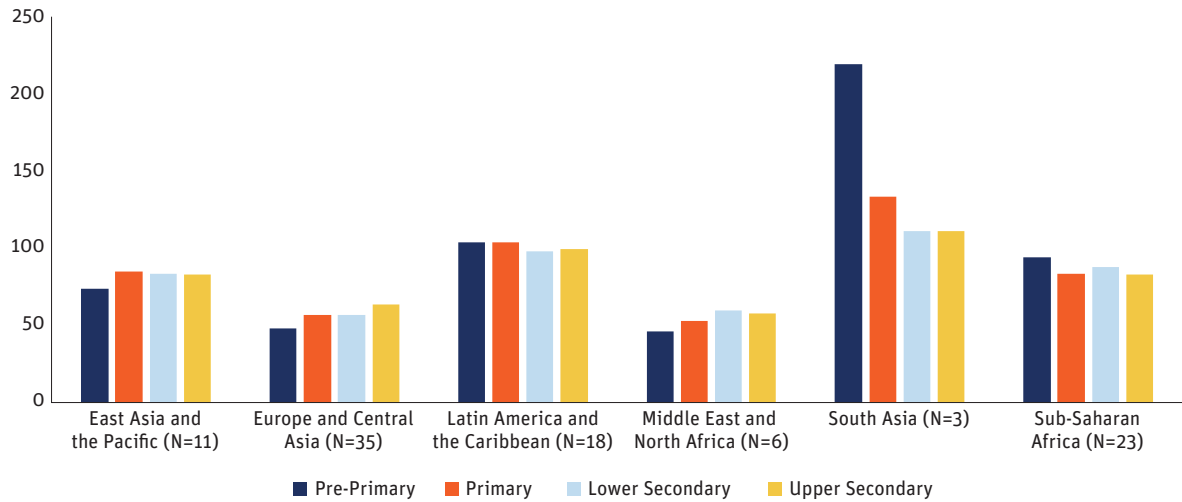
## 1.3 Overview of the remote learning response to the pandemic

### 1.3.1 The elements of a complex remote learning response

Education systems across the LAC region responded to the irruption of COVID-19 and school closures in a strong fashion and undertook notable efforts to continue delivering education remotely during the pandemic<sup>24</sup>. These efforts comprised several aspects that characterized the “distance learning response package”, from the education delivery channels chosen to reach students from afar to the enhancement of needed investments to ensure delivery and inclusion to strategies used for supporting the different actors of the education process (students, teachers, principals, households) along the way.

24 Such innovations are well documented in WBG (2021a).

**Figure 1.12. Average number of instruction days lost during 2020, by level of education and region**



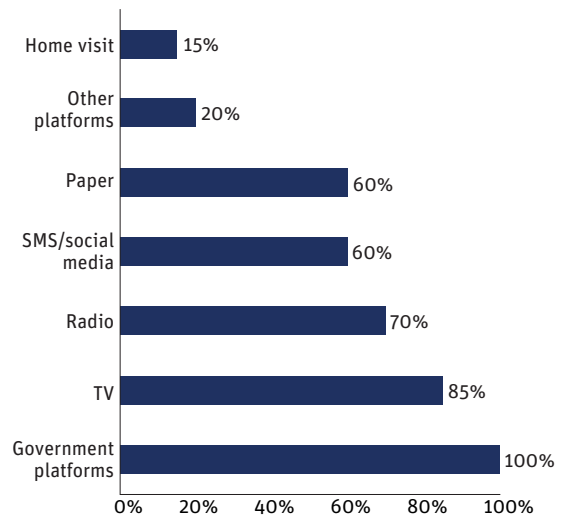
Source: UNESCO, UNICEF, WBG, and OECD (2021b).

As a result, the “remote learning experience during the pandemic” to date has not been a uniform process, but rather a complex enterprise that attempted to accommodate different education delivery modalities (largely remote, and, to the extent that schools were at least partially opened, hybrid<sup>25</sup>), and channels – with a vast array of delivery backgrounds and situations. Hence, distance learning during the pandemic followed a multi-modality multi-channel multi-strategy approach. Such configuration determines that there are several angles that are important to bear in mind so as to adequately understand the implications of the sudden switch in the modus operandi of the delivery process. Beyond the core response package, several countries also developed additional policies and took measures to support student retention and learning, such as early warning systems and curriculum consolidation, but these complementary efforts will be further examined in other chapters, to keep the focus here on the core response.

**One of the most important elements of the distance learning response package was the delivery channel.**

Governments across the region were forced to combine the use of online learning platforms – the default modality for remote learning – with other core elements or tools that could ensure teaching continuity for as many students as possible. Hence, the usage of television (TV), radio programs, usage of text messages/social media, take-home

**Figure 1.13. Channels implemented for learning continuity in LAC during 2020 (% of countries)**



Own elaboration based on Barron-Rodriguez et al. (2021a).

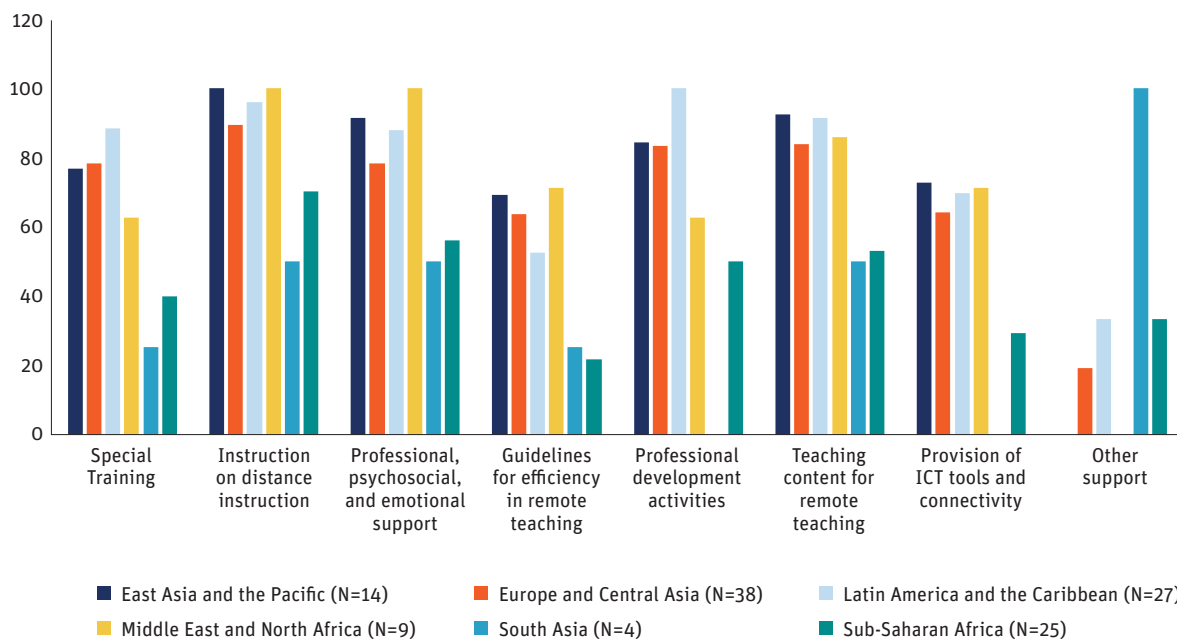
Note: Data for only 20 LAC countries including the latest available data for each country.

learning materials, and even direct home visits were learning channels for many of the students in LAC. In a recent WBG study on the remote learning responses during the pandemic carried out in 20 LAC countries, all of them had developed a government online platform to ensure continuation of education delivery (Figure 1.13).<sup>26</sup> The second

25 Hybrid education implies any combination of in-person and remote learning, opening up an array of implementation possibilities that can be defined through three key features: i) time (when); ii) space (where); and iii) interaction (how). When planning for hybrid education, these three elements are critical aspects to consider when determining what type of teaching should be delivered remotely and what type in-person. See Barron-Rodriguez et al. (2021b).

26 Barron-Rodriguez et al. (2021a).

**Figure 1.14. Support provided to teachers nationwide during 2020, by type of support and region (%)**



Source: UNESCO, UNICEF, WBG, and OECD (2021b).

most used delivery method, country-wise was TV, with 17 of these countries (85%) offering this modality. Other learning channels used - including radio programs, social networks, short-message service (SMS) via cell phones, or printed material - were less prevalent, but still widely used in the majority of the countries.

**Countries also invested substantially in teachers during the pandemic, albeit with a short-term focus.**

This included a variety of interventions, from ensuring that teaching methods were adapted to the new remote and hybrid learning environment, to investing directly in additional teacher training, with specific emphasis on digital skills. Investments in professional development, distance teaching instruction and professional, psychosocial, and emotional support for teachers, were made by a large majority of LAC countries (Figure 1.14).<sup>27</sup>

**To complement investment in teachers, many governments also encouraged the involvement of parents and caregivers, as their participation and support in children's learning was critical.** In LAC, communication between households and schools was most encouraged<sup>28</sup>, as compared

to other regions, and 82 percent of countries encouraged at least four interactions or more between teachers and parents and/or students during school closures (Figure 1.15).<sup>29</sup> In this regard, the LAC region appears to have been the second most committed region in the active pursuit of teacher-parent interactions, behind the MENA region.

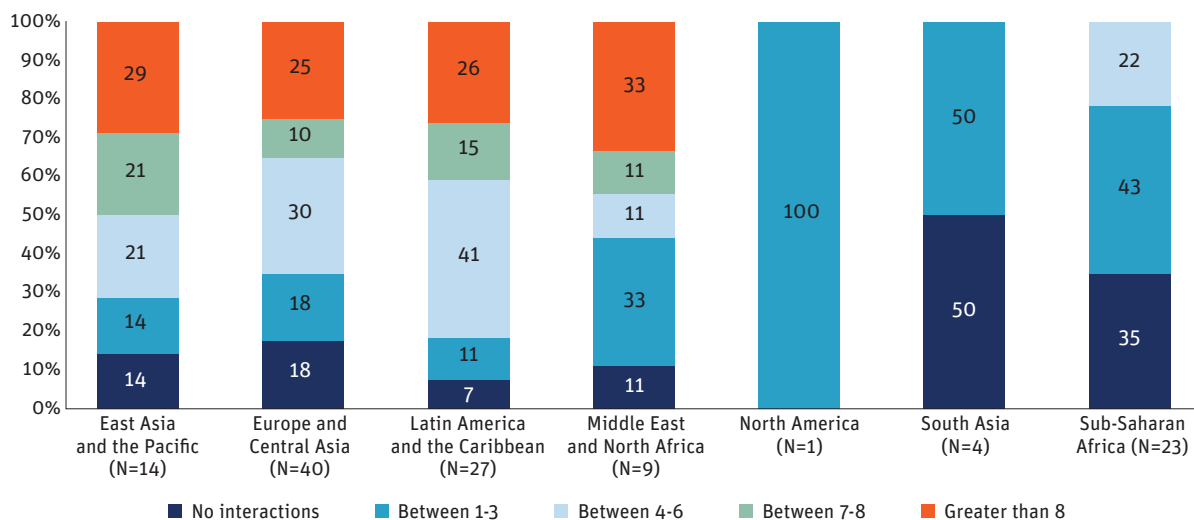
**There were a few LAC countries whose distance learning strategies were relatively successful at enhancing participation.**

One of such experiences was Chile's, which showed that it is possible to utilize multimodal learning solutions effectively (Box 1.1). Chile implemented more than 50 education-related actions to respond to the pandemic to ensure continuation and recovery of schooling and learning, including a multimodal approach using adaptive learning solutions, an online platform, broadcast media (TV and radio) and printed materials, accompanied with critical support for teachers. Another good practice in distance learning education was Uruguay's. This South American country had established an educational technology plan (*Plan Ceibal*) before the pandemic hit. This plan aimed at providing a personal computer to every student in primary and middle public schools, Internet access to all

27 UNESCO, UNICEF, WBG, and OECD (2021b).

28 Beyond online learning interaction.

29 UNESCO, UNICEF, WBG, and OECD (2021b).

**Figure 1.15. Number of interactions encouraged between teachers and parents and/or students during school closures in 2020, by region (%)**

Source: UNESCO, UNICEF, the World Bank, and OECD (2021b).

schools, and a comprehensive set of educational resources and pedagogical services and programs. During the COVID-19 disruption, *Plan Ceibal* adapted and strengthened their services to teachers, students, and families, launching *Ceibal en Casa* (Ceibal at home).<sup>30</sup> It is important to note that both countries effectively capitalized during the pandemic on their pre-existing investment and institutional capacities.

### 1.3.2 The limitations of the remote learning response

**Despite the notable efforts and investments made by most countries in the region to support learning continuity, the remote learning response faced several limitations.** Among the most important factors that posed a challenge to the distance learning response package and, more generally, that have conditioned its reach, participation, and quality, we find five relevant ones: (i) the state of connectivity in the region (quantity and quality); (ii) the access to devices; (iii) the implementation of the response strategy; (iv) teachers' preparedness; and (v) institutional constraints. Each of these factors is explained in more

detail below, followed by initial evidence on the impact of remote schooling in the region.

**Arguably one of the most important challenges faced by the remote learning package was the region's deficit in connectivity.** Recent data compiled for 12 countries in LAC show that roughly only 1 in 4 households have access to Internet (Figure 1.16).<sup>31</sup> Even within this important handicap for the region, there are noteworthy differences across countries. While about 40 percent of all households in countries like Panama and Colombia report having Internet access, such indicator is below 15 percent in Guatemala and Haiti. Access to TV and radio is, as expected, higher in most LAC countries though still far from universal. Available data, using the same source, indicate that 81 percent of households of these 12 participating countries had access to a TV and 70 percent to a radio. Of all the platforms for remote learning access, mobile phones represented the most widespread one, slightly above access to a TV, with 81.3 percent of households in LAC having access to this service. Limited access to Internet has constrained access to remote learning.<sup>32</sup> Internet access is also an issue in schools limiting options for hybrid learning as schools reopen.

30 Students and teachers were given access to virtual learning environments, math platforms, a national digital library, as well as training and support. Families were provided content and guidance on how to support pedagogical continuity as well as socioemotional support. In addition to the digital resources provided by Plan Ceibal, paper-based resources and television broadcasts were made available during the COVID-19 disruptions. See Meinck, S. et al. (2022).

31 Barron-Rodriguez et al. (2021a).

32 Providing education through online platforms where students have limited access to Internet, instead of more low-tech solutions, has been coined as the *remote learning paradox*. This expression describes a scenario where students most at risk are unable to access learning material/resources provided through government delivery channels, as current digital infrastructure is not adequate for this purpose, which is unfortunately a reality in many countries across LAC. See Barron-Rodriguez et al. (2021a).

### Box 1.1. The remote learning experience in Chile

During the school/calendar year 2020 alone, Chilean schools remained completely closed for 27 school weeks due to the pandemic. To mitigate the impact of the pandemic on education outcomes, the Government of Chile implemented a comprehensive multimodal approach to remote learning. The response consolidated more than 50 actions, covering 8 main areas: (1) provision of resources and supplies for connectivity/education continuity; (2) distance learning strategy and channels; (3) reinforced or additional pedagogical materials; (4) flexibility and contextualization; (5) in-service teacher training; (6) strengthening of student retention and drop-out mitigation strategies; (7) socio-emotional well-being; and (8) safe return to face-to-face classes.

The scope of the Chilean response combined with a great level of flexibility, allowing each institution to choose a combination of solutions best adapted to their context, resulted in relatively high levels of engagement and attendance. For example:

- *Aprendo en Línea* (I learn online), an educational platform made available from the first day of suspension of face-to-face classes has had more than 13 million visits, with an average of more than 300,000 weekly users.
- It was complemented by radio (*Aprendo FM*), TV (*Aprendo TV*) programs, and the “*Aprendo en Casa* (I Learn at Home)” program guarantying the same educational material in printed format, especially to rural schools and those with limited connectivity.
- An agreement was also made with Athena, the Mobile Telephone Association of Chile to ensure free downloads of texts and access to their learning material, and with google and Fundación Chile to facilitate access and technical support. Their digital library has more than 10,000 free books available.

Four strengths of the actions implemented by Chile, as compared to benchmarked countries were:

- The response package was quick and high-quality.
- Areas within the package showed a good overall alignment and coordination, leading to a coherent and comprehensive approach.
- Centralized proposals were offered with a great level of flexibility, allowing each educational institution to choose among those best aligned with their individual context.
- Many of the actions implemented have the potential to become long-term strategies.

Sources: MINEDUC-Chile and WBG (2022); and Bellei et al. (2022).

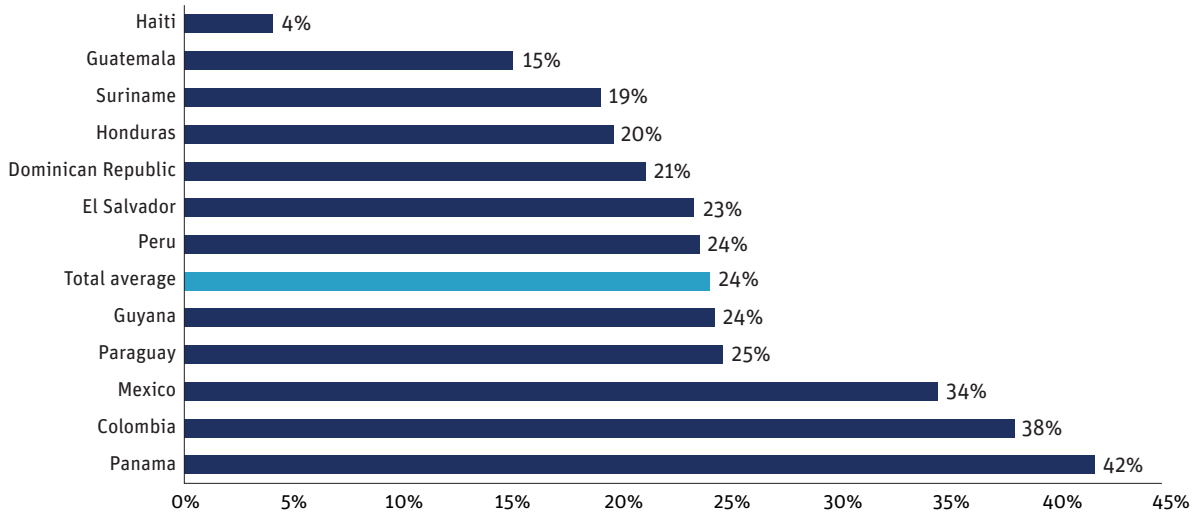
**Constraints are stronger for the most vulnerable groups.** And this obstacle disproportionately affected specific groups insofar as access to Internet and electricity, essential ingredients to the success of virtual learning, is unequally distributed in LAC, disproportionately affecting poor children in rural areas, and other vulnerable groups such as indigenous children and students with special

needs<sup>33</sup>. Indeed, while access to electricity in LAC is almost universal in most urban areas, only one in every 10 households in rural areas has access to electricity<sup>34</sup>, limiting its capacity to benefit from remote learning opportunities. In Panama, less than 15 percent of the households in the bottom wealth quintile have access to Internet as compared to almost 100 percent of households in the top

33 Rieble-Aubourg and Viteri (2020).

34 WBG et al. (2021).

**Figure 1.16. Internet access across LAC, selected countries (%), latest year available**



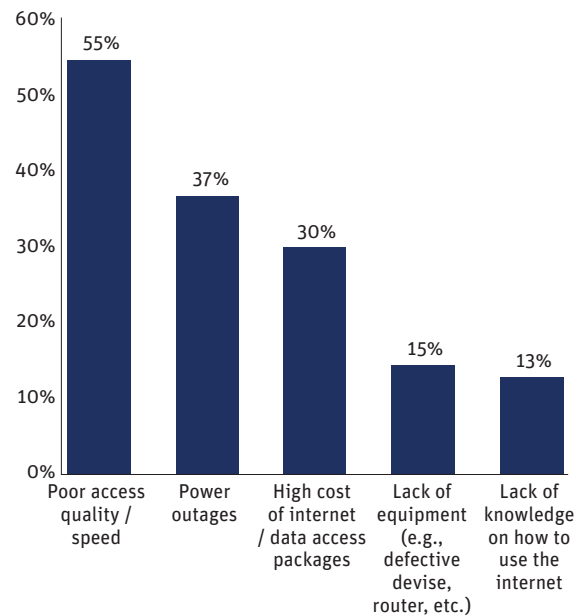
Source: Own elaboration based on Barron-Rodríguez et al. (2021a). Note: Data for LAC includes 20 countries including the latest available data for each country.

wealth quintile.<sup>35</sup> In addition, according to estimates from UNICEF and ITU (2020), about 10 percent of all children in LAC who are enrolled in primary and secondary school (amounting to 13 million students) live in areas where Internet cannot be even deployed.

**Even when households have access to the Internet and electricity, services often have ben intermittent and of poor quality.** Available data from the World Bank High-Frequency Phone Survey (HFPS)<sup>36</sup> indicate that a significant share of LAC children living in a household with access to the Internet cannot fully take advantage of on-line learning opportunities. More than half of all families who participated in the survey indicate that the quality of the Internet is poor. In contrast, over one-third indicated that power outages or high-service cost limited their Internet access (Figure 1.17).

**Beyond connectivity, access to devices further impacted the reach to and participation in online learning.** For example, in Colombia, Ecuador and Peru, less than 50 percent of all primary students have a computer at home, which points to very low device access rates to effectively

**Figure 1.17. Households in LAC that reported having problems accessing the Internet (%), mid-2021**



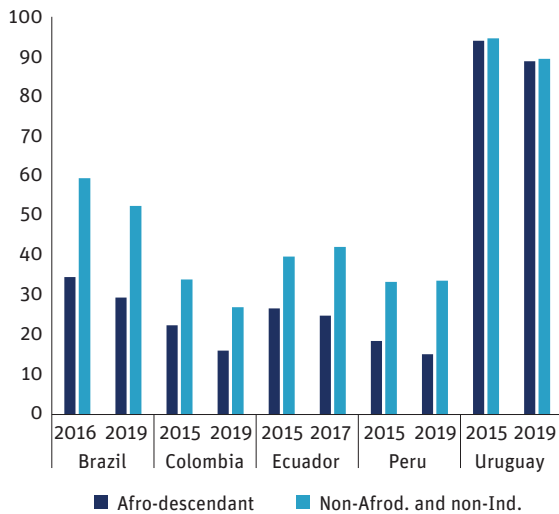
Source: Own elaboration on the basis of LAC's HFPS, Phase II, Wave 1.

<sup>35</sup> UNICEF (2021d).

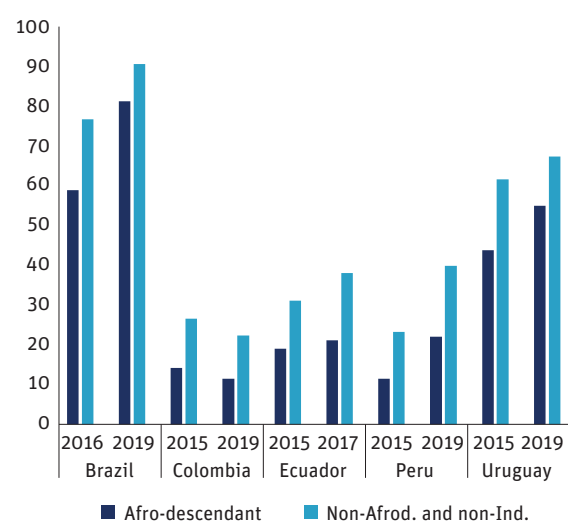
<sup>36</sup> The HFPS is an effort originally led by the Poverty and Equity Global Practice of the WBG. The HFPS collects data on the effects of and responses to COVID-19 across different themes such as labor markets, income, health, gender, food security, education, connectivity, and finance. Detailed microdata for the HFPSs for specific countries or regions can be obtained at <https://microdata.worldbank.org/index.php/catalog/hfps?page=1&ps=15&repo=hfps>. In LAC, the first phase was collected in 2020 in 3 waves – May, Jun/July and August – and included 13 countries. The second phase, developed in partnership with the United Nations Development Program (UNDP), was collected in 2021 in 2 waves – May/July and October/December – and added 11 more countries. The HFPS Phase II, Wave 1 covered an average of 1,150 individuals per country and was nationally representative of all individuals aged 18 or above who have access to a phone in the given country. For further details on the HFPS for LAC, see WBG (2021b).



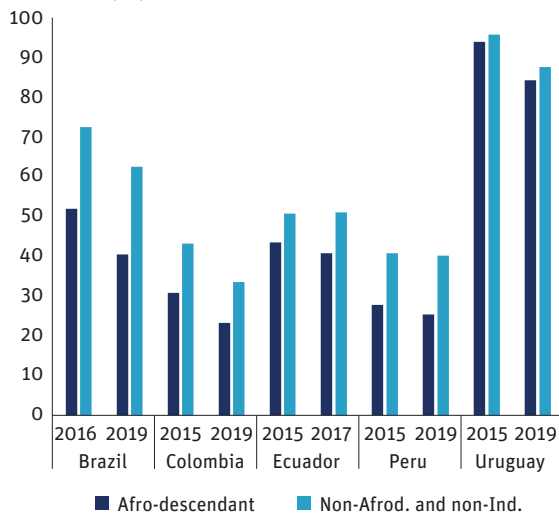
**Figure 1.18a. Share of primary students with a computer in the household by ethnic origin, selected countries (%)**



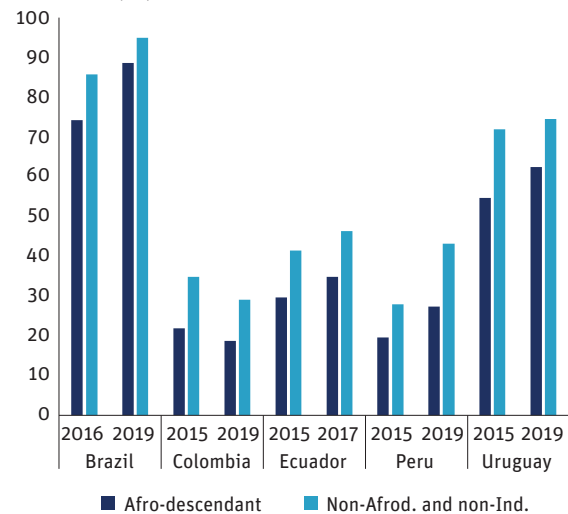
**Figure 1.18b. Share of primary students with Internet in the household by ethnic origin, selected countries (%)**



**Figure 1.18c. Share of secondary students with computer in the household by ethnic origin, selected countries (%)**



**Figure 1.18d. Share of secondary students with Internet in the household by ethnic origin, selected countries (%)**



Source: WBG (forthcoming), pp. 31-33.

utilize online learning modalities.<sup>37</sup> Students from lower socio-economic backgrounds, rural areas or specific ethnic/indigenous origin were disproportionately affected. In LAC, Afro-descendant students have lower access to a computer at home and to Internet in the household, both in primary and secondary education, as compared to their non-Afro-descendant non-indigenous peers (Figures 1.18a-1.18d).<sup>38</sup> In Brazil, for example, only about one in three

Afro-descendant students have access to computers at home, while more than half of white students do.<sup>39</sup>

**Another important determinant of the reach, participation in and quality of the remote learning package was the implementation strategy, or the way various delivery channels were deployed, which it is difficult to get right.** Whilst many countries developed distance learning

37 WBG (forthcoming).

38 Except in Uruguay, where the implementation of Plan Ceibal and one-computer-per-child has been successful in bridging this gap.
















































39 WBG (forthcoming).






strategies during school closures in LAC, new studies suggest that their implementation differed, thereby presenting different challenges and varied effectiveness. Figure 1.19 presents a snapshot of the different strategies followed by Chile, Brazil, Peru, and Uruguay, with varied remote learning channels. As can be seen, most countries have been using multimodal solutions, but they combined them differently. For example, Brazil and Peru did not use adaptive software for the deployment of their strategy, while Uruguay did not recur to radio programs or printed take-home materials. Similarly, online sessions in Chile and Uruguay did allow for synchronous learning, but not in Brazil or Peru. On the contrary, while TV programs in Brazil and Peru allowed for interactivity, such feature was not available in either Chile or Uruguay.

**These differences matter because each distance learning channel and instrument has its own strengths, limitations, and requirements (see Annex 1.1).** For instance, paper and printed material are essentially low-tech tools for

which connectivity is not a limitation, yet they require an especially strong regular communication stream between households and teachers. Both SMS/phone calls and TV/radio programs are considered low/medium-tech channels, expanding the reach possibility for many students, but also require robust follow-up and TV/radio programs are not always high quality. For instance, recent evidence from the Dominican Republic, where printed booklets and TV programs were the most used solutions for distance learning, showed that the usage of the material dropped over time and that significant parental involvement was required to efficiently utilize the resources provided (Box 1.2).<sup>40</sup> On the other hand, Internet-based strategies, the highest-tech, can potentially propose higher-quality solutions, but are affected by both access to and quality of connectivity, as well as by teacher digital capabilities. What is at stake here is both the capacity to combine well different delivery channels and to provide high-quality learning experiences regardless of the platform (which entails a broader view on the quality of the overall response strategy).

**Figure 1.19. Remote learning implementation strategy in LAC during 2020, selected countries<sup>41</sup>**

Country	Remote Learning Channels				
	Adaptive Software + Teacher Support	Online sessions + Teacher Support	TV + Teacher Support SMS	Radio + Teacher Support SMS	Printed Material + Teacher Support
 Chile	   	  	  		
 Brazil		  	  		
 Peru		  	  	 	
 Uruguay	   	  	  		

-  The Government implemented the remote learning channel
-  The Government did not implement the remote learning channel
-  Remote learning channel allowed for interactivity
-  Remote learning channel allowed for synchronous learning
-  Remote learning channel allowed for adaptive learning

Source: MINEDUC-Chile and WBG (2022).

40 WBG (2022b).

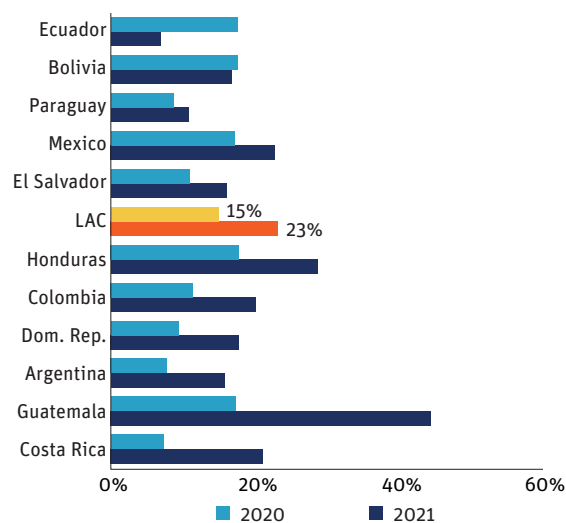
41 This figure was made based on a World Bank study (2022) worked together with the Chilean Education Ministry which compares remote learning implementation strategies through specific characteristics among five delivery channels and five implementation dimensions with a focus on South American countries. Nonetheless, for a comprehensive review of the multiple platforms implemented by 33 LAC countries, including Central America and the Caribbean, see: <https://www.unicef.org/lac/en/online-education-platforms-and-resources>.

**For effective implementation of any learning modality, the role of the teacher is critical, but despite the efforts made, teacher readiness remained an issue.** Evidence is indicating that many teachers did not feel prepared for the transition to remote learning modalities and overwhelmed by the new requirements.<sup>42</sup> A teachers' survey conducted in mid-2020, that included eight countries in LAC, showed that 57 percent of the respondents agreed that weak technological skills were one of their main challenges during the health crisis<sup>43</sup>. The same survey reflects that 66 percent of the teachers had completed the digital skills training offered by their own schools, national ministries, international organizations, and local non-governmental organizations (NGOs), but just 56 percent of those trained teachers perceived that they were ready for effective remote teaching. Further evidence on digital skills is provided in Chapter 3.

**Finally, institutional constraints also limited the effectiveness of the remote learning response.** Many countries did not have the institutional capacity to rapidly cope with the pandemic and to adapt to everyday's new challenges while providing good quality remote learning. Most ministries of education did not have the capacity to monitor the usage of remote delivery systems for education or students' engagement and learning. They did not have the technical teams in place and the capacity to continually monitor and evaluate education processes and outcomes to understand if the whole education strategy was being effective.<sup>44</sup>

**Emerging regional evidence confirms that remote education delivery, especially with the limitations and characteristics above, has fallen short of ensuring participation.** Recent evidence, collected through multiple waves of the HFPS led by the World Bank, indicates that massive school closures and transition to remote schooling have had a negative impact on engagement rates in the region, measured as participation in any learning activities at home.<sup>45</sup> Following the school closures, around 1 of 4 students, who had not left the education system, was not actively engaged in any learning activity by May/July 2021 (Figure 1.20). The increase of 54 percent in student disengagement is alarming, and as compared to before the

**Figure 1.20. Disengagement rate, by country (% of student-age population), 2020 vs 2021**



Source: Own elaboration on the basis of LAC's HFPS, Phase II, Wave 1.

pandemic, significant in many countries. In Guatemala, student disengagement was registered at 45 percent in 2021, which as compared to 17 percent before the pandemic represents an increase of 156 percent, in Costa Rica the increase was 192 percent, from 7 to 21 percent in 2021. The increasing disengagement in Dominican Republic is consistent with the very few hours a day of study reported by parents, especially for primary education students (Box 1.2). Based on limited access to connectivity and computers, it is also expected that participation across the region was weaker for the most vulnerable groups (as will also be seen with overall attendance in the next chapter).

**There are also strong indications that the quality of remote learning has been highly problematic in the region.** First, and in alignment with the institutional constraints highlighted above, according to the latest UNESCO-UNICEF-World Bank-OECD survey on Government responses to the pandemic in the education sector, few governments have prioritized continuous assessments and evaluations on the effectiveness of remote learning strategies<sup>46</sup>, which has constrained the monitoring of these

42 Barron-Rodriguez et al. (2021a).

43 Herrero-Tejada et al. (2020).

44 Barron-Rodriguez et al. (2021a).

45 The "engagement" and "disengagement" indicators come from question 8 of the Education Module in the HFPS, asking if the individual participated in any learning activities at home during the previous week. Percentages (rates) are adjusted for academic break periods. It is worth noting that this indicator of engagement does not measure the quality of engagement, i.e. the quality of the work being done. Therefore, it is arguably not possible to fully assess the impact of the pandemic through this metric.

46 This is an issue because this means that important variables to evaluate the effectiveness of remote learning strategies to identify areas of improvement are currently not adequately monitored in the region. See UNESCO, UNICEF, WBG, and OECD (2021a).

### Box 1.2. Assessing the effectiveness of remote learning in the Dominican Republic during school closures

Governments around the world have designed and implemented different strategies to mitigate learning and schooling losses caused by the school closures during the pandemic. The Dominican Republic (DR) designed the “Education for All while Preserving our Health” strategy. The strategy included five pillars and focused on developing educational materials and tools for students, facilitating connectivity and access to devices for distance learning, and training for teachers and school principals. The strategy also strengthened the administrative data collection to monitor distance learning.

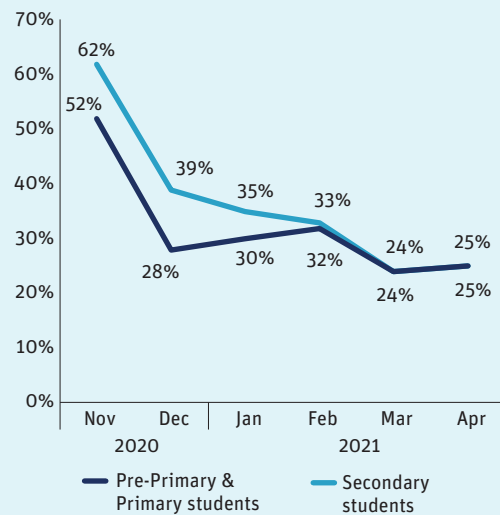
The implementation of the strategy was recently assessed, providing a comprehensive understanding of the functioning and challenges of distance learning in the DR during the pandemic from the perspective of different actors. The report, prepared by the World Bank, uses findings from a nationally representative household telephone survey with 800 households with school-aged children enrolled in public schools before the pandemic, television ratings for educational programs, as well as a nationally representative phone survey with 454 school directors from public schools.

The study found that the usage of distance learning material dropped over time. Primary student usage of the TV distance learning programs was 52 percent in November 2020 but dropped to 25 percent by April 2021 (Figure B.1.2.1). In addition, the time students viewed the program in April 2021 was between 10-12 percent of the total program duration.

Parental perception indicators collected in that study suggests that students could have certain lags when they return to face-to-face classes. Less hours of study time per day could mean less learning. Average study hours during distance learning have been low for all students. Parents reported that 47% of high-school students and 66% of elementary students studied on average less than 3 hours a day. With low average hours of study, it is likely that learning was also low. For elementary school, 9% reported that they studied less than an hour per day or nothing at all. Furthermore, 60% of parents of both primary and secondary education students agreed in that their children learned less during remote learning than when education was face-to-face. This percentage rises to 84% for primary school principals and 88% for secondary school ones.

Source: WBG (2022b).

**Figure B.1.2.1. Dominican Republic: Proportion of students that watched distance learning programs in Gran Santo Domingo and Santiago (% of students aged 4-17)**



Source: WBG (2022b).

strategies and the measurement of their quality. Second, when there have been assessments, evidence collected in a few countries confirmed sub-optimal satisfaction rates. In Peru, for instance, 67 percent of parents were satisfied with the content and delivery remote learning through TV, 57 percent through radio and 80 percent through the

online learning platform *Aprendo en Casa* (I learn at Home), which shows clear margins for improvement.<sup>47</sup> In the Dominican Republic, 60 percent of parents and 88 percent of teachers contended that student learning had suffered through remote learning as compared to in-person delivery. Third, the reopening of schools and emerging learning

47 Barron-Rodriguez et al. (2021a).

assessments are starting to make it eminently clear that this is just the “tip of the iceberg”. As documented in Chapter 3, although Peru and Brazil successfully reached 85 and 75 percent of students, respectively, by implementing multimodal delivery systems, even allowing for teacher-student interaction, learning losses are expected to be sizeable.

## 1.4 Key takeaway messages

**The combined impact of the health, economic and education crises induced by COVID-19 disproportionately affected the LAC region.** The region ranked atop of the world ranking in terms of the: (i) number of COVID-19 related deaths – both absolute and per million inhabitants; (ii) largest impact on GDP (both during the pandemic and projected into the next two years); and (iii) share of school weeks with schools closed or mostly closed in the last two years. This three-fold curse impacted the lives, livelihoods and human capital formation of LAC’s population, in particular that of children and adolescents.

**The education systems of LAC made a huge effort to cope with the pandemic and ensure learning continuity with remote learning strategies.** However, the response faced several limitations due to a multiplicity of factors, the most prominent being: (i) the uneven state of connectivity in the region; (ii) the limited access to devices needed for distance learning; (iii) the complexities in the implementation of the specific response strategy; (iv) the lack of teachers’ preparedness for remote learning; and (v) institutional constraints. The combination of these factors eventually impinged upon the effectiveness of remote learning.

**Overall, an important lesson derived from the global and LAC evidence is the need for a comprehensive approach to remote learning, with focus on access, quality, and governance.** The emergency strategies implemented by various countries were not all that effective to overcome the challenges of the needed large-scale transformation. Critical lessons have included the need to use multiple modalities of remote learning in a complementary fashion and upskill the capacity of all agents involved in the education process (students, teachers and directors, parents or caregivers, and governments) to provide high-quality remote instruction and continuously monitor and evaluate the usage, engagement, and effectiveness of the remote learning strategy for successful real-time decision making. Chile and Uruguay are two examples of multi-modality approaches to remote learning that have worked through a wise combination of instruments within the response package, but also by harvesting on prior investments in education technologies and pre-existing institutional capacity. Peru’s Ministry of Education started in April 2020 to supervise the adoption of the national remote learning program, students’ satisfaction, and the proportion of teachers providing constant feedback to students, with encouraging results<sup>48</sup>. At the same time, coordination between key players to mobilize financial and human resources and solve logistical problems is fundamental.<sup>49</sup>

**However, it is also clear that, even under the best scenario, remote learning cannot replace in person education.**<sup>50</sup> Engagement and quality have been an issue across the board for remote learning, and the consequences of the combination of school closures and this limited effectiveness will become abundantly clear in the next two chapters when discussing impacts on schooling and learning.

48 Ibid.

49 Muñoz-Najar et al. (2021).

50 WBG (2021a) and WBG et al. (2021).



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## Chapter 2

# The impact, so far, of the COVID-19 pandemic on schooling

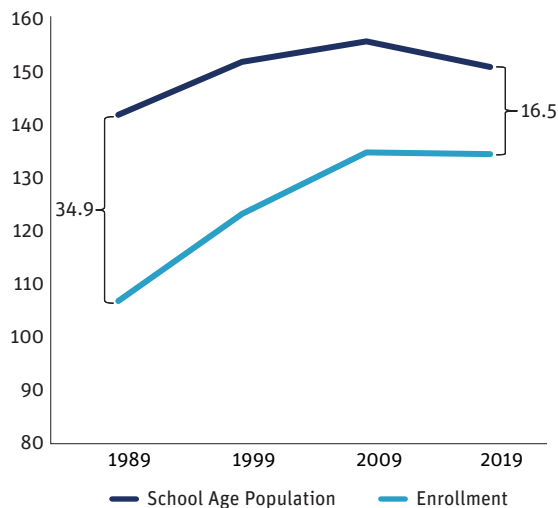
**T**he pandemic generated a silent crisis in the education sector of the LAC region and only understanding the magnitude of the impact could help gauge how deep it was. As was discussed in Chapter 1, the irruption of the COVID-19 brought about a heavy health and economic toll on countries all over the region. But an equally, though sadly less loud, crisis was kicked off in the education sector upon the massive shutdown of educational institutions that took place since. As documented, the intensity of school closures was such that, on average, the typical student in LAC missed one full year of in-person education. The impact of the disruption from this unprecedented exogenous shock permeated all aspects of the educational delivery process, generating a tremendous impact on the schooling and learning process. These next two chapters attempt to understand the breadth, depth and characteristics of the impact. To place the analysis in perspective, the chapters take a two-fold approach. First, they assess the impact on a few educational outcomes, starting by arguably the two most important - schooling and learning - and then continue with other outcomes that were put to test in the context of the pandemic. Second, when possible, they carry out an ex-ante and ex-post analysis, taking stock of the status of the outcomes prior to the COVID-19 outbreak and after the hit. This chapter focuses on schooling outcomes.

## 2.1 The state of schooling prior to the pandemic: A positive outlook with good prospects

**Over decades before the COVID-19 pandemic, compulsory education attendance had been consistently increasing across the LAC region.** As Figure 2.1 shows, in 1989 the out-of-school population (OOSP)<sup>51</sup> in LAC comprised approximately 34.9 million children and adolescents. As of 2019, 30 years later, this number had been more than halved (53% decrease). As a result, prior to the pandemic outbreak, the estimated OOSP comprised around 16.5 million school-aged students. This number represented roughly 11% of the total population of compulsory school age. In other words, on average only 1 in 10 school-aged students in LAC did not attend school prior to the pandemic. However, even if still large in absolute terms, the OOSP 30 years earlier was 25%, meaning that 1 in 4 students of compulsory-education school age did not attend school. In sum, half a percentage point of OOSP was being cut yearly before the pandemic outbreak.

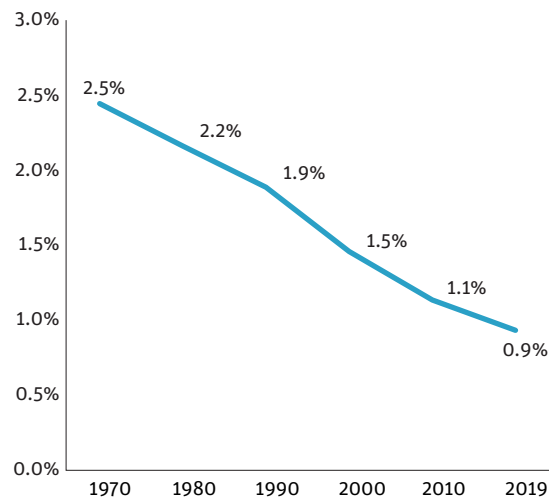
**The reasons behind the progress in school attendance over the decades in LAC were varied.** One of the drivers was the demographic transition, a worldwide trend that had its own dynamic in LAC, but that led to progressively smaller-sized incoming cohorts into the region's education

**Figure 2.1. Enrollment vs. school-age population in LAC (million), 1989-2019**

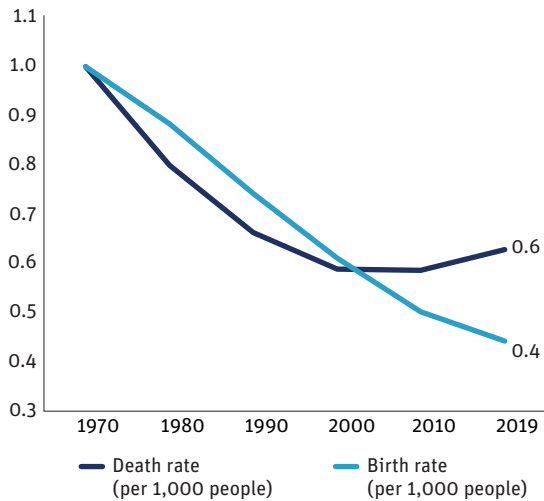


Source: Own elaboration on the basis of UNESCO Institute for Statistics.

**Figure 2.2. Population growth rate in LAC (%), 1970 - 2019**



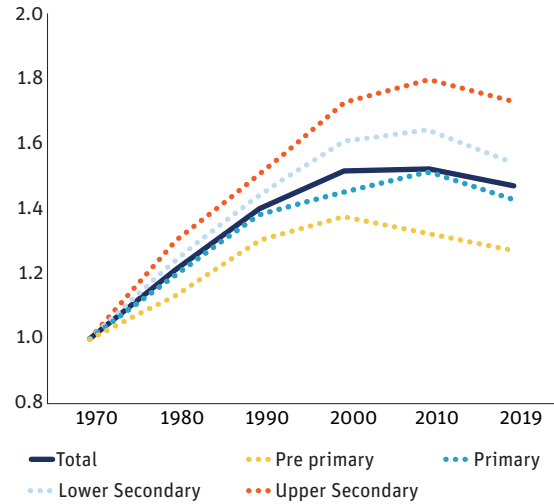
51 The OOSP is measured as the difference between the school-aged population for compulsory levels of education - i.e. the number of children and adolescents of the age range for which compulsory education grades are set in a given school system - and the number of students of the same age range who are enrolled in school at any level of education.

**Figure 2.3. Death rate index vs. birth rate index in LAC (per 1,000 people), 1970-2019**

Source: Own elaboration on the basis of UNESCO Institute for Statistics.

systems with the population annual growth rate falling from 2.5% in 1970 to 0.9% in 2019 (Figure 2.2). A second driver was the dramatic increase in education enrollment, especially at the bottom of educational trajectories, with the sizeable expansion of early childhood education (ECE) coverage, mostly driven by a consolidated approach towards ensuring universal access to pre-primary education access in the region. The third key driver was the decrease in drop-out rates across the board in compulsory education, but most notably in the secondary education levels (lower and upper). The following paragraphs provide a quick snapshot of each of the three drivers.

**Demographic change in LAC was one of the drivers that contributed to the progressive reduction in the OOSP.** The strong demographic change that took place in LAC in the last 50 years worked as an exogenous change that, other factors constant, helped reduce pressure on education systems across the region by decreasing the size of incoming cohorts. In fact, the birth rate in LAC decreased more than 50% in the last 50 years (Figure 2.3) while the death rate did not fall more than 40%. This significant change in demographics

**Figure 2.4. School-age population index, LAC (total and by education level), 1970-2019**

helped ensure a quicker “catch-up” between the school-aged population and schooling enrollment, as shown previously in Figure 2.1, especially starting in the 2000s. As of 2019, the school-aged population at all levels (pre-primary to upper secondary) was declining (Figure 2.4). Arguably then, it could be assumed that demographics helped ease the financial burden for school systems to increase coverage rates or, alternatively, that policies aiming to increase schooling attendance may have found an “exogenous ally” that may have contributed to reduce the OOSP.

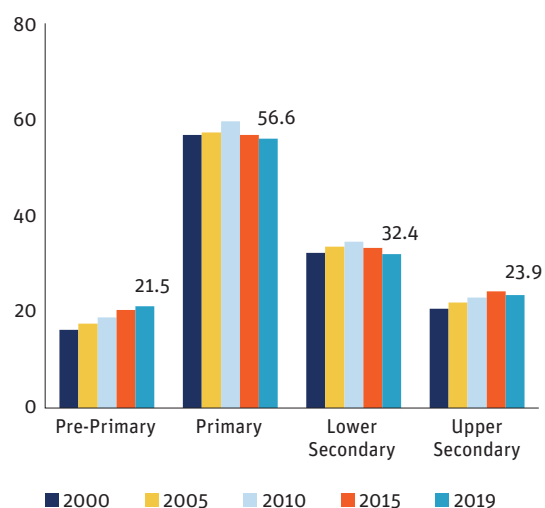
**One of the most important drivers in the reduction of OOSP in LAC was the increase in the compulsory education coverage rates in the region.** In fact, as of 2019, prior to the pandemic outbreak, around 134 million children and adolescents of compulsory education age were enrolled in school<sup>52</sup>. As hinted above, this meant that roughly 9 in 10 students who should be attending school, given their age, were already in the system (Figure 2.5). As shown above, increased enrollments, coupled with a declining school-age population, led to increasing coverage rates<sup>53</sup>. Hence, right before the arrival of the pandemic, the

52 This report refers to compulsory education levels of education to the four levels of education (pre-primary, primary, lower secondary and upper secondary) for which at least one country in LAC has confirmed the full given level as compulsory by law. In fact, compulsory education laws in LAC present significant differences across countries because of at least the four following reasons: (i) different levels of education have a different number of years of education (e.g. primary education could last 6 or 7 years); (ii) different levels of education have different starting age (6 years of age or 7 years of age); (iii) some countries do not set compulsory education by levels of education, but by age groups covered within a given level (e.g. the kindergarten year for pre-primary); and (iv) age groups are defined differently in different laws (e.g. the last year of upper secondary education could be for 17-year-olds or for 18-year-olds or for a combination of the two). For a comprehensive review of the age groups for which compulsory education laws are set for each LAC country, see Annex 2.1.

53 All pre-primary indicators presented in this section are calculated based on gross enrollment while indicators for primary, lower secondary, and upper secondary are based on net enrollment. Gross enrollment rate is defined as the number of students enrolled for a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education.

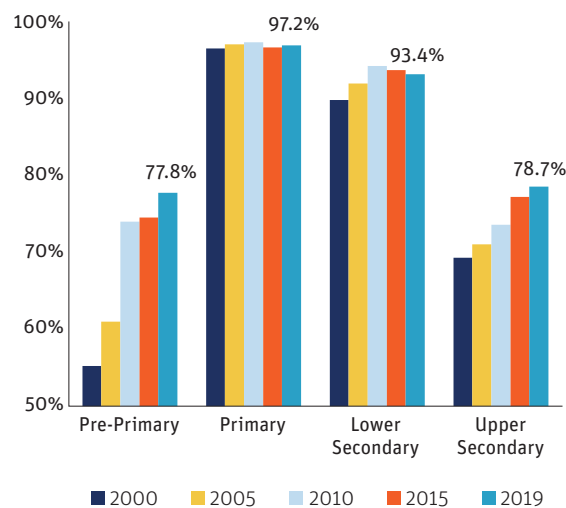


**Figure 2.5. Total enrollment in LAC, by level of education (million), 2000-2019**



Source: Own elaboration on the basis of UNESCO Institute for Statistics.

**Figure 2.6. Net enrollment rate in LAC, by level of education (%), 2000-2019**



primary and lower secondary education levels presented almost universal coverage, with net enrollment rates of about 97% and 93%, respectively. At opposite extremes of the compulsory education trajectory, though, pre-primary and upper secondary education levels presented lower coverage rates, reaching 78% and 79%, correspondingly. Of importance, by 2019, the net enrollment rate for LAC had increased with respect to 2000 at every level of compulsory education, with effects most noticeable in pre-primary (with a sizeable increase, especially between 2005 and 2010) and in upper secondary education (Figure 2.6).

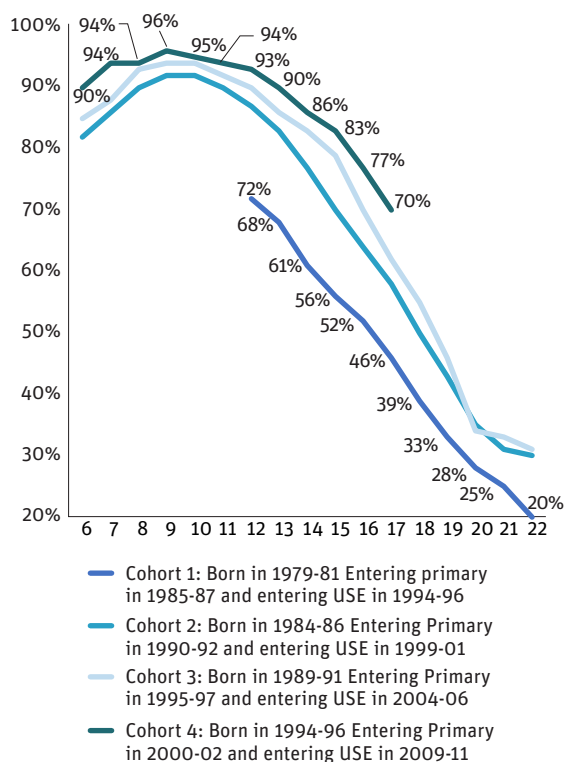
**Other important drivers in the reduction of OOSP in LAC were the decrease in drop-out rates in compulsory education, most notably at the lower and upper secondary education levels, and the increase in graduation rates.**

As Kattan and Székely (2017) document in their cohort analysis of school dropout in the LAC region<sup>54</sup>, significant progress was achieved since 1979 or so. In fact, while the cohort of LAC students born in the 1979-1981 period had, on average, only 1 in 2 students enrolled in upper secondary education (USE), the cohort of students born 15 years later (in the 1994-1996 period) had 7 students out of 10 attending USE (Figure 2.7). In addition, not only did later cohorts show a lower share of USE-aged adolescents not

attending school, but also improved internal efficiency – with a lower share of the age group attending lower levels of education, i.e. primary or lower secondary (LSE), due to repetition or overage problems (Figure 2.8). The authors hypothesized that two factors have apparently contributed to lowering drop-out rates over time in the region: (i) increased returns to education over time; and (ii) an “income effect”<sup>55</sup>. Increasing returns to education over time have also been a reason identified by Bassi et al. (2015) to explain the improvements in enrollments as well as graduation rates and decrease in dropouts. Other explanations also pointed out by these authors included more resources allocated to education and the implementation of policies to help students stay in school, including welfare programs increasing the demand for schooling.

**As a result of these trends, before the COVID-19 pandemic, the OOSP, both in absolute terms and as a share of the school age population, was consistently decreasing over time across education levels.** As of 2019, from the 16.5 million school-aged children and adolescents that were out of school, 6.1 million were out of pre-primary education, 1.6 million out of primary, 2.3 million out of LSE, and 6.5 million out of USE (Figure 2.9). All of these values, with the exception of those for LSE, were at their

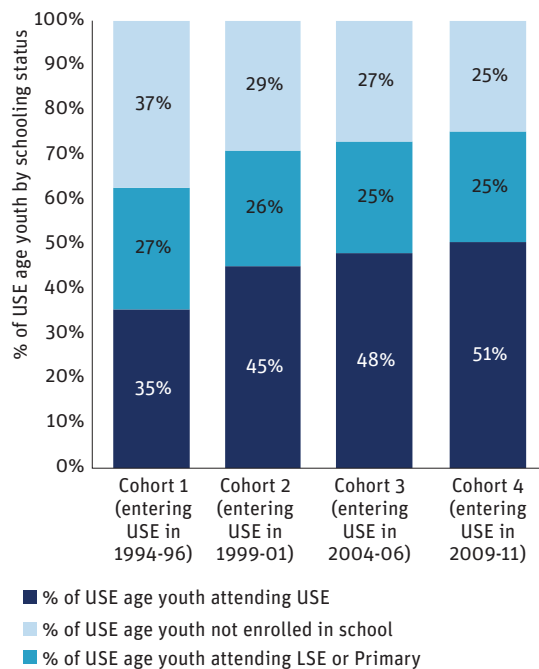
54 The paper, which draws from a series of household surveys, only covers 18 LAC countries, including 17 Spanish-speaking countries and Brazil.  
55 The increase in the returns to education over time seems to have pulled an ever-increasing number of people of compulsory education age to enroll in school. This factor in particular appears to have played a prominent role in increasing graduation rates for lower secondary education, thereby contributing to positively impact enrollment levels at USE. The “income effect” (which describes the change in the quantity demanded for a good given a change in price that affected real income) seems to have stemmed from a more favorable macroeconomic and labor market environment, especially during the 21<sup>st</sup> century, where inflation rates in the region tended to decline sharply, leading to higher retention rates due to decreased direct and indirect costs of schooling.

**Figure 2.7. Evolution of enrollment in LAC for 4 cohorts, 1990-2010 (% enrolled)**

Source: Kattan and Székely (2017), Figure 1.

minimum historical values ever. Interestingly, while in absolute terms the USE level of education had the largest absolute number of OOSP, due to the demographic transition explained above, the pre-primary education level had the largest share of OOSP (22.2% versus 21.3% for USE, Figure 2.10). In a nutshell, before the pandemic, 3 out of 4 OOSP were located at the opposite extremes of the distribution of the compulsory education cycle, namely pre-primary and USE. Such result was partially explained by legal differences across countries in the definition of the compulsory education age.<sup>56</sup>

**Finally, the OOSP average situation for LAC prior to the pandemic masked significant differences across several dimensions, as it would be expected in such an unequal region.** In terms of countries, for example, the Dominican Republic's OOSP for pre-primary education was 9 times higher than Brazil's (43% versus 5%). When it comes to

**Figure 2.8. Distribution of upper secondary education (USE)-age students in LAC by schooling status for 4 cohorts entering USE between 1994 and 2011 (%)**

Source: Kattan and Székely (2017), Figure 2.

gender gaps, the OOSP showed a slight gender bias against boys, for every education level and both in absolute and relative numbers (Figures 2.11 and 2.12). As regards OOSP's differences according to socio-economic status (SES), lower-income quintiles presented lower attendance rates than higher-income ones. For example, in Mexico, the probability of an adolescent aged 15-17 being OOSP was 30% higher if the student belonged to the lowest quintile of the distribution of income rather than to the top one<sup>57</sup>.

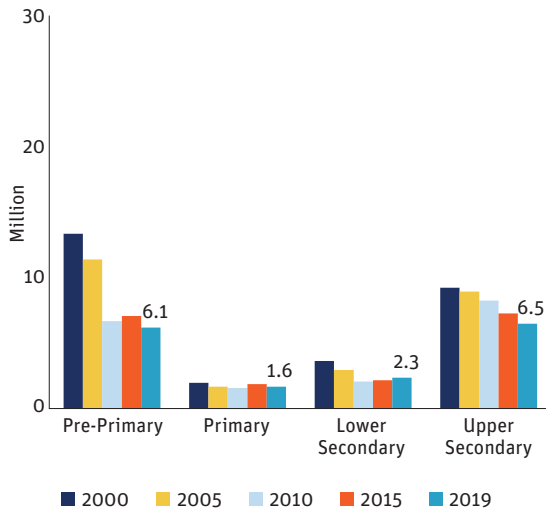
## 2.2 The COVID-19 pandemic shock and its impact on schooling

**The arrival of the COVID-19 pandemic in LAC entailed a significant disruption to school attendance, raising expectations that the downward trend in the OOSP would**

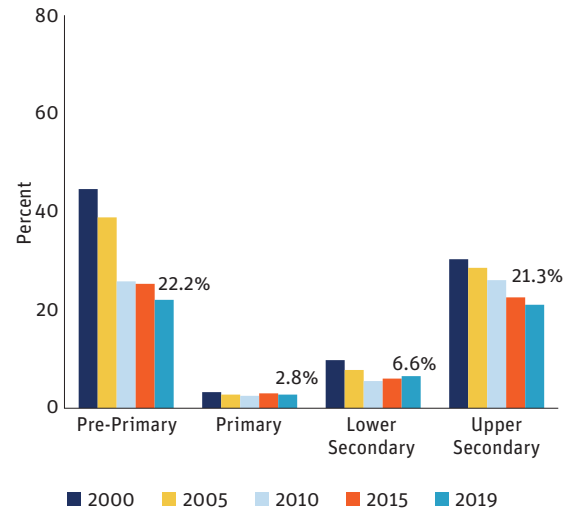
56 For example, only 36 countries out of 45 in the region (80%) have established a compulsory education upper bound at 15 years of age. Similarly, only 38 of the 45 countries in LAC (84%) have established at least one compulsory year of pre-primary education. For further details, see Annex 2.1.

57 Estimates based on 2018 household survey available for Mexico at the Socio-Economic Database for Latin America and the Caribbean (SEDLAC). See <https://www.cedlas.econo.unlp.edu.ar/wp/en/estadisticas/sedlac/>.

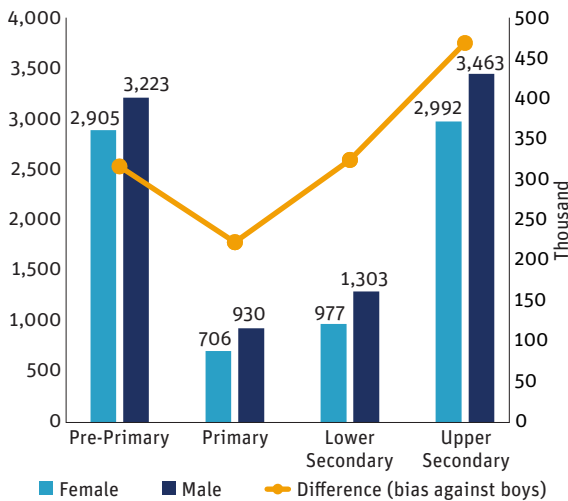
**Figure 2.9. OOSP in LAC, by compulsory education level and for selected years (million), 2000-2019**



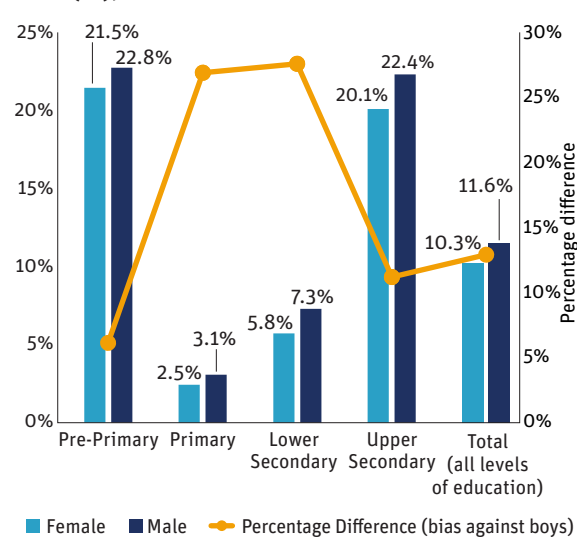
**Figure 2.10. OOSP in LAC, as a share of school-aged population, by compulsory education level and for selected years (%), 2000-2019**



**Figure 2.11. OOSP in LAC, by gender and compulsory education level (thousands), 2019**



**Figure 2.12. OOSP in LAC, as a share of school-aged population, by gender and compulsory education level (%), 2019**

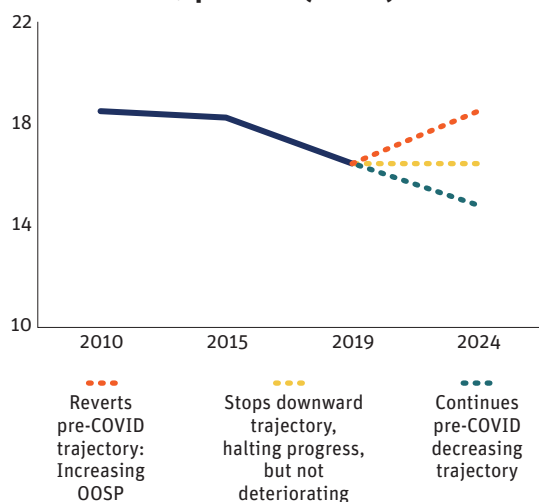


Source: Own elaboration on the basis of UNESCO Institute for Statistics.

**be interrupted.** Theoretically, the historical OOSP trend could either: (i) continue decreasing (either by not being influenced at all by the shock or by decreasing at a slower pace); (ii) stagnate (i.e. stopping the descent, but not deteriorating); or (iii) reverse (through an increase in the

OOSP) (Figure 2.13). The initial assessments of COVID-19 effects pointed to the latter as the most likely scenario, with a projected increase in OOSP from March 2020 onwards<sup>58</sup>. The initial estimates of the impact of the pandemic on school drop-out pointed to an estimated 7 million

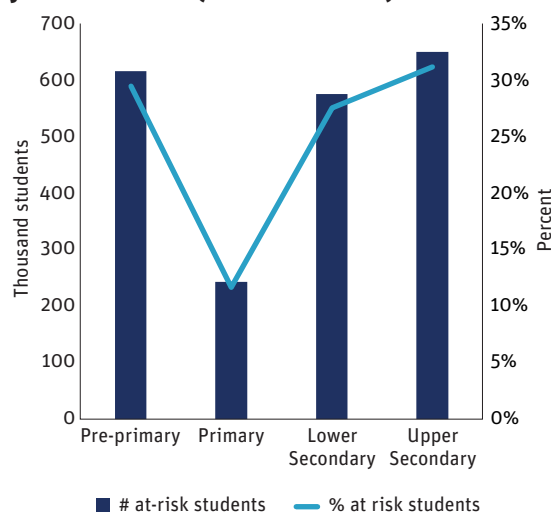
58 The transmission mechanisms that were forecasted (UNESCO, 2020a) were, for example, student disengagement (as a result of a forced remote learning), the need to support household work, income loss (which could lead to child/adolescent labor, an increased opportunity cost of staying in school), and other problems associated with lockdowns (e.g. early marriage, teenage pregnancy). In addition, since the pandemic interrupted critical stages of the educational process at all educational levels, it was also foreseen that such interruptions would lead to higher dropout rates (Azevedo et al. 2020).

**Figure 2.13. Possible trajectories of the OOSP in LAC after the COVID-19 pandemic (million)**

Source: Own elaboration.

students around the world leaving school permanently due to the COVID-19 shock<sup>59</sup>. Specifically for LAC, UNESCO (2020) estimated that 2 million students were at risk of dropping out, with the pre-primary and USE levels expected to be the most affected (Figure 2.14), and students from the most disadvantaged backgrounds being the most disproportionately affected, especially in low- and lower-middle income countries.

**Regrettably, actual data that could help document the impact of the pandemic on schooling is still scarce at this stage.** Nonetheless, results from surveys especially designed to understand the impact of the pandemic, National Household Surveys from different countries, and administrative data are starting to give some information about the direction and magnitude of the effects of COVID-19 on schooling and, as a result, on OOSP. In fact, the OOSP phenomenon can be understood as one that could happen at three different points/stages of the school year: (i) at enrollment – for students who enroll at school, but then disenroll or do not attend dropping out before the school year begins; (ii) at attendance – at

**Figure 2.14. Students at risk of dropping out in LAC, by education level (thousands and %)**

Source: UNESCO (2020).

any point before the school year ends; and (iii) at conclusion – i.e. after passing the given school grade, by not enrolling in the immediately following one. In the paragraphs below, the impact of the pandemic on the OOSP is explored from these three angles, though focusing more on attendance rates, which were the ones immediately impacted upon the pandemic outbreak<sup>60</sup>. Throughout the analysis, we draw from three main sources of data: country-specific administrative data from Education Management Information Systems (EMISs), the HFPS (described in Chapter 1), and country-specific National Household Surveys.

**In terms of enrollment, detailed administrative data already available for a few countries for 2021, seemed to show at that stage no clear impact of the pandemic two years after, on average.** In fact, and as part of an ongoing Human Capital Review (HCR)<sup>61</sup> for Central America<sup>62</sup> conducted by the World Bank, data from the Dominican Republic, Guatemala, and Panama appear to carry two conclusions: (i) for those countries where enrollment slightly decreased from 2019 through 2021, it is

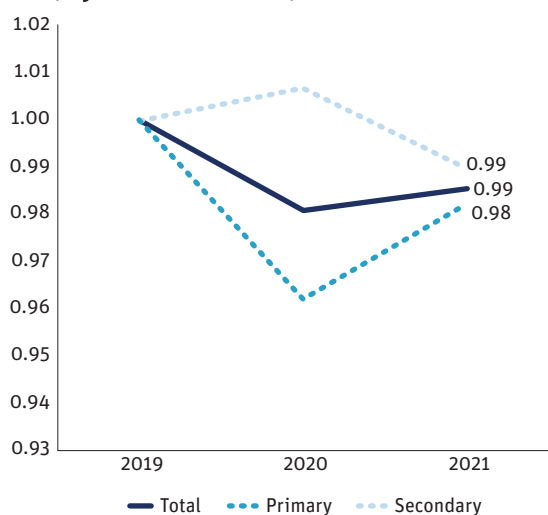
59 Azevedo et al. (2020).

60 In fact, as was explained in Chapter 1, the timing of the pandemic (early to mid-March for most of the countries in LAC) caught the vast majority of the school systems in the region with an already advanced school year or with a school year which had recently kicked-off. See Section 1.2 and Figure 1.6.

61 The HCR is a new core diagnostic tool launched by the World Bank in early 2020. The HCR is an analytical product that uses new or existing data and accepted analytical methods to: (i) present an overview of the state of key human capital endowments and challenges in a country; (ii) identify priority human capital outcomes that require improvement; (iii) offer country/region-specific policy options to improve these outcomes; and (iv) identify areas for further analysis in key sectors. HCRs are being conducted in a handful of countries around the world and, specifically, for LAC, the ones for Brazil, Paraguay, and the 6 countries in Central America are expected to be completed between 2022 and 2023.

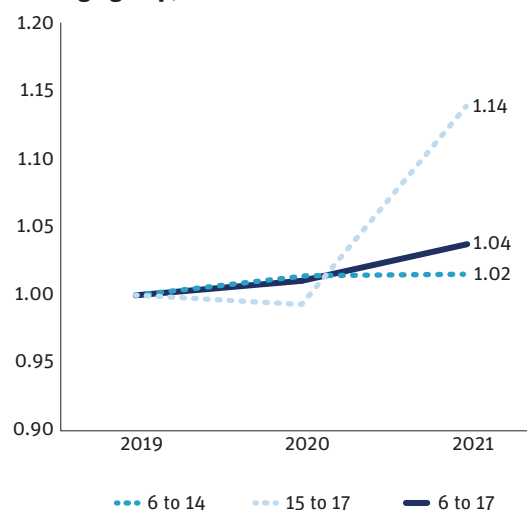
62 The Dominican Republic, though technically a Caribbean country, is considered part of Central America within the current geographical organization of the Bank for convenience purposes – having the same language (Spanish) as the 5 other countries located in the Central American isthmus (Costa Rica, El Salvador, Guatemala, Honduras, and Panama).

**Figure 2.15. Dominican Republic: Total enrollment index, by level of education, 2019-2021**



Source: Own elaboration based on administrative data at school level for school years 2019-2020, 2020-2021 and 2021-2022.

**Figure 2.16. Panama: Total enrollment index, by school age group, 2019-2021**



Source: Own elaboration based on administrative data from Panama's SIDE (Integrated Statistical Data System).

not possible to disentangle the potential “pandemic effect” from the “demographic transition” effect described above; and (ii) there seems to be a consistent “push-and-pull” effect with students moving from private schools to public schools, as evidenced by the sustained increase in enrollment in public schools vis-à-vis the steady (and sometimes very significant) decrease in enrollment in private schools. Regarding the first point, administrative data from the three countries listed above show an overall neutral effect of the pandemic on total enrollment in compulsory education<sup>63</sup>. In fact, while Panama presents a 4% increase in total enrollment, Guatemala and the Dominican Republic displayed mild drops of 2% and 1%, respectively (Figures 2.15 and 2.16). Such variations, especially the latter ones, cannot really tell apart how much of the variation could be genuinely attributed to the pandemic at this stage, as there is an ongoing demographic transition underway for the region, which may play a role. The second stylized fact (the “push-and-pull” effect) is more consistent across countries, even if the causes behind this effect are yet to be investigated with the help of microdata. A more in-depth analysis of this issue is undertaken in Box 2.1.

**Moving now to attendance and using the latest available information from the HFPS<sup>64</sup>, survey data pointed to significant reductions in attendance rates when comparing to the pre-pandemic situation by mid-2021<sup>65</sup>.** In fact, as shown in Figure 2.17, attendance rates<sup>66</sup> as of mid-2021 were 12% lower for the region than pre-pandemic attendance rates (February 2020). As with the case for almost every education indicator, there were important differences across the board. While countries like Guatemala, Honduras, and Jamaica presented significant percentage differences between May/July 2021 and February 2020 (33%, 22%, and 20%, respectively), countries such as Costa Rica and St. Lucia show much smaller percentages (10% and 6%). Chile only experienced a 1% decrease in attendance. While many or most schools were still closed by mid-2021 in the region, these different trends seem consistent with different paces in school reopening and the reach of the remote learning response, with Chile and Costa Rica doing better on both counts than countries like Guyana, Guatemala, and Honduras. When disaggregating by age groups (Figure 2.18), we see that the percent difference between the before- and during-pandemic attendance rate is significant for both students between

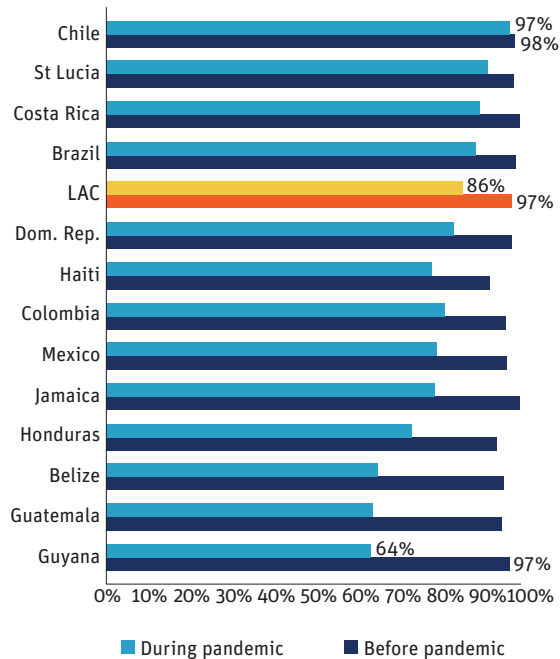
63 Compulsory education, in this case, only refers to the consolidated information from the primary and secondary education levels but does not include pre-primary education.

64 The 2<sup>nd</sup> Phase of the HFPS was originally planned to be carried out towards the end of 2021. Unfortunately, data collection continued, for some countries, through January 2022. Hence, as of the date of the release of this report, it was not possible to analyze the microdata from this wave.

65 The bulk of the HFPS collection period took place between May and July 2021.

66 “Attendance rate” was defined, in the HFPS, as the proportion of school-age population that had done any in-person (attended classes face-to-face) or remote educational activity (participated in learning activities at home) at the time of the survey. Percentages (rates) are adjusted for academic break periods.

**Figure 2.17. Attendance rates before and during the pandemic, for selected countries (%), February 2020 vs. May/July 2021**

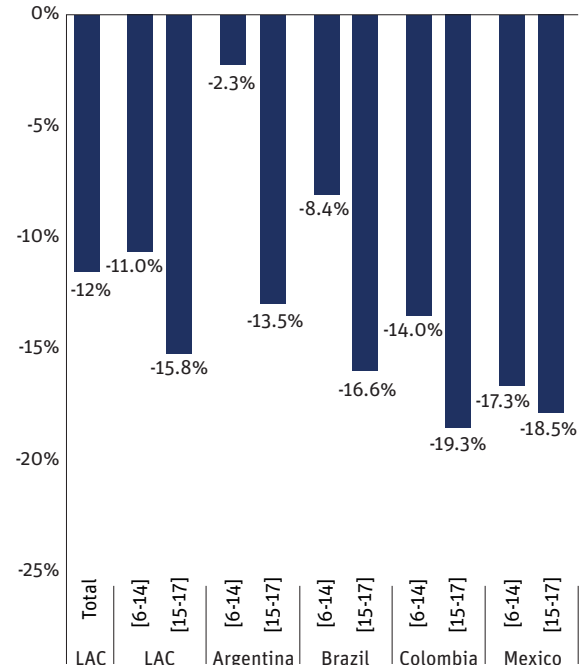


Source: Own elaboration on the basis of LAC's HFPS, Phase II, Wave 1.

6 to 14 and 15 to 17 years old, being a bit higher for the latter (11% vs. 15.8%). A similar trend is consistently observed across countries in the region. It is important to understand that the comparison between before and after the start of the pandemic is done between two different months/time periods each year so the attendance indicator could be biased (given the seasonality of this indicator). Notwithstanding this and other HFPS' limitations<sup>67</sup>, findings from the HFPS II (Wave 1) help in having a better understanding of the effects of the pandemic on education systems across LAC, with the dramatic consequences that decreased attendance can have on drop-out rates and learning gaps later on.

**National Household Surveys for selected countries show a somewhat different picture.** Figures 2.19 to 2.22 below

**Figure 2.18. Attendance rates before and during the pandemic, by age group for selected countries (% change), February 2020 vs. May/July 2021**



Source: Own elaboration on the basis of LAC's HFPS, Phase II, Wave 1.

portray trends in OOSP as a share of school-age population across four countries<sup>68</sup>. Three of the four household surveys took place at the end of 2021 when schools in the respective countries had largely reopened, another one (Costa Rica) took place at the same time as the HFPS, when schools were already fully open.<sup>69</sup> For analytical purposes, data trends in OOSP<sup>70</sup> are presented for three school years - the pre-pandemic (PP) year (2019), the “in-pandemic, no vaccines yet (IPNV)” year, and the “in-pandemic, vaccination available (IPVA)” year - and for two age group breakdowns - the 6-to-14-year-olds, which is the group for which OOSP only represented a minor percentage before the pandemic, and the 15-to-17-year-olds, which is the group with the largest absolute number of people in the OOSP. Three important conclusions seem to emerge: (i) the average downward OOSP trend, calculated as a ratio of school-age

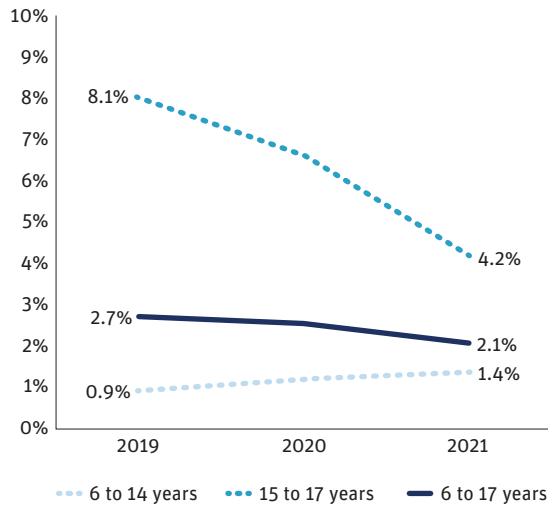
67 The main two limitations are related to the representativeness of the sample. Country representativeness was limited to the 18+-year-old population with access to a phone. There was an extra limitation: HFPS the Education Module was applied but to only one (randomly chosen) school-age person in the household.

68 Given the necessary time and data availability limitations of processing microdata from 45 different country-specific household surveys in the region, this section draws on a sample of 4 selected countries that represent very large countries (Brazil), medium-sized ones (Argentina and Colombia) and small-sized ones (Costa Rica) for which comparable data as of late 2021 are available.

69 Household Survey data presented correspond to: (i) the third trimester (2019, 2020, 2021) for Argentina; (ii) the fourth trimester (2019, 2020, 2021) for Brazil; (iii) the month of November (2019, 2020, 2021) for Colombia; and (iv) the month of July (2019, 2020, 2021) for Costa Rica.

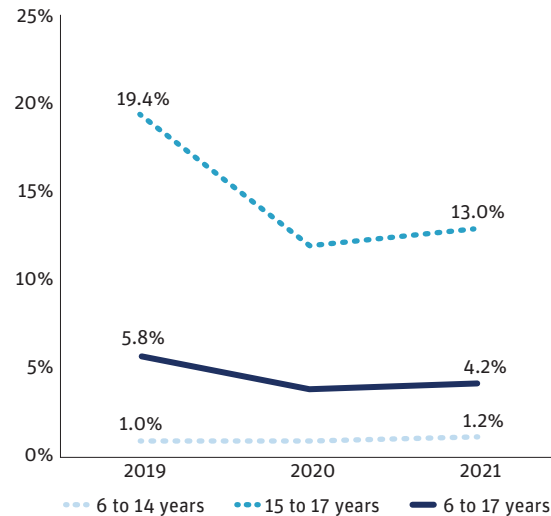
70 For this analysis, since data are not drawn from administrative records from the Ministries of Education, the OOSP is calculated as the difference between the school-age population in the 6-17 years of age group (i.e. not including any age group below the primary education level) and the population attending school in the corresponding age group (6-17).

**Figure 2.19. Argentina: OOSP as a share of the corresponding school-aged population, total and by age group (%), 2019-2021**



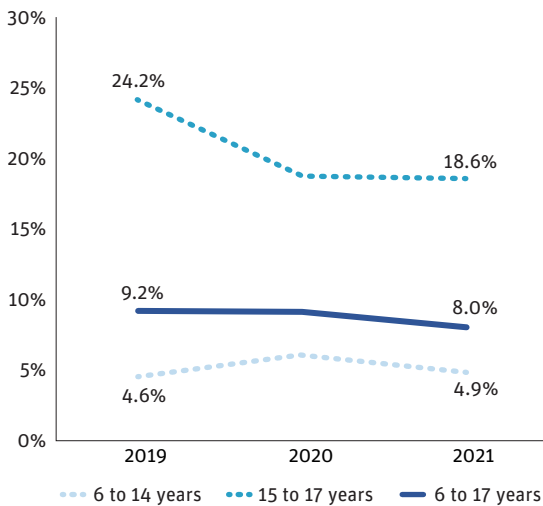
Source: Permanent Household Survey, third quarter. INDEC.

**Figure 2.20. Brazil: OOSP as a share of the corresponding school-aged population, total and by age group (%), 2019-2021**



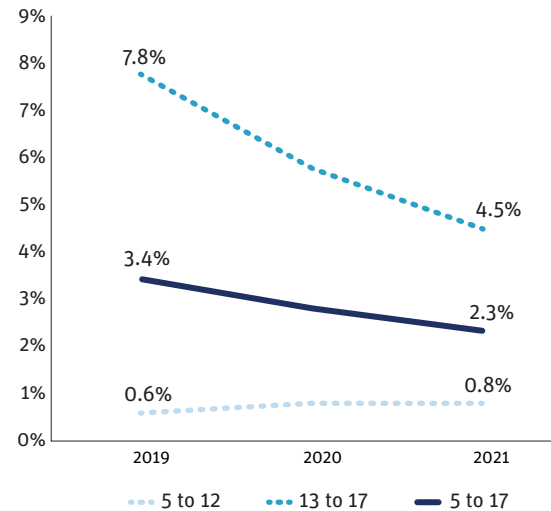
Source: PNAD, fourth quarter.

**Figure 2.21. Colombia: OOSP as a share of the corresponding school-aged population, total and by age group (%), 2019-2021**



Source: National Household Survey (GEIH), November. DANE.

**Figure 2.22. Costa Rica: OOSP as a share of the corresponding school-aged population, total and by age group (%), 2019-2021**



Source: National Household Survey, July. INEC-Costa Rica.

population and using attendance rates, in the PP year appears to have continued decreasing after two years since the pandemic hit; (ii) the 15-17 age group in OOSP consistently - and for the most part, significantly - decreased towards the IPVA year - with a “kink” in Brazil and Colombia in 2021 inflecting somewhat the trend; and (iii) the 6-14 age group in OOSP consistently - although less significantly - increased towards the IPVA year. The four countries

experienced a small cumulative absolute increase in 6-14 OOSP of about 97 thousand children representing a 15% increase vis-à-vis the pre-pandemic. On the other hand, no such overall increase in absolute numbers is visible for the 15-17 OOSP for the countries analyzed. To sum-up, there is some evidence that OOSP in selected LAC countries, and in proportion of school-age population, seems to have continued decreasing over time, with a generally decisive drop in

the 15-17 age group, which made up for the less significant though positive increase in the OOSP in the 6-14 age group. The decreasing trend in the OOSP 6-14 age group has however been reversed for these countries.

**Attendance rates for the 6-14 years old show at least some decrease.**

It is difficult to compare phone and national surveys because they may capture different dimensions, and over- or under-estimate the extent of the problem<sup>71</sup>, but at least in the case of the 6-14 years old, while different surveys show different magnitudes, they point for the selected countries to decreases in attendance over the pandemic period. Different magnitudes may also be related to the different timing of the surveys, insofar as Colombia, Argentina and Brazil had experienced larger school reopening by the time of their national surveys (most of the schools were open in those countries by then), which may have helped boost attendance<sup>72</sup>. Nonetheless, the negative trends point to some concerns with the capacity of these countries to have kept children engaged and attached to school. As schools were closed during the pandemic, remote learning was the only alternative offered by most schools which, as discussed previously, had many limitations and challenges. In many cases, for younger kids, studying remotely implied needing support and assistance from their parents who not always were able to assist them. In other words, younger kids were more dependent on a third person to attend school remotely. Moreover, the limited effectiveness of remote schooling may have especially affected the engagement and attendance of that age cohort. This may have led to higher risks of disconnect from school, made worse by the prioritization of higher grades in school reopening.

**Data are less consistent for the 15-17 years old, where national surveys are showing continued increases in attendance rates comparing with the pre-pandemic, which could also simply indicate no clear impact (yet) on this age range by the end of 2021.** Beyond methodological differences between surveys already pointed out

above, and which could affect more this age range, it is possible that the attendance rate of this cohort by the end of 2021 reflects the prioritization in school reopening. Specific policies, benefitting all students, but especially the 15-17 years old, may also explain the enrollment and attendance trends in 2021. Explanations for the trends may be related to automatic promotion policies (which were for instance encouraged in Argentina, Brazil, El Salvador, and the Dominican Republic), and cash transfer policies implemented notably in Colombia and Brazil.<sup>73</sup> Outcomes would have been worse without these policies. In Brazil, increased age-for-grade distortion could also be part of the explanation. According to *Todos pela Educação* (2021), one of the reasons that explains that attendance continued increasing after the pandemic is the increase in the number of students attending school but in previous years that do not correspond to their age (increase in age-for-grade distortion). In fact, the number of students in this situation was around 1.5 million in 2019, 1.7 million in 2020, and 1.6 million in 2021, more than in 2019. Finally, it is also simply possible that direct and indirect costs as well as opportunity costs of attending school may have in fact decreased following the availability of virtual education and the difficulty of finding good jobs in the middle of the crisis (opportunity costs, however, may have played out differently across countries) keeping youth in school. While these are positive findings, the inflection points in the 15-17 years old OOSP in Brazil and Colombia in 2021 may nonetheless be seen as a signal that this group will continue needing close attention.

**While the full magnitude of the impact of the pandemic on schooling is not clear yet, results from the HPFS show that by mid-2021: (i) the most affected by the pandemic in terms of attendance rates were lower-income children and youth, but (ii) the gender gap had decreased for children in households with access to one or less assets. A couple of national household surveys show more nuanced outcomes.** Using the HPFS II, wave 1, we found that the impact on attendance rates was much

71 First of all, the definition of the attendance rate indicators is different in each source –in the HPFS, the attendance rate is capturing the proportion of school-age population that had done any in-person (attended classes face-to-face) or remote educational activity (participated in learning activities at home) at the time of the survey for the pandemic period, while the attendance rate in the household survey measures the proportion of school-age population who reported to be attending any educational institution during the period of reference. Secondly, the cross-sectional nature of national surveys may be overestimating attendance rates in the pandemic period. And it is also simply possible that the “attendance rate” is being over-estimated in areas and/or periods with many schools closed (risk mitigated by the timing of the surveys), with families responding positively even in cases of limited “engagement”, which would lead to a convergence with the phone surveys, possibly more attuned to capturing the realities on the ground. The measured attendance rates may capture more of a “formal” attachment rather than actual attendance. On the other hand, design and implementation aspects of the HPFS, especially the possible impact of seasonality on the indicators, may impact the reliability of their results and possibly over-estimate some impacts.

72 On the other hand, Costa Rica is showing a somewhat smaller difference between survey types, possibly also because they took place at the same time.

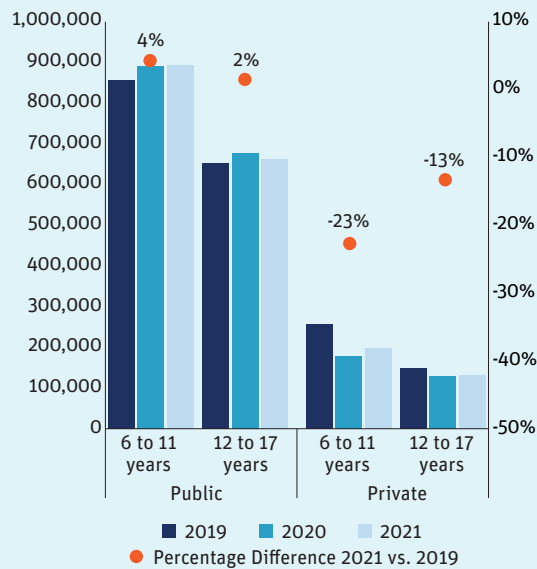
73 The largest share of federal resources to combat COVID-19 was to strengthen cash transfers during the COVID-19 crisis. In 2021, Bolsa Família (PBF), the renowned conditional cash transfer program in Brazil, was expanded to include an additional 1.2 million new families from the program’s waiting list. A recent analysis shows that an increase of 10 percent of the number of families who receive PBF would explain a 0.3 percent increase in years of schooling in alignment with other literature (WBG, 2022a).



### Box 2.1. Dropouts in private but not in public schools: A push-and-pull effect?

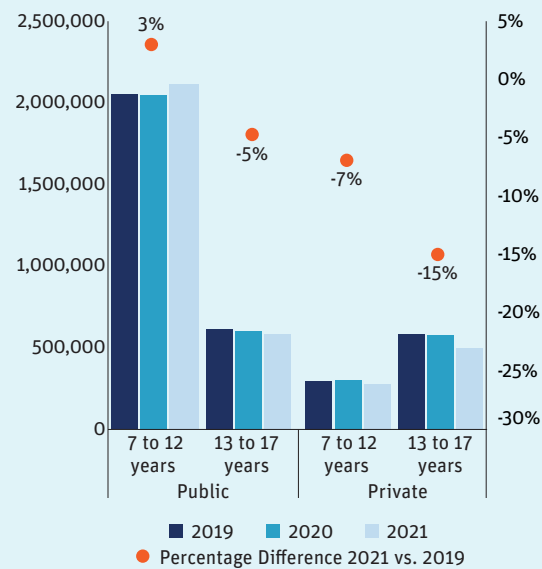
Detailed administrative data for select countries show a consistent pattern that took place between 2019 and 2021: even though total enrollment does not seem to have been affected much by the pandemic, yet, the distribution of enrollment across institutions within the system has. Indeed, while public schools experienced an increase in enrollment, private schools showed a (significant) decrease in enrollment. Data from the Dominican Republic (DR), Guatemala, and Panama all confirm the same stylized fact.

**Figure B.2.1.1. Dominican Republic: Enrollment, 2019-2021**



Source: Own elaboration based on administrative data.

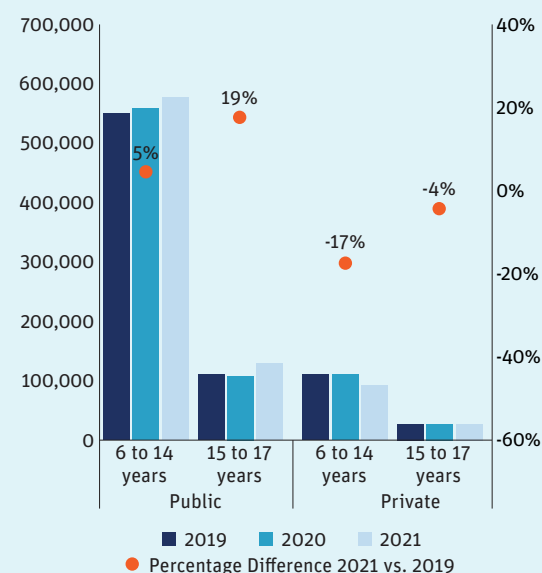
**Figure B.2.1.2. Guatemala: Enrollment, 2019-2021**



Source: Own elaboration based on administrative data.

The specific pattern of changes in enrollment during the pandemic lead to the immediate question: was there a push-and-pull effect with students who were formerly in private schools moving to public ones? But if so, in those countries where there was a net decrease in total enrollment (e.g. DR or Guatemala), was there not a net loss of students, even after factoring in demographics? If so, who were these students, those that were at higher risk of dropping out in public schools, but none of the ones that came from private schools? To be able to properly respond to these questions, it is fundamental to get access to the microdata to follow the same individuals over time (panel data on the cohort of students still in school in March 2020). The Human Capital Review being prepared by the World Bank during 2022 should help shed light on this.

**Figure B.2.1.3. Panama: Enrollment, 2019-2021**



Source: Own elaboration based on administrative data.

(Box continues on next page)

### Box 2.1. Dropouts in private but not in public schools: A push-and-pull effect? (continued)

Now, there is another question: was the significant increase in public school enrollment just an artifact of the “push-and-pull” between private and public schools? Or was there an important “retention effect” that discouraged dropping out of school for those students who were already in public schools? Again, the lack of microdata at this stage precludes a more conclusive analysis. Nonetheless, it is worth mentioning that the Central American countries under analysis made substantial efforts to ensure schooling continuity during school closures. Providing students and teachers with digital devices in the Dominican Republic, the activation of the accelerated learning program in Panama, or the school insurance and the continuity of the school feeding programs in Guatemala, were all policies that may have not only prevented students in public schools from dropping out, but that could have even incentivized students in low-cost private school to feel attracted to enroll in public schools in an effort to help lower both direct and indirect costs of schooling for their families.

In any case, despite the results gotten so far, and the observed trend in enrollment in these countries in Central America, future developments are uncertain. All efforts and new policies implemented in the countries to counteract the negative effects of the COVID-19 pandemic seem to have had positive implications in school enrollment, specifically for children and youth in public schools. In the future, however, this trend may be reverted when all the “emergency” policies are over, and the students get fewer incentives to enroll as well as when opportunity costs of education increase due to better economic conditions and a more dynamic labor market.

Source: Own elaboration based on administrative data for the DR, Guatemala, and Panama.

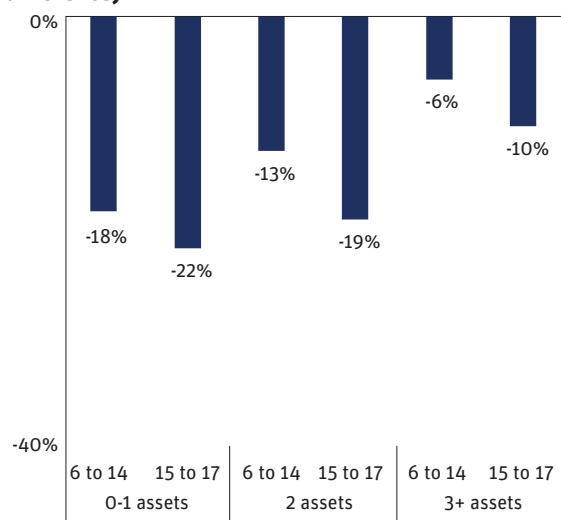
higher for those children and youth in families with access to 1 or fewer assets than for those of families with access to 3 or more assets (Figure 2.23). The difference in attendance rates between these families is particularly strong for the 6-14 years old. In addition, according to the survey, the gender gap in attendance rates increased from 0.9% before the pandemic (February 2020) to 2.3% during the pandemic (May/July 2021). Nonetheless, the gender gap was reduced for children belonging to households with access to one or less assets while it increased for those with access to two assets and in a greater proportion for children in families with access to three or more assets (gap increased from 0.5% to 3.6%) as shown in Figure 2.24. Data from the national survey of Colombia show similar trends for the gender gap but somewhat different trends by income level. In fact, the attendance rate of lower-income 15-17 years old increased more than for their higher-income counterparts. Such differences could be explained by a combination of successful policies implemented by the government during the pandemic to protect lower-income youth, including the continuity of school feeding programs, low-fee policies, and possibly more difficult access of lower-income youth to job opportunities. The national survey data for Argentina also seem to show slightly higher relative increases in the attendance rate of lower-income vis-à-vis higher-income youth, pointing to the equalizing

effect of automatic promotion policies. These findings also seem consistent with the possible “retention effect” in public schools in Central America. More data and surveys are needed to assess the full impact of the pandemic on lower-income children and youth.

## 2.3 Key takeaway messages

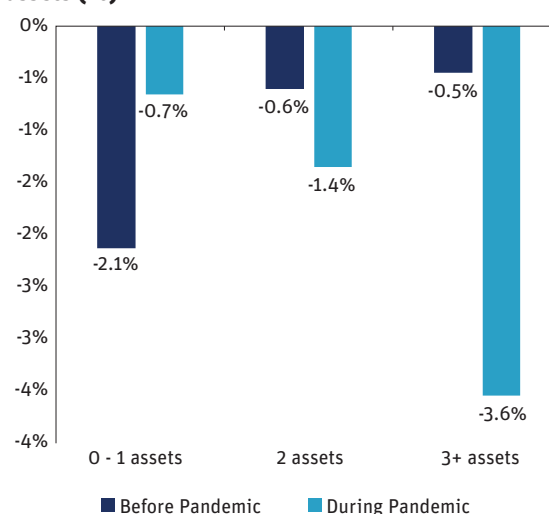
**The relatively limited available evidence so far on the impact of the pandemic on schooling likely points to an important attendance shock during remote learning for all children and youth, but also to an overall limited impact on schooling by the end of 2021 thanks to a set of protective policies.** Before the pandemic, the region was on a positive trend towards continuing reducing its 11% OOSP rate at a 0.5 percentage-point pace per annum, by the time the pandemic hit. The massive closure of educational institutions led many education researchers and practitioners worried about a sudden reversal in this trend. Available information is showing that there was most likely a negative shock to schooling attendance when schools were mostly closed across countries, especially strong for lower-income students. Yet, by the end of 2021, when schools were mostly open and looking at other

**Figure 2.23. LAC: Attendance rates before and during the pandemic, by age group and access to assets (% difference)**



Source: HPFS II, Wave 1.

**Figure 2.24. LAC: Gender gaps in attendance rates before and during the pandemic, by access to assets (%)**



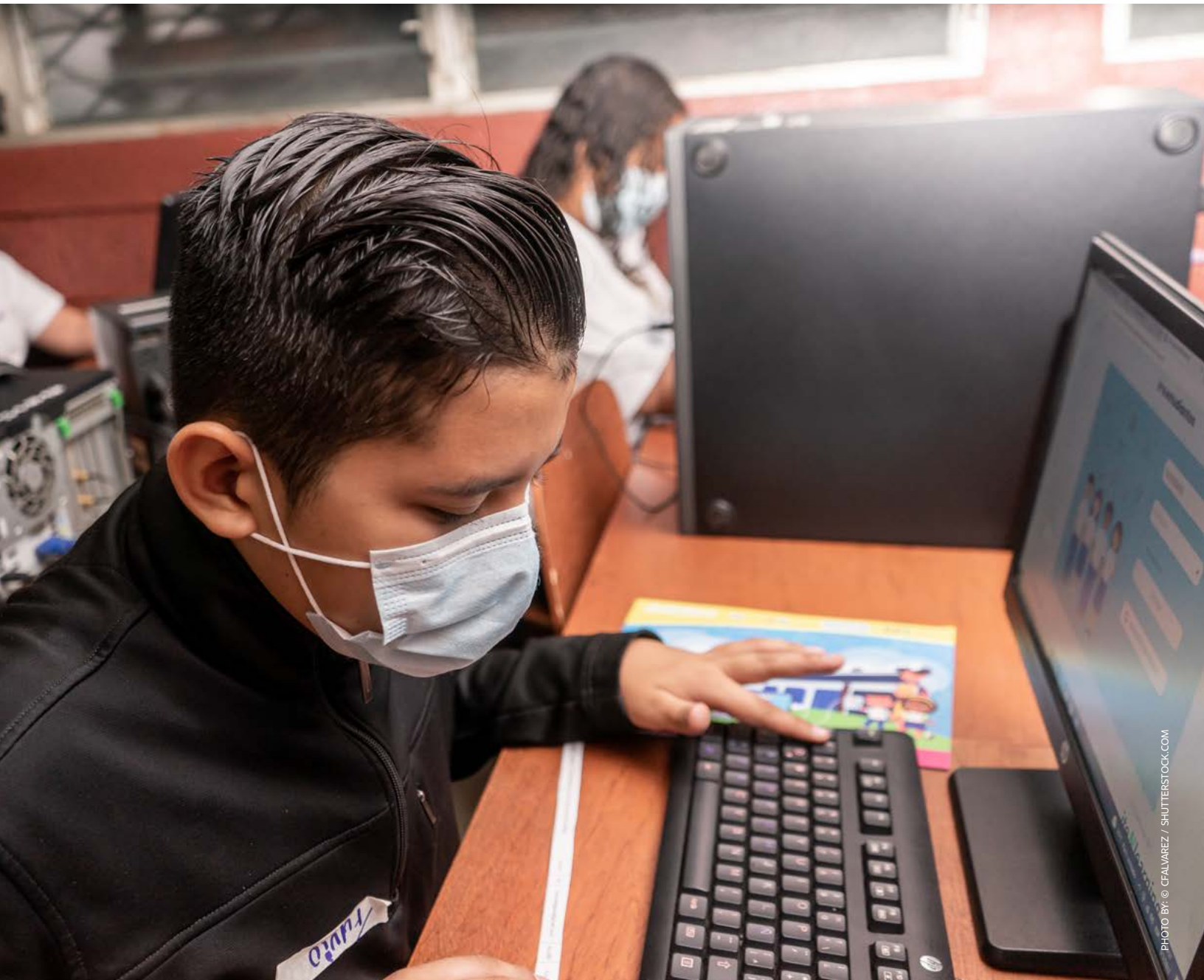
Source: HPFS II, Wave 1.

indicators and selected countries, the overall impact on attendance/enrollments rates appeared limited, especially for the 15 to 17 years old. Reduced opportunity costs of schooling, cash transfer policies, automatic promotion rates, among other factors, may have played a role in this outcome, with the role of automatic promotion likely an especially important one. Government policies may have also been fairly effective in protecting attachment to school of lower-income youth.

**The overall small but consistent increase in the out of school population rate for 6 to 14 years old in selected countries may nonetheless be a worrisome signal.** The increased numbers of 6 to 14 years old out of school in countries like Argentina, Colombia, and Brazil, although small, may point to limited continuous participation and engagement in remote schooling, limited priority in school reopening, and lack of specific policies to address the attachment to school of this age-group. And these numbers do not consider numbers of pre-school students which it will be important to

start monitoring. At the same time, continuous attention is also warranted to the 15 to 17 years old, especially as they represent the larger OOSP group.

**Future follow-up surveys and administrative data will be needed to adequately capture the longer-term impact of the pandemic on enrollment, attendance, and dropouts.** Enrollment rates were likely kept up by several policies. When data become available, it will be important to look at re-enrollment rates to the new 2022 academic year. While attendance and enrollment rates may have been relatively protected in 2020 and 2021, especially for the older cohort, the relaxation of some policies, the relatively slow economic recovery, improvement in labor market outcomes and, especially, learning losses related to limited attendance and learning during remote schooling may lead to shocks in 2022 and beyond which could reverse the overall trends in OOSP population, including and above all for the most vulnerable.



### Chapter 3

# The impact of the COVID-19 pandemic on learning outcomes and skills development

**The pandemic is expected to have a large impact on learning outcomes and skills development.** While the effects on enrollment and to some extent attendance may be not completely clear at this point, the decrease in attendance and engagement rates during the pandemic are likely to have had important negative implications for learning. And, in turn, learning gaps are likely to have an impact on future dropouts. This chapter analyzes the impact of the pandemic on learning, considering both simulated and actual data. Because of the broad-based impact of the pandemic, it also looks at skills development more broadly with focus on transferable and digital skills, while also documenting the initial impact of the pandemic on psychosocial health and well-being, dimensions which affect schooling, learning and skills acquisition.

## 3.1 The impact on learning

### 3.1.1 The state of learning achievement in LAC prior to the pandemic: A grim picture

**Before the COVID-19 pandemic hit the region, LAC was suffering from a deep learning crisis.** The vast majority of students attending compulsory levels of education in the region did not have minimum proficiency levels in foundational skills, like literacy and numeracy. Evidence about these worrisome trends got re-confirmed a few months back, when UNESCO's Latin American Laboratory for Assessment of the Quality of Education (LLECE, in its Spanish acronym) released the latest results from their Regional Comparative and Explanatory Studies (ERCE 2019), a large-scale assessment program that involves most of the Spanish-speaking countries LAC in addition to Brazil<sup>74</sup>. The study, which has been measuring students' achievement since 1996, underscored the extent of this crisis, placing countries far from fulfilling the targets and

goals set by Sustainable Development Goal (SDG) 4 of the 2030 Agenda for Sustainable Development<sup>75</sup>.

**Results from ERCE 2019<sup>76</sup> show that, on average, roughly one in two 3rd-graders, and three in four 6th-graders do not reach the minimum proficiency level (MPL)<sup>77</sup> in basic foundational skills.** In fact, when we analyze reading, 44 percent of students in 3<sup>rd</sup> grade (Figure 3.1a) and 69 percent of students in 6<sup>th</sup> grade (Figure 3.1c) are below MPL. In the case of math, figures are even worse: 48 percent for 3<sup>rd</sup> grade (Figure 3.1b) and 83 percent for 6<sup>th</sup> graders (Figure 3.1d). These results are appalling, and they bear two key conclusions. First, they mean that not only the bulk of LAC kids are not learning basic foundational skills by mid-primary, but that the situation only gets worse by the end of that cycle. Second, they highlight that, although numeracy and literacy fare equally bad by mid-primary, the deterioration process by the end of the cycle happens faster in numeracy skills.

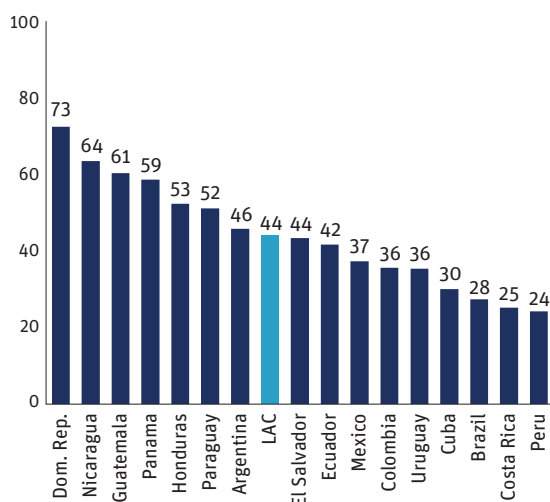
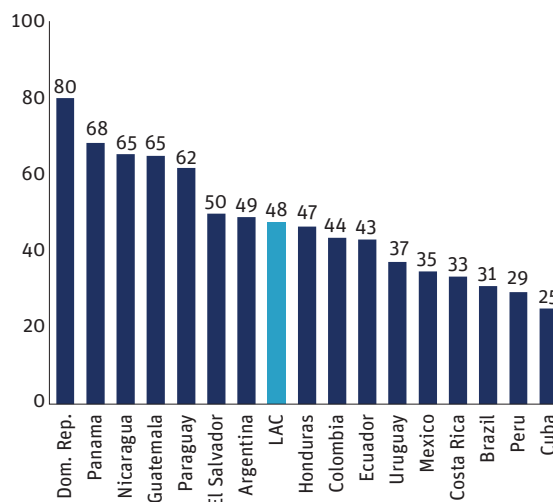
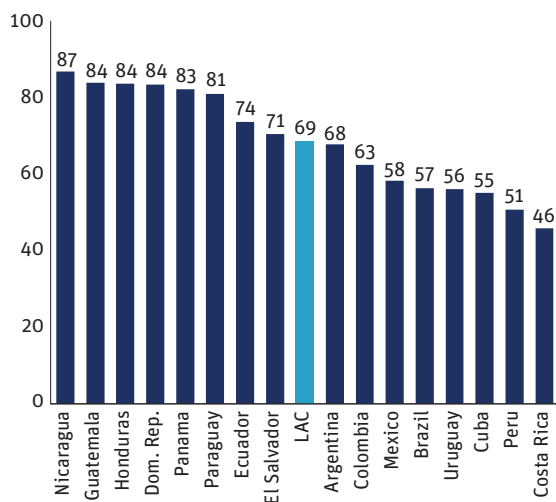
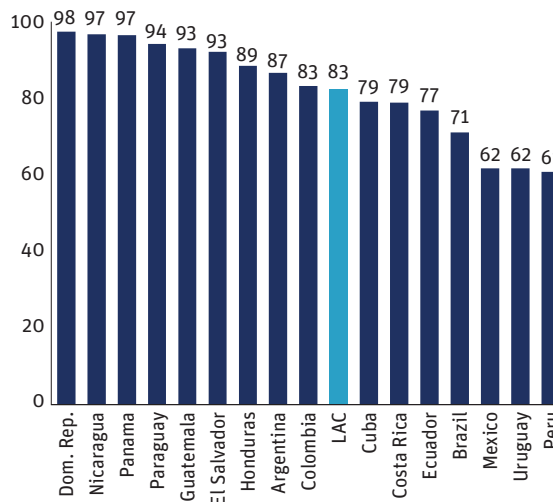
**ERCE 2019 also confirms the wide inequalities in learning across the region.** For example, the average Costa Rican 3<sup>rd</sup> grader is 3 times more likely to be above MPL in reading than his/her Dominican counterpart, or the average Peruvian 3<sup>rd</sup> grader is twice less likely to fall below MPL in math when compared with his/her Paraguayan peer. By the time kids get to 6<sup>th</sup> grade, disparities do not go away. Countries like the Dominican Republic (98 percent below MPL for math) and Nicaragua (87 percent below MPL for reading) perform poorly while Peru (61 percent below MPL for math) and Costa Rica (with 46 percent below MPL for reading) show the best performance. Despite the high variance across countries, data seem to indicate that school acts as an "equalizer" over time, insofar as the size of disparities – as measured by the distance between the best-performing and worst-performing countries in terms of share of students below MPL - tend to decrease from 3<sup>rd</sup> to 6<sup>th</sup> grade.

74 ERCE measures standardized learning outcomes of students in 3<sup>rd</sup> and 6<sup>th</sup> grades covering three main disciplines – reading, mathematics, and natural sciences. ERCE assessments are graded around four proficiency levels, with Level I being the lowest and IV the highest. For interpretation and comparability purposes, proficiency level II in ERCE in 3<sup>rd</sup> grade can be equated to the international Minimum Proficiency Level (MPL), while for grade 6, the MPL is set at Level III. See UNESCO-OREALC (2021b).

75 The SDGs were established in 2015 by several United Nations agencies and multilateral/bilateral institutions as a collective of 17 objectives meant to become a springboard for achieving a sustainable future for the world. They have specific targets to be attained by 2030. SDG4, known as the "Education SDG", aims at "ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all". See <https://sdgs.un.org/goals>.

76 UNESCO-OREALC (2021b).

77 MPLs are determined for each subject and each grade differently. For example, in the case of math for 6th grade, being at the MPL means that the student is capable, for example, of solving problems that involve measurement, computation or estimation of areas, or the interpretation of information. MPL in reading for 6th grade means that the student can establish relationships and make inferences from the text. See UNESCO-OREALC (2021b), pp. 14, 16-17.

**Figure 3.1a. Share of students in grade 3 below MPL in reading (%), ERCE 2019****Figure 3.1b. Share of students in grade 3 below MPL in math (%), ERCE 2019****Figure 3.1c. Share of students in grade 6 below MPL in reading (%), ERCE 2019****Figure 3.1d. Share of students in grade 6 below MPL in math (%), ERCE 2019**

Source: Own elaboration on the basis of UNESCO-OREALC (2021b). MPL is the proportion of students who fall below Level 2 of the assessment in the case of 3<sup>rd</sup> grade.

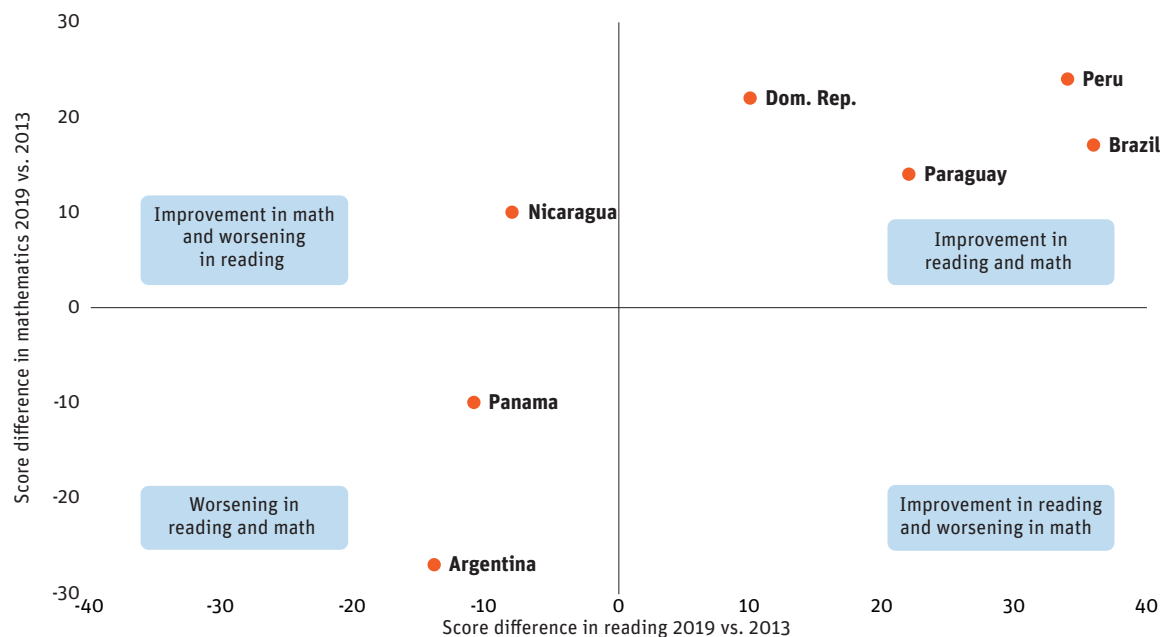
**The ERCE 2019 report also confirms another disappointing fact: there has been limited progress in learning outcomes in the region.** In fact, when compared to TERCE 2013, ERCE 2019's immediate predecessor<sup>78,79</sup>, results show that, on average, the bulk of countries participating in ERCE showed no

gains in learning outcomes between 2013 and 2019. Indeed, out of 14 countries that participated in both assessments, only 3 - Brazil, the Dominican Republic, and Peru - were able to improve their learning outcomes for both types of students (3<sup>rd</sup> and 6<sup>th</sup> grades) in both key subjects tested (reading and

78 UNESCO's LLECE has undertaken four international assessments of this kind to date. The first such assessment, called PERCE, took place in 1995, and had 13 LAC countries participate, all of them being Spanish-speaking one. The second assessment, SERCE, took place 11 years later, in 2006, and increased the number of participating countries to 15, but also adding a separate measurement for the Mexican State of Nuevo León, on top of the one for Mexico. Again here, all countries were of Spanish-speaking origin. The third assessment, TERCE, shortened the period between assessments to 7 years (2013) and again counted with the participation of 15 countries and the State of Nuevo León, but this time around incorporated, for the first time, a non-Spanish-speaking country, Brazil. Finally, the fourth assessment, ERCE 2019, again shortened time between assessments (to 6 years) and added more countries (having, for the first time, a total of 16 countries, 15 Spanish-speaking ones and Brazil). This time around, no sub-national assessment – like the one for Nuevo León in SERCE or TERCE – took place. For details on the four assessments, see <https://es.unesco.org/fieldoffice/santiago/projects/llece>.

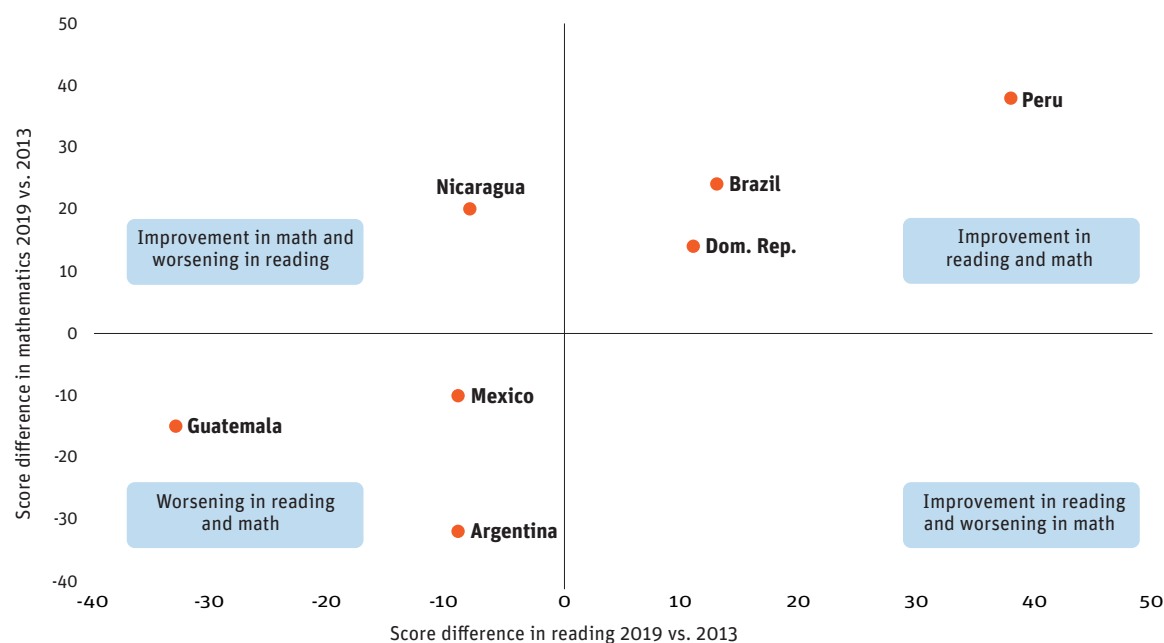
79 To access more data visit [www.lleceunesco.org](http://www.lleceunesco.org).

**Figure 3.2a. Learning gains in reading and math for students in grade 3, TERCE 2013 and ERCE 2019**



Source: Own elaboration based on UNESCO-OREALC (2021b). Countries appearing in the graphs are those that presented statistically significant differences between both assessments for both reading and math (at the 5 percent level).

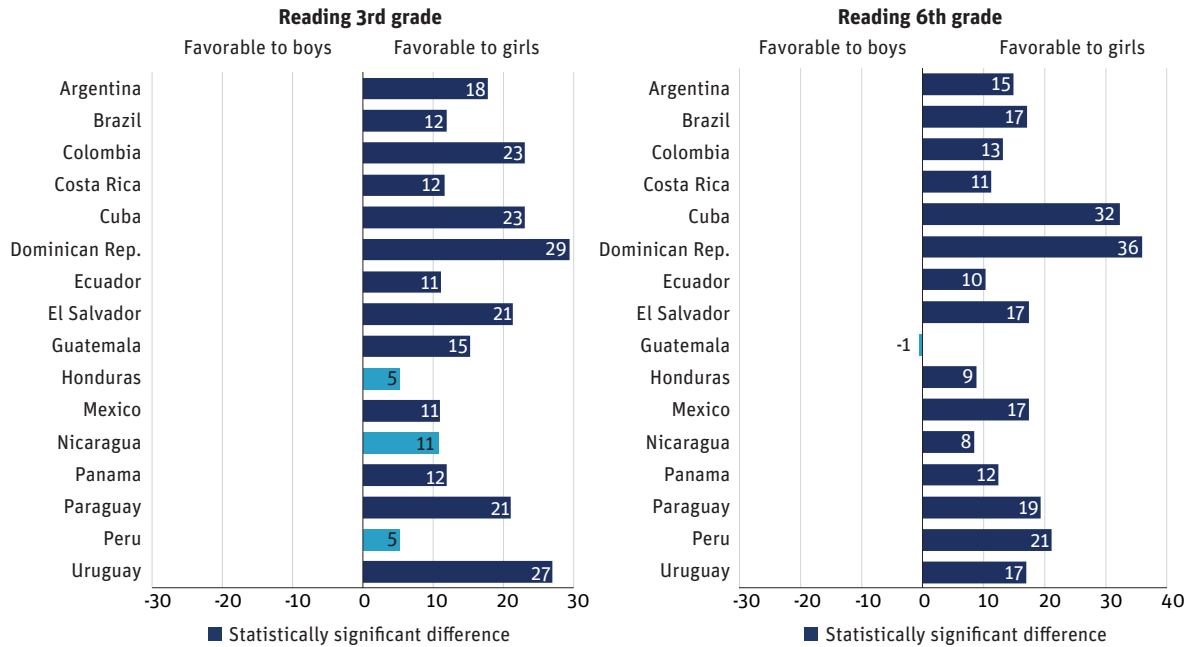
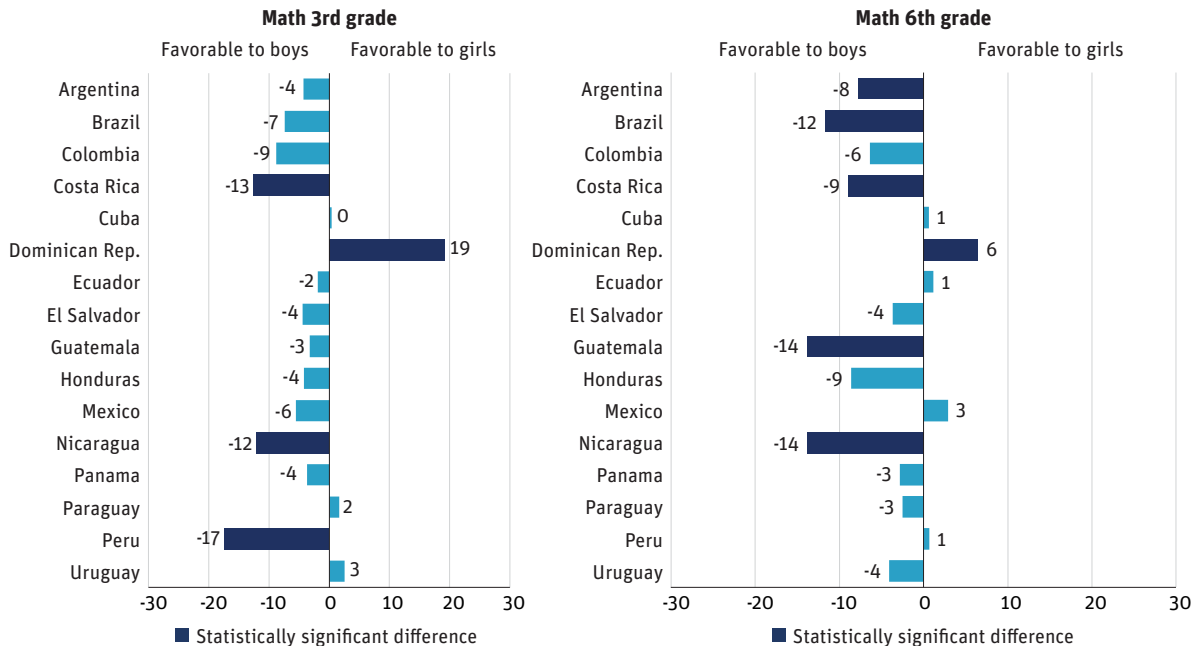
**Figure 3.2b. Learning gains in reading and math for students in grade 6, TERCE 2013 and ERCE 2019**



Source: Own elaboration based on UNESCO-OREALC (2021b). Countries appearing in the graphs are those that presented statistically significant differences between both assessments for both reading and math (at the 5 percent level).

math). Six countries – Colombia, Costa Rica, Ecuador, Honduras, Panama, and Uruguay – saw no significant progress in any of the grades or key subjects. And, most concerning, one country – Argentina – showed worse performance in both subjects and both years. The remaining countries showed mixed results, but often for just one subject and grade – e.g.

Nicaragua, for 3<sup>rd</sup>-graders, or Paraguay, for 6<sup>th</sup>-graders – or also worsening performance, but not in all subjects or grades – e.g. Nicaragua, with worse results in math for both grades, and Panama (3<sup>rd</sup> grade only), and Guatemala and Mexico (6<sup>th</sup> grade only), with worse results in both subjects for specific grades (Figures 3.2a and 3.2b).

**Figure 3.3a. Student achievement differences by gender in Reading, 3rd and 6th grade, ERCE 2019****Figure 3.3b. Student achievement differences by gender in Math, 3rd and 6th grade, ERCE 2019**

Source: Own elaboration based on UNESCO-OREALC (2021b).

**ERCE 2019 results show interesting and fairly consistent patterns in connection to gender differences across disciplines tested.** Two stylized facts emerge from the analysis. First, on average, LAC girls perform

systematically better in reading than boys, both in 3<sup>rd</sup> and 6<sup>th</sup> grade<sup>80</sup> (Figure 3.3a). Second, the clear gender bias in favor of girls in reading does not replicate at all in the case of math, where there is no discernible gender bias in

80 Actually, the bulk of participating countries show statistically significant differences in favor of girls - 13 of 16 countries in 3<sup>rd</sup> grade, 14 of 16 in 6<sup>th</sup> grade.



**Figure 3.4. Factors most strongly associated with student performance in 6th grade, ERCE 2019**

	Socioeconomic level	Attendance to preschool education	Grade repetition	Days of study per week	Parental participation in learning
<b>Effect</b>	<b>(+)</b>	<b>(+)</b>	<b>(-)</b>	<b>(+)</b>	<b>(+)</b>
# of countries with statistically significant results (reading)	16	16	15	16	14
# of countries with statistically significant results (mathematics)	16	12	15	15	14

Source: Own elaboration on the basis of UNESCO-OREALC (2021b), Annex 3, p.53. The table only shows those variables: (i) for the student- and family-based associated factors; and (ii) for which the number of countries with statistically significant effects was at least 12.

performance in favor of either boys or girls (Figure 3.3b). Data show that, on average, mixed results are obtained for math performance, where a handful of countries show gender differences for specific grades<sup>81</sup>.

**The ERCE 2019 study also reveals that the most significant force driving disparities in learning outcomes across and within countries in LAC is the SES of the household.** Indeed, by the end of primary education (6th grade for the majority of the countries), SES is the only variable that was statistically significant for both math and reading for all 16 participating countries (Figure 3.4). From an equity perspective, the results show the persistence of socioeconomic learning gaps and confirm that differences in learning outcomes between schools are largely a product of socioeconomic segregation within countries. Several other factors also show strong importance, like the number of days of study per week, whether the child has repeated a grade and attended pre-primary education, and the degree of parental participation in the learning process.

**Last but not least, ERCE 2019 results also show that between 40% and 50% of learning variability occurs between schools and between 50% and 60% within schools.** The high variability between schools finding implies a tight link between quality learning and school characteristics, which vary considerably within countries. Such diversity within countries represents an enormous challenge to educational systems in Latin America, which need to ensure equal learning opportunities for all students despite their socio-cultural and economic contexts.

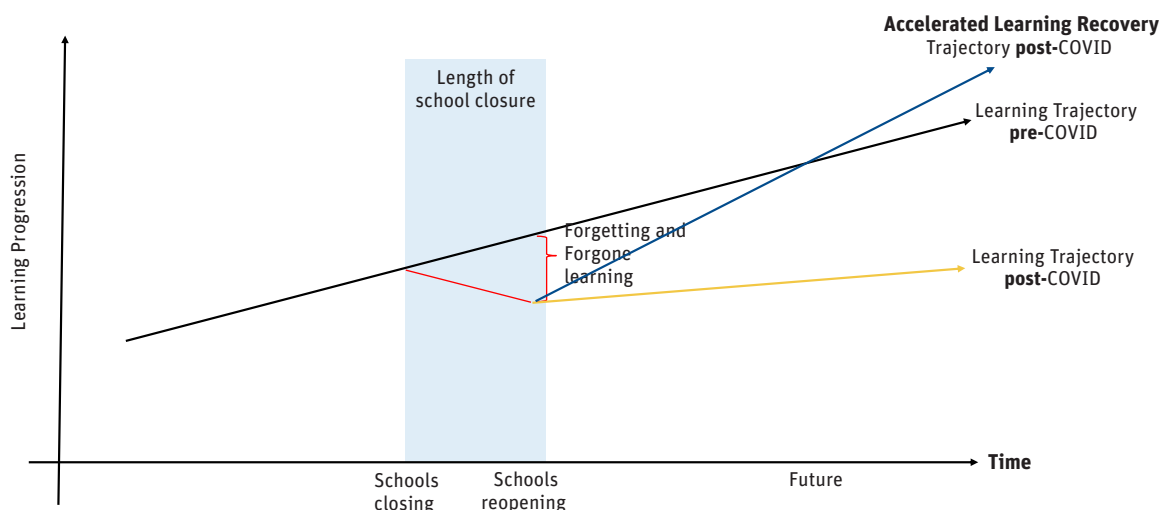
In addition, disparities in learning outcomes are also largely explained by differences within classrooms. These large differences in learning within a classroom bring up another enormous challenge for education systems, suggesting that a personalized/targeted approach to learning that adapts to each student need is increasingly fundamental for narrowing learning gaps. This personalized approach was the one approach greatly challenged by the massive school closures triggered by the pandemic across all countries in the region, but also one being given renewed impetus with the learning recovery agenda, as will be made clear in chapter 5.

### 3.1.2 The COVID-19 pandemic shock and its impact on learning: A crisis within a crisis

**The COVID-19 pandemic generated an “education upheaval”, disrupting the learning process and generating potential learning losses<sup>82</sup>.** This report defines learning losses as any loss of knowledge or skills and/or deceleration of or interruption to academic progress, most commonly due to extended gaps of discontinuities in a student’s education. Two main types of learning losses are often discussed in the literature: “forgotten learning”, which refers to the loss of previously acquired learning, and “forgone learning”, which makes reference to expected learning that does not take place as schools are closed to in-person learning. To estimate the “forgone” learning, some authors estimate a counterfactual using empirical data, such as learning levels attained by previous cohorts (learning losses), while others use normative criteria such as grade-level expectations (learning gaps). Even after students return to

81 The situation is fairly even, with 3 of the 16 countries (Costa Rica, Mexico, and Peru) in 3<sup>rd</sup> grade and 4 of the 16 countries (Argentina, Brazil, Costa Rica, and El Salvador) in 6<sup>th</sup> grade showing statistically significant differences in favor of boys, whereas only one country in 3<sup>rd</sup> grade (Paraguay) and a couple of countries in 6<sup>th</sup> grade (Mexico and Peru), showing that girls outperform boys.

82 WBG (2022c).

**Figure 3.5. Learning trajectories pre- and post-COVID-19, and implications of current learning losses on future learning**

Source: WBG et al. (2021).

school, additional learning losses could accumulate, harming children's future learning trajectories.<sup>83</sup>

**Figure 3.5 illustrates the elements described above using a hypothetical learning progression (slope) given by the learning trajectory pre-COVID.** It shows that COVID-related school closures can yield learning losses, both in terms of forgetting and forgone learning. Such losses can be measured as schools reopen. Additionally, since learning is progressive, if it is not recovered, students might be pushed towards a new learning trajectory (post-COVID learning trajectory) with a flatter slope, which will result in a level of learning that would be much lower than would have been expected if students had remained at the pre-COVID rate of learning. This difference is referred to in the figure as future learning losses. In this context, to redress learning losses, students must be put on an accelerated learning recovery trajectory. Chapter 5 discusses the learning recovery interventions to catch up on lost learning.

### Simulating the expected learning losses for LAC

**Updated simulations using observed data on length of school closures to date show significant learning losses in the region.** Previous estimations on simulated learning

losses published by the WBG<sup>84</sup> relied on older macroeconomic data and learning assessments, such as the scores from the Programme for International Student Assessment (PISA) from 2018 or before, to prospectively calculate learning losses in terms of learning-adjusted years of schooling (LAYS), associated loss of earnings, mean test scores (PISA), and share of students below the minimum proficiency levels in PISA. The estimates considered three different scenarios that varied according to the expected length of school closures early in the pandemic and assumptions on the effectiveness of each country's mitigation efforts<sup>85</sup>. Now, using observed information on school closures that include data on partial reopening of school systems at the country level, updated assessments data, and the latest macroeconomic projections, these simulations can be run for each country retrospectively. For updated global simulations<sup>86</sup>, school closures information is obtained from UNESCO's Global Monitoring of School Closures database<sup>87</sup>, and the different scenarios are differentiated by their assumption on the extent of school closures in partially opened systems (50%, 25%, and 15% for the optimistic, intermediate, and pessimistic scenarios, respectively) and the effectiveness of mitigation efforts (high, medium, and low, for the optimistic, intermediate, and pessimistic scenarios respectively). For these regional simulations, we further improve these estimates in two ways.

83 WBG et al. (2021).

84 For previous publications in chronological order, see Azevedo (2020), Azevedo et al. (2020), WBG (2021a), and WBG et al. (2021).

85 See Azevedo et al. (2020) for details.

86 See Azevedo et al. (2022) for details.

87 Data source: <http://COVID19.uis.unesco.org/global-monitoring-school-closures-COVID19/>.

First, we calculate the length of school closures by February 2022 aggregating data from different sources, including the UNESCO calendar, the UNICEF's Monthly monitoring of school closures<sup>88</sup>, and country-specific web research to get more accurate data<sup>89</sup>. Second, for simulations on test scores and levels of proficiency, our simulations incorporate the latest data on student learning from the ERCE 2019 assessments for a subset of countries in the region<sup>90</sup>. This allows us to see the effects on mean test scores and distribution of students within the different levels of proficiency for math and reading among third and sixth graders. Using these updated data, we simulate (i) the effect on LAYS and earnings<sup>91</sup> using the UNESCO calendar scenarios and the aggregated WBG calendar<sup>92</sup>, and (ii) effect on ERCE mean scores, levels of proficiency and share of students below minimum proficiency for the aggregated WBG calendar.

**Estimates using different assumptions on the extent of partial reopening show a loss of between 1 and 1.8 LAYS.**

Using the UNESCO's calendar, in the optimistic scenario, with partial reopening assumed to be 50% open, there is an average loss of 1 LAYS in the region, from a baseline of 7.8 years (see Figure 3.6). In the intermediate scenario, with partial reopening assumed to be 25% opened, losses reach 1.5 LAYS. Lastly, in the pessimistic scenario with only 15% opened, losses reach 1.8 LAYS. Using the aggregated WBG calendar, simulations show that LAYS would decrease from 8.2 to 6.9 (assuming high mitigation effectiveness), to 6.5 (assuming medium mitigation effectiveness) and 6.4 (assuming low mitigation effectiveness). These values approximate more those of an optimistic assumption on partial school openings in terms of the percentage of the school time schools remained closed. Thus, optimistically, children are one learning-adjusted year of schooling behind in the region on average, despite attempts to reopen schools and provide distance learning.

**These averages hide large variations between countries, with larger relative losses for worse-off countries.**

As in previous simulations, the loss in absolute terms could be higher for countries that were better off before COVID-19. Looking at the scenarios from the UNESCO calendar, in Costa Rica, Ecuador, and Mexico, LAYS could drop by almost 2 years in the intermediate scenario. However,

efforts in certain countries to provide remote learning, like *Plan Ceibal* in Uruguay, and to fully open schools to in-person classes seem to have paid off, with Uruguay losing only 0.88 LAYS in the same scenario. In relative terms, the loss in learning represents a bigger share in countries with lower LAYS prior to the pandemic. For example, Guatemala and El Salvador could lose 16% of LAYS relative to their baseline in the intermediate scenario, while Honduras could lose up to 20% of LAYS.

**These learning losses translate into a significant decrease in earnings and productivity equivalent to a decrease of about 12% in lifetime earnings for a student at school today under an intermediate scenario.**

The loss of learning can be quantified in terms of lifetime earnings using evidence on returns to schooling, life expectancy and labor market variables. In the optimistic scenario, the average student in LAC from the cohort in school today could lose \$931 (in 2017 dollars of purchasing power parity or PPP) average annual earnings, equivalent to \$16,993 in lifetime earnings and 7% of projected lifetime earnings. In the intermediate scenario, the average student in LAC from the cohort in school today could lose \$1,565 (in 2017 PPP dollars) average annual earnings, equivalent to \$28,556 in lifetime earnings and 12% of projected lifetime earnings. This effect compounds the economic crisis already resulting from the pandemic, and countries may suffer significant losses in human capital and productivity. It is expected that learning losses in LAC may translate into an aggregate economic cost of foregone earnings of US\$1.5 trillion lost (in 2017 PPP dollars) in the optimistic scenario, equivalent to 16% of the regional GDP, and US\$ 2.3 trillion lost and 24.7% of the regional GDP, in the intermediate scenario. Using the aggregated WBG calendar data, and assuming intermediate effectiveness of mitigation efforts, the average student could lose \$1,374 (in 2017 PPP dollars) average annual earnings, equivalent to 10% of projected lifetime earnings.

**Simulations reveal that learning outcomes as measured by mean ERCE scores decrease significantly for both math and reading and 3rd and 6th grades.** For the 16 participating countries in the region, baseline (2019) ERCE scores were on average 718 and 715 for 3<sup>rd</sup> grade

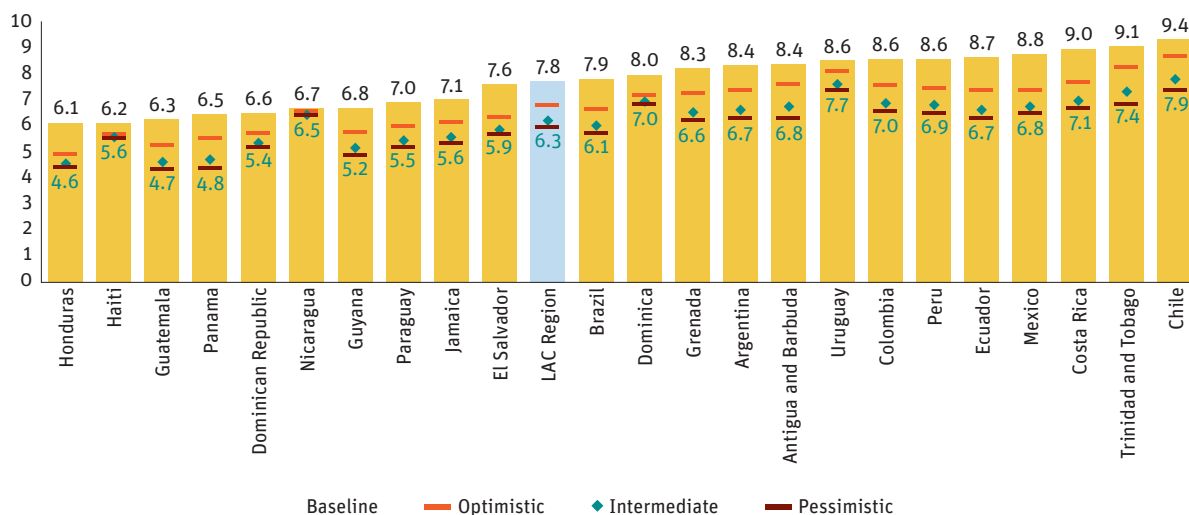
88 Data source: <https://www.unicef.org/lac/respuesta-educativa-de-alc-frente-al-COVID-19/>.

89 This aggregated WBG calendar divides the "Partially Closed" classification further into three: mostly opened, partially closed/opened, and mostly closed. Each of these classifications is converted into a measure of the percentage of time a school system was closed: 75% for mostly closed, 50% for partially closed, and 25% for mostly open.

90 The 16 countries included are: Argentina, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Uruguay.

91 LAYS and associated earnings losses simulations still use the original simulation model based on PISA 2018 or older data.

92 This calendar includes information on 3 more countries: St. Kitts & Nevis, St. Lucia, and St. Vincent & the Grenadines.

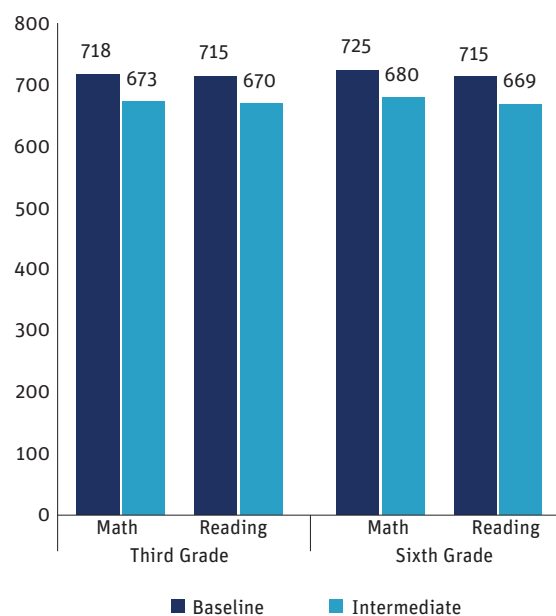
**Figure 3.6. Simulated loss in learning-adjusted years of schooling (LAYS) due to COVID-19 in LAC**

Source: World Bank estimates based on Azevedo et al. (2022).

Note: The parameters used here match global simulations based on the country's income level group. Simulations presented are based on UNESCO's calendar until February 2022. Optimistic, Intermediate, and Pessimistic scenarios vary in their assumption of actual school closures during partial reopening (50, 25, and 15 % closed, respectively) and effectiveness of mitigation strategies (high, medium, and low, respectively).

math and reading, respectively, and 725 and 715 for 6<sup>th</sup> grade math and reading, respectively<sup>93</sup>. The mean ERCE scores are expected to decrease by around 6.3% (or 45 points) in both grades and subjects, given our best estimate on the actual length of school closures from the aggregated WBG calendar and a medium level of mitigation effectiveness for distance learning. Figure 3.7 presents the decrease in the average ERCE scores corresponding to these 16 countries by grade and subject. To put things in perspective, the simulation results for 3<sup>rd</sup> grade imply that every country would have worse mean scores than in 2013 and results would fall to levels of more than 10 years ago, considering average TERCE 2013 scores of respectively 700 for reading and 709 for math.

**Beyond the mean, the distribution of students along ERCE scores, that is the percentage of students belonging to each of the 4 categories will also be greatly affected by the pandemic.** Figure 3.8 shows the percentage of students in each of the 4 proficiency levels of ERCE by grade and subject at baseline (based on ERCE 2019 scores) and simulated using school closures from the aggregate WBG calendar and assuming an intermediate effectiveness of remote learning. For all tests, the share of students in level 1 is expected to increase the most. The share of students in proficiency level 1 increases by 17 percentage

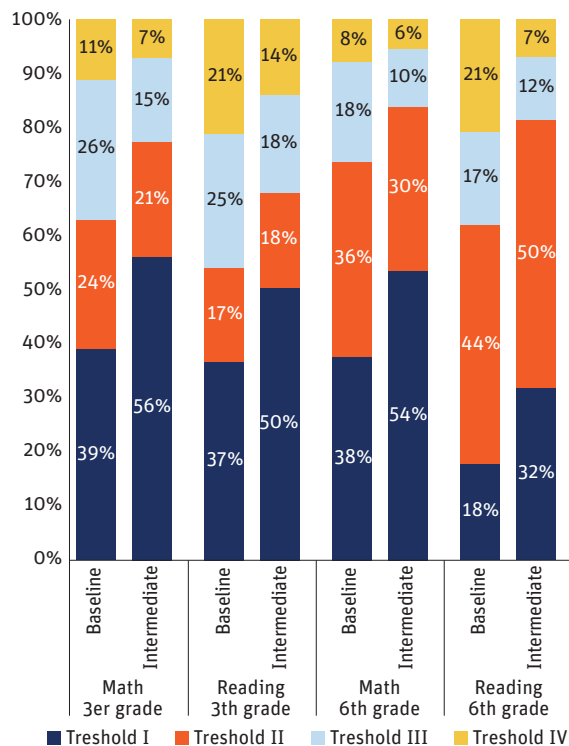
**Figure 3.7. Simulated learning loss effects on mean ERCE 2019 scores, by grade and subject in LAC (%)**

Source: World Bank estimates based on Azevedo et al. 2022.

Note: The parameters used here match global simulations based on the country's income level group and assume an intermediate effectiveness of mitigation strategies. The length of school closures is defined on a country level based on an aggregation of UNESCO, UNICEF, and other data sources until February 2022.

93 The country-level mean scores between official UNESCO results and the baseline values for ERCE 2019 used in the simulation tool differ slightly because the simulation tool estimates baseline values for 2019 using grouped data. Scores are population weighted averages.

**Figure 3.8. Simulated learning loss effects on the distribution of ERCE 2019 proficiency levels, by grade and subject in LAC (%)**



Source: World Bank estimates based on Azevedo et al. (2022).

Note: The parameters used here match global simulations based on the country's income level group and assume an intermediate effectiveness of mitigation strategies. The length of school closures is defined on a country level based on an aggregation of UNESCO, UNICEF, and other data sources until February 2022.

points in math for third graders (from 39% to 56%) and 13 percentage points in reading (from 37% to 50%). For sixth graders, the share of students in level 1 increases by 16 percentage points in math (from 38% to 54%) and by 14 percentage points (from 18% to 32%) in reading. The percentage of students in high-scoring levels 3 and 4 decreases in all grades and subjects. The higher percentage of students in level 1 poses an especially strong challenge to teachers as they must cater to the need of this increasing proportion of students in the classroom.

**This changing distribution of scores has consequences on the share of students below MPL, which is expected to dramatically increase, especially for the younger**

**ages and in reading.** The minimum proficiency level is defined differently in each grade.<sup>94</sup> Figure 3.9 shows the resulting share of students below MPL at baseline and after the pandemic for each grade and subject. In most countries, the share of students below MPL is expected to increase more for students in third grade (panel A and B) and in reading (panels B and D), which is consistent with expectations on the effectiveness of distance learning for younger students and in reading. In the region<sup>95</sup>, on average, the share of students below MPL for reading in sixth grades increases from 62% to 82% (20 p.p.) and from 74% to 84% (10 p.p.) in math. For third graders, the share of students below MPL increases from 37% to 50% in reading (13 p.p.) and from 39% to 56% in math (17 p.p.). Recent forthcoming updates of learning poverty estimations do confirm that Latin America is the region in the world with the starkest increase in children unable to read a simple passage with comprehension by age 10 (see Box 3.1). Expected losses are already showing to be a reality according to the emerging evidence on actual learning losses.

### Actual learning losses: Reviewing the evidence to date

**Learning assessments are a vital tool to provide a clear picture of students' current learning levels.** They are essential to attempt to measure the effect of the pandemic on learning losses, and to inform the formulation of adequate and evidence-based targeted and remedial programs. Assessments also allow periodical tracking of the students to gauge their progress and learning recovery after the crisis.

**During the year 2020, most countries in the region decided to postpone or suspend their national learning evaluations due to the pandemic.** During 2020 there was a tendency to maintain certification and/or student selection exams, and to suspend or postpone national evaluations for monitoring purposes. As shown in Chapter 5, many countries canceled the scheduled national evaluations (Argentina, Belize, Dominican Republic, Costa Rica, Guatemala, Honduras, Panama, and Peru) or evaluated fewer grades or subjects. Brazil, Uruguay, and El Salvador continued with the national evaluation as planned in 2020. However, in 2021 most countries resumed the measurement of learning outcomes. The challenges and innovations adopted by LAC countries for different types of assessments will be discussed in Chapter 5.

94 As explained above, for third graders, a student is defined as being below minimum proficiency if he or she is in level 1. For sixth graders, a student is defined as being below minimum proficiency if he or she is in level 1 or level 2.

95 For this exercise, we calculated a population weighted average that considers the number of students in each of the included countries.

### Box 3.1. Learning poverty in LAC: A serious issue, deepening with COVID-19

The learning poverty indicator measures the share of children who are unable to read and understand a simple text by age 10. High rates of learning poverty are an early signal that education systems are failing to ensure that children develop critical foundational skills. This makes it much harder for children to acquire the technical and higher-order skills needed to thrive in increasingly demanding labor markets and for countries to develop the human capital needed for sustained economic growth<sup>96</sup>.

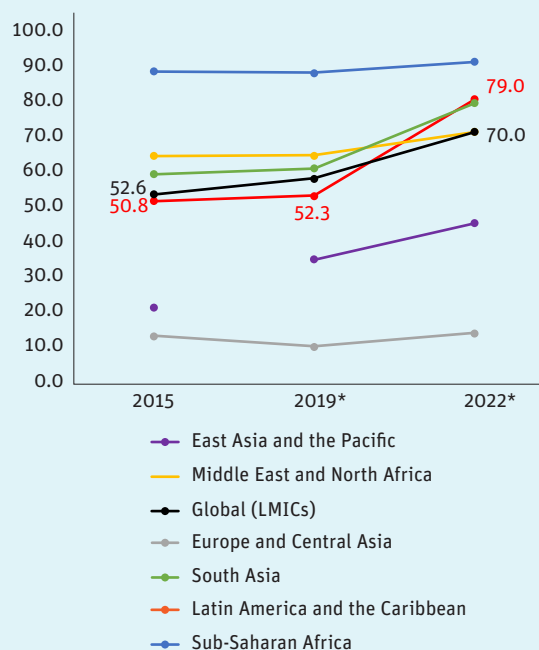
**The high rate of learning poverty was a global rising problem before the pandemic and expects to deepen now after COVID-19.** The average global learning poverty rate was estimated to affect 57 percent of 10-year-olds in low- and middle-income countries (LMICs) in 2019, up from a 53 percent value in 2015. The latest global simulations, just released by the World Bank within the scope of a joint effort by many international agencies (WBG 2022d), project a 23 percent increase, reaching a dismal 70 percent. In other words, after two years of living under the effects of the pandemic, learning poverty in low- and middle-income countries would be expected to affect 7 out of 10 10-year-olds. A sobering trend.

**Once again here, the pandemic would be disproportionately affecting the LAC region.** Learning poverty was estimated to affect roughly half of all children in the region. In line with global trends, it was also presenting a negative trend since 2015 - increasing from an average 51 percent in 2015 to 52 percent in 2019. Prior to the pandemic, nonetheless, LAC showed average learning poverty rates which were only higher than two regions - EAP (35 percent) and ECA (10 percent). *According to the new simulations, the deepening of learning poverty in LAC would be so dramatic that the region would now experience the largest relative increase in learning poverty (26.7 percentage points) in the world.*

In fact, simulations forecast that learning poverty in LAC would reach 79 percent by 2022<sup>97</sup>, surpassing the average for low- and middle-income countries and overtaking regions like MENA (Figure B.3.1.1). Increases in learning poverty would be largest in those regions – SA and LAC - where school closure spells were the longest. In these regions, the share of children in learning poverty is expected to have increased by more than half in just the past two years.

Sources: Azevedo et al. (2022); WBG (forthcoming b).

**Figure B.3.1.1. Learning poverty, globally and by region (%), 2015 – 2022 (est.)\***

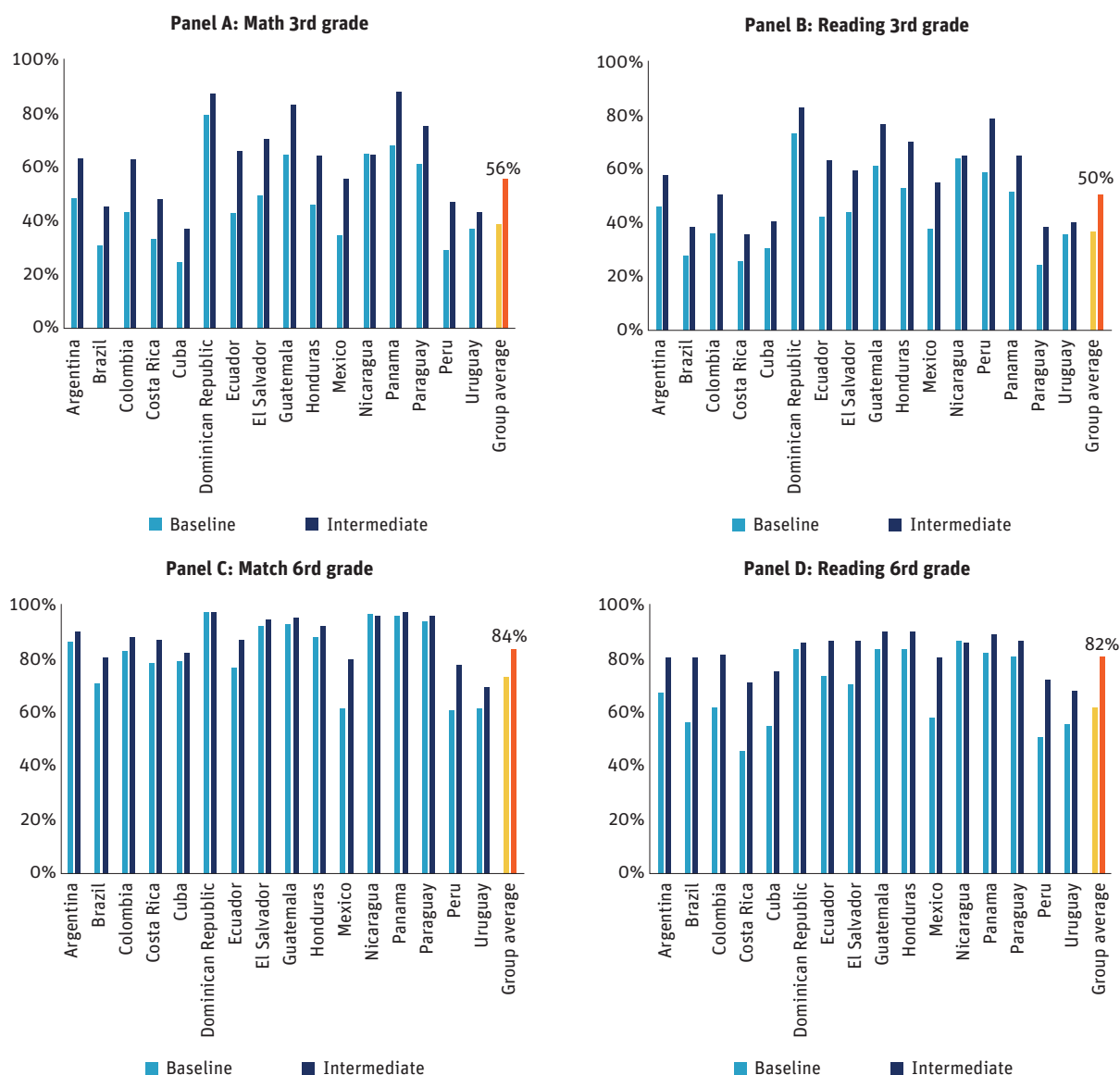


\*Note: Numbers for 2022 are based on simulations under a pessimistic scenario. The global figure is for all low- and middle-income countries. Regional and global figures are all population-weighted averages. For the EAP region, the 2015 and 2019 averages are not directly comparable, due to major changes in the country composition and assessments used for the two years. Sources: Azevedo et al. (2022), WBG (forthcoming b).

96 WBG (2022d).

97 It is important to highlight that the calculation of learning poverty is based on the SERCE scale (which defined the minimum proficiency level as those students reaching Level 3 in language (or a score above 514 points)), so these estimations, while consistent in the magnitude of the increase, are not directly comparable with the simulations presented in Figures 3.7 through 3.9, which use the TERCE scale for comparability with 2013.

**Figure 3.9. Simulated learning loss effects on the share of students below MPL in ERCE 2019, by grade and subject in LAC (%)**



Source: World Bank estimates based on Azevedo et al. (2022).

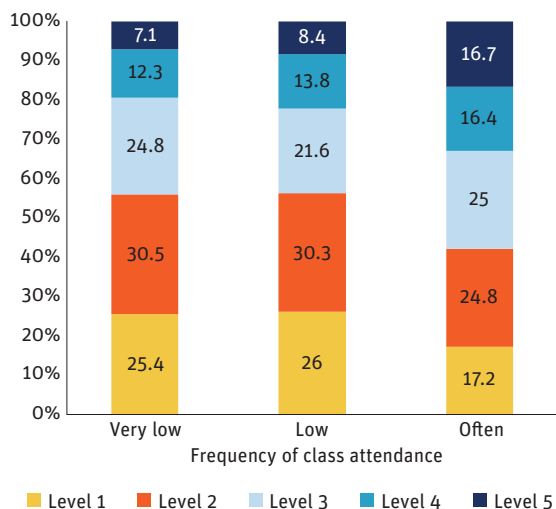
Note: The parameters used here match global simulations based on the country's income level group and assume an intermediate effectiveness of mitigation strategies. The length of school closures is defined on a country level based on an aggregation of UNESCO, UNICEF, and other data sources until February 2022.

**Regional and international assessments were mostly kept on track.** The high-stakes assessments of the Caribbean region, developed by the Caribbean Examinations Council (CXC), were applied in 2020 and 2021. The PISA global assessment was postponed, and its next application is planned for 2022. However, PIRLS (Progress in International Reading Literacy Study) was applied in-person in 2021.

**While it is good news that many assessments took place in 2021, evaluation challenges persist and carrying out**

**comparable evaluations over time is still a challenge in several LAC countries.** Additionally, the results of most of the 2021 evaluations are still pending publication. This has resulted in having few data and studies at this stage that can help measuring the learning loss generated by the two years of the pandemic.

**National and regional assessments undertaken in 2020 (and 2021 when available) can help provide a first snapshot of trends in learning, with caveats.** Colombia implemented SABER examinations in 2020 and 2021, allowing

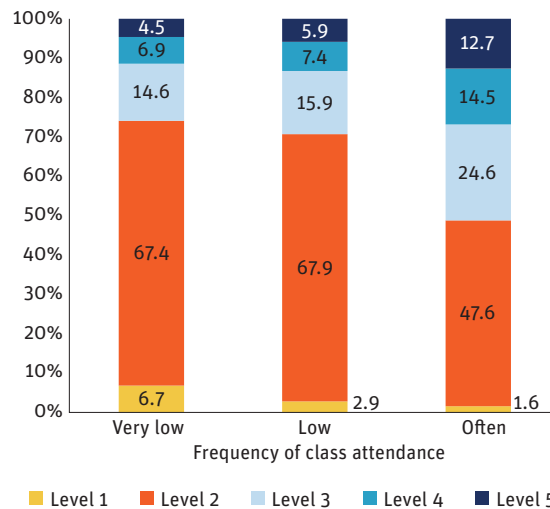
**Figure 3.10. Colombia: Share of Grade 3 students at each reading level by frequency of attendance (%), 2020**

Source: INEEd, 2021.

for some comparison, although with caveats<sup>98</sup>, between pre- and post-pandemic outcomes (see Box 3.2). Learning scores slightly decreased, continuing a long-term trend, with persistent gender, socioeconomic, private-public, rural-urban disparities. The magnitude of the decrease is however difficult to interpret in this context given that this is a high-stake exam which was subject to important cohort effects in 2020 and 2021<sup>99</sup>. Results on the high-stake Caribbean Secondary Education Certificate (CSEC) examinations in Jamaica show that the share of students with a passing grade in Mathematics dropped from 47 percent in 2018 to 38.2 percent in 2021.

### Outcomes from Uruguay illustrate the importance of readiness for remote learning and school reopening.

A comparison of the 2017 and 2020 low-stakes Aristas assessment in *Uruguay* (the test uses a representative sample of all 3rd and 6th grade students) shows no

**Figure 3.11. Colombia: Share of Grade 3 students at each math level by frequency of attendance (%), 2020**

Source: INEEd, 2021.

significant reduction in learning outcomes, expressed as average test scores. Better overall results in Uruguay were partly related to higher readiness for remote learning through Plan Ceibal, which broadly increased Internet and computer access for students and teachers.<sup>100</sup> The relevance of Plan Ceibal gained greater visibility in the context of the pandemic due to the increase in the use of platforms. Almost 90 percent of teachers indicated that they were linked to students in the context of the pandemic through Plan Ceibal platforms.<sup>101</sup> The prompt reopening of schools also contributed to better results. Students from 3<sup>rd</sup> grade who attended school more frequently, showed higher levels in reading. Of the children with low attendance, only 19.4% achieved reading levels 4 and 5, compared to 33.1% of children who usually/often attend class (Figure 3.10). A similar result is observed for mathematics in 3<sup>rd</sup> grade: 11.4% of children with very low attendance were in mathematics levels 4

98 It is worth noting that, while the SABER 11 test is comparable in its applications in 2019, 2020 and 2021 (pre- and post-pandemic), the SABER 3, 5 and 9 tests were applied only through 2017, for which there are pre-pandemic estimates, but not post-pandemic. The latter results are therefore comparable only through 2017 because the test was significantly changed in 2018. In fact, in 2018 the SABER 3, 5, 7, and 9 tests were re-designed to be standardized and comparable over time. In 2019, a pilot application for all four SABER tests was carried out. The full application of the 4 revised tests was first carried out in 2021. As a result, comparability between the pre-pandemic and post-pandemic applications of SABER 3, 5, 7, and 9 tests is necessarily limited.

99 In Colombia, official data from the Colombian Institute for the Education Quality Assessment (ICFES), which is in charge of the national evaluation tests, shows that in 2020 the number of students that participated in the national evaluation for eleventh grade was 2% lower than in 2019. Nonetheless, in 2021 the participation rate in the evaluation was even higher than in 2019 (4% higher) in part given by the fact that people who did not do the test in 2020, did it in 2021, which is suggestive of temporary rather than permanent effects on schooling.

100 100 percent of primary and lower secondary schools (3,023 schools) had Wi-Fi connection and access to digital devices (laptops and tablets). See <https://www.ceibal.edu.uy/es/articulo/ceibal-en-cifras>.

101 Carbajal et al. (2022).



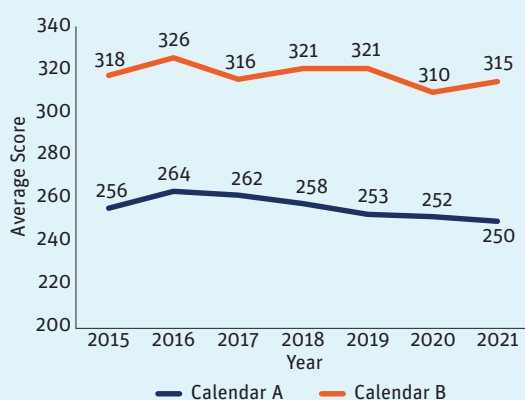
### Box 3.2. Assessing learning in difficult times of the pandemic: Colombia's culture of evaluation

**Colombia demonstrated commitment to an evaluation culture by applying the SABER test in the context of the pandemic to give continuity to the measurement of its students' competencies.** Due to the pandemic and continued school closures, many countries postponed or canceled the learning assessments that were scheduled. However, Colombia maintained the application of the SABER exam during 2020. The system for evaluating the results of the quality of education in Colombia is led by the Colombian Institute for Education Quality Assessment (ICFES). Because the SABER exams have national coverage, conducting the exam in 2020 involved a major logistical challenge. The places where the face-to-face exams were applied were, in most cases, schools that had been closed for most of the year and had to be reopened in November solely for the application of the exam and complying with the biosafety protocols.

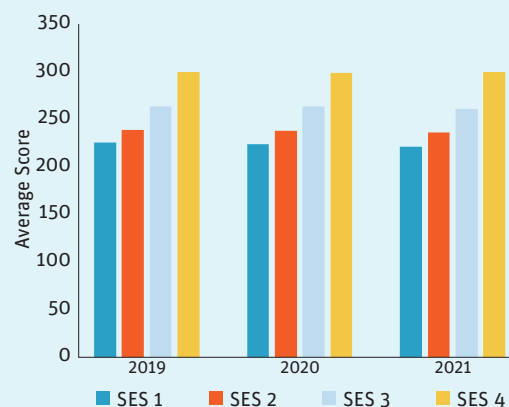
**By law, state exams are applied twice a year to evaluate the education given to those who finish upper secondary education, called SABER 11 (Grade 11).** For SABER 11, the application of the first semester (which takes place approximately in March) mainly evaluates secondary education institutions whose school calendar begins in August and ends in June of the following year (calendar B), while the application of the second semester (which takes place between September and October) mainly assesses students from institutions whose school calendar begins in January and ends in November (calendar A). The population enrolled in calendar B is a minority compared to that of calendar A and is also largely made up of private and bilingual institutions. 100% of the country's public institutions belong to calendar A.

**Temporary adaptations were made to the SABER 11 test to achieve its application in 2020, without compromising the quality, comparability, or rigor of the exam.** Generally, the exam is carried out in two sessions of four hours and thirty minutes each. In 2020, the tests were applied in a single session and with a smaller number of questions, for which it was necessary to reduce the number of questions from 278 to 188, with a total application time of 5 hours and 30 minutes. This change was rigorously evaluated to ensure that comparability with results from other applications was not affected. In 2021, the ICFES resumed the usual application of the exam.

**Figure B.3.2.1. Colombia: Average SABER-11 test results, 2015-2021**



**Figure B.3.2.2. Colombia: Average SABER-11 test results by SES, 2019-2021**



Source: Own elaboration with data from ICFES, using SABER-11 data (2021).

Note: SABER 11 evaluated 486,271 Grade 11 students and 55,207 "Cycle 6" students. Cycle 6 corresponds to the last year of secondary education for adults. Since the focus of this section is on children and adolescents, results from Cycle 6 were not included, only those from Grade 11. ICFES applies SABER tests to assess students learning in elementary school (grade 3 and grade 5), lower secondary (grade 7 and grade 9) and upper secondary (grade 11). Only SABER-11 results are comparable pre- and post-pandemic.

(Box continues on next page)

### Box 3.2. Assessing learning in difficult times of pandemic: Colombia's culture of evaluation (continued)

**Regarding the results, in 2020 and 2021 there is a slight decrease in the average score with respect to the results of 2019.** The maximum score of the SABER 11 exam is 500, where the scores are weighted in each of the 5 competencies that the exam examines: mathematics, critical reading, social and citizenship, natural sciences and English. In 2020 the average Calendar A score dropped one point (from 253 to 252 points) and in 2021 it dropped an additional two points (score 250)-Figure B.3.2.1-. The drop was strongest for Schedule B, whose average score fell 11 points between 2019 and 2020 (from 321 to 310). However, in 2021 it increased again by 5 points (score of 315). It is important to highlight that these variations are not statistically significant with a confidence level of close to 95%. Last but not least, some gaps in results are observed for some groups. Figure B.3.2.2 illustrates the scores (adding calendar populations A and B) for each socio-economic status between 2019 and 2021. As the socioeconomic level increases, the average global score also increases. In 2021, the students of SES 1 had an average of 222 points, while those of SES 4 obtained an average of 301. The results show a very wide and significant difference (79 points) in the average score between the students of the level highest and lowest socioeconomic status.

Source: ICFES, Colombia. SABER 11, 2021.

and 5, compared to 27.2% of children who usually/often attend class<sup>102</sup> (Figure 3.11). The pandemic however interrupted the educational process in an unequal way depending on the context: those who were not (came back later) in the classrooms were, to a greater extent, children in more vulnerable situations. As a result, there appears to have been an increase in the academic gap between lower- and higher-income students. These data are also nicely illustrative of the expected impact of limited attendance on learning in other countries, knowing that the situation is likely to be much worse given the higher preparedness of Uruguay for distance learning.

**Studies from LAC regarding actual learning losses are still scarce and not all studies have the same statistical rigor, but the available evidence points to significant learning losses.** Table 3.1 summarizes the main findings on learning losses for selected studies from the region. Two robust studies from São Paulo (Brazil) show pronounced learning losses. The first study uses standardized test scores to compare learning before and after school closures.<sup>103</sup> The study finds learning losses for all assessed grades in math and reading. For 5<sup>th</sup> grade, the

results show learning losses equivalent to scores from 10 years ago or more: 196 (2021) in math and 194 (2021) in Portuguese (Figures 3.12 and 3.13). The drop is starker for primary education students. Assuming the pre-COVID learning trajectory (2011-2019) is maintained, recovering from the learning losses would take between four and fifteen years<sup>104</sup>. This study is the starkest illustration so far that expected learning losses are real and simulations are not far from reality, with, notably, a decrease of about 13% in reading in grade 5. And this is especially worrisome knowing that these data refer to a wealthy State in Brazil. A second study from São Paulo concluded that under remote learning, students had a setback equivalent to 75% of in-person learning with a risk of school drop-out increasing by 365 percent in the wake of the pandemic<sup>105</sup>. Additional data from a group of Brazilian states indicate that the share of second graders off track to becoming fluent readers (who can only read a maximum of 9 words in one minute) increased from 52 percent in 2019 to 73 percent in 2021<sup>106</sup>.

**A study from Chile compares child development indicators for pre-primary students, finding children affected**

102 INEEd (2021).

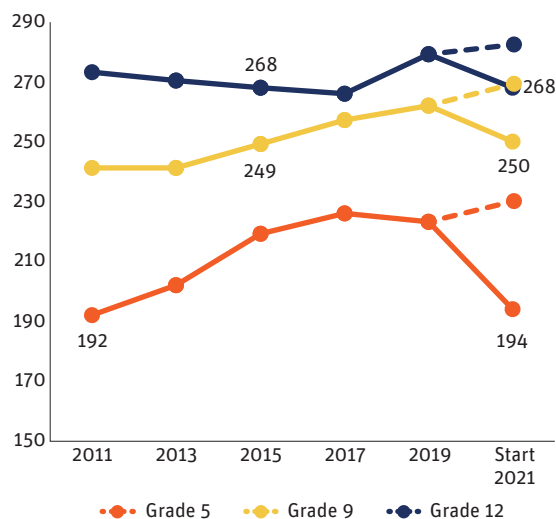
103 At the end of 2021 the National Institute of Educational Studies and Research (INEP) started the in-person application of the Basic Education Assessment System (SAEB). The application included public school students from 5th and 9th grades of elementary school and 12th and 13th grades of high school. These same grades were also evaluated in a sample format for private schools. The areas evaluated were Portuguese (language) and mathematics. Basic Education Assessment System analyzed a sample from 5th, 9th and 12th grades.

104 São Paulo Education Secretariat (2021).

105 Cossi et al. (2021).

106 Fundação Lemann (2021).

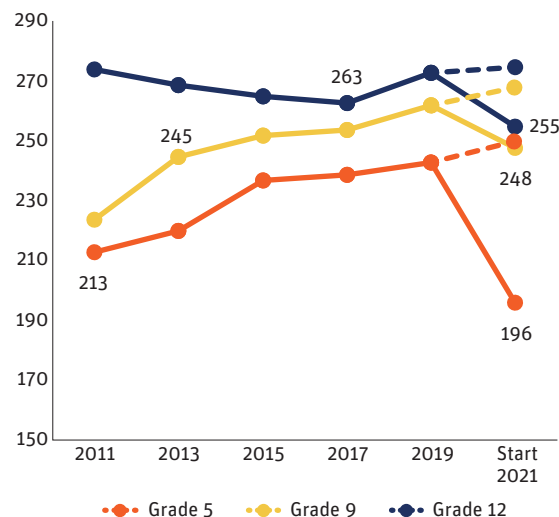
**Figure 3.12. Brazil: National SAEB score results in language: Time trend by grade in São Paulo, 2011-2021**



Source: São Paulo Education Secretariat (2021).

Note: The grades are graphed together for illustration, although the scales are not comparable across grades.

**Figure 3.13. Brazil: National SAEB score results in mathematics: Time trend by grade in São Paulo, 2011-2021**



by the pandemic scored worse than the pre-pandemic cohort in three out of four developmental areas (language, social-behavioral skills, and general development)<sup>107</sup>. Other studies for Colombia<sup>108</sup> and Mexico<sup>109</sup> show significant learning losses, especially affecting disadvantaged groups. In Mexico, a recent study on the State of Guanajuato supported by the World Bank presents robust preliminary evidence of a decrease in learning outcomes (Box 3.3).

**Growing evidence from LAC and low- and middle-income countries confirms learning losses have unequally impacted vulnerable groups.** Based on recent studies, Table 3.2 summarizes the effect that certain characteristics have had on learning losses to date. On average, early grades, younger children and children from lower SES have been disproportionately affected with greater learning losses. There is limited evidence by location (urban vs.

rural areas) and results, although also still limited, have tended to penalize girls. Some studies from the OECD (Organisation for Economic Co-operation and Development) countries show similar patterns.<sup>110</sup>

**Evidence confirms that younger students and early grades have been disproportionately affected.** Results from São Paulo using SAEB, the Basic Education Assessment System, show much starker declines for grade 5 than for grades 9 and 12. Data from Mexico show a steeper drop in reading results for early ages (10 and 11 years) than for older ages (12 to 15 years). In India, the proportion of children in grade 3 enrolled in public schools who can do at least subtraction (proxy for grade level) dropped from 23.5% in 2018 to 16% in 2020. In contrast, for grade 7, the proportion of children who can do division increased in that same period (36.1% to 36.6%). There are larger losses in grades 3 and 5 than in grade 7.

107 Abufhele et al. (2021).

108 García et al. (2021).

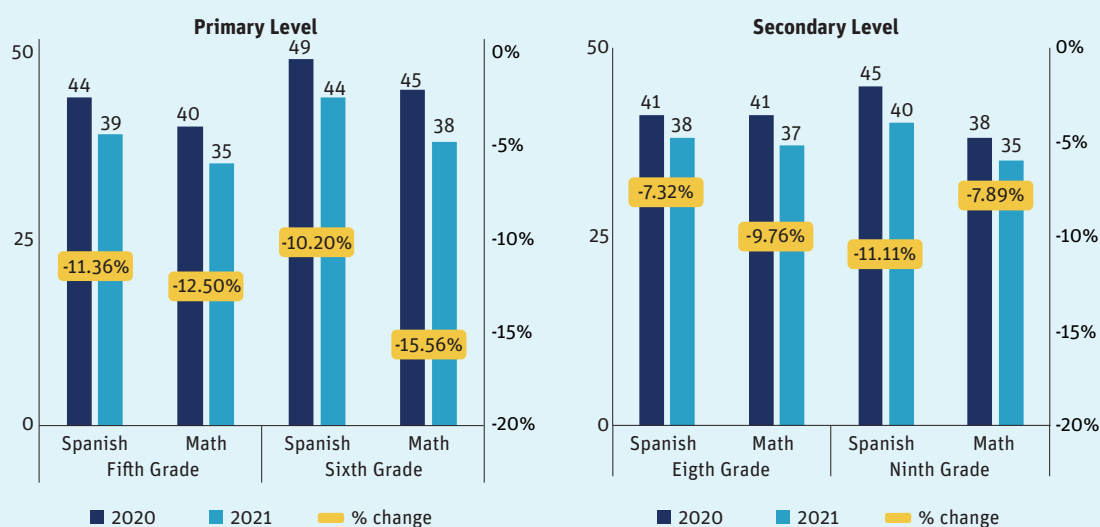
109 Hevia et al. (2022).

110 In Belgium, for example, a study finds increases in inequality both within and across schools, driven by large learning losses in schools with a high proportion of disadvantaged students (Maldonado and de Witte, 2021). A study from Switzerland showed that the learning pace of primary school students was much lower in remote learning than the learning pace of secondary school students (Tomasik et al., 2021). A study from the United States found larger declines in math, and the earlier grades, and marginalized and economically disadvantaged students had larger declines relative to their peers (Lewis et al., 2021). Recent evidence from the Basque Country (Spain) finds that factors linked to schools account for learning loss differences, observing a large decline in learning for public schools, as well as learning in private schools with prior low performance (Arenas and Gortázar, 2022).

### Box 3.3. Measuring learning and promoting alliances for learning recovery: The case of Guanajuato

The state of Guanajuato (GTO), in Central Mexico, is a great example of an education system that has developed an Education Management Information System (EMIS) and a learning assessment culture for evidence-based policymaking. Against such background, GTO's Ministry of Education (SEG) decided to build on this information-driven policy approach to guide critical actions for recovery after the pandemic<sup>111</sup>. In doing so, they became Mexico's only state to place a strong emphasis in the use of student learning outcomes (both summative and formative) as a first stage to guide the schooling and learning recovery strategy in coordination with other human development public institutions and in alliance with the private sector<sup>112,113</sup>.

Figure B.3.3.1. Guanajuato: RIMA average scores by level, grade, and subject, 2020 vs. 2021



Source: Own elaboration based on RIMA data.

Note: The scale of these scores goes from 0, for students that answered all items incorrectly, to 100, for students that answered all items correctly. The percent change in scores from baseline is presented in the yellow boxes.

Prior to the pandemic, the SEG had developed and piloted a standardized test called **Data Collection for Improving Learning Outcomes (*Recopilación de Información para la Mejora de los Aprendizajes* or RIMA)**. The effort emerged at a time when the national assessment PLANEA for basic education had been interrupted indefinitely. RIMA was piloted in six municipalities<sup>114</sup> of GTO one week before schools closed in March 2020. The pilot covered two subjects (Spanish and mathematics) and was administered in four grades: 5<sup>th</sup> and 6<sup>th</sup> grades of primary education, and 8<sup>th</sup> and 9<sup>th</sup> grades of lower secondary education. The test was later applied state-wide (over 600,000 students) when students began returning to in-person classes at school, between November and December 2021. This second assessment round of RIMA was administered to grades 4, 5, and 6 in primary education, and grades 7, 8, and 9 in lower secondary education. The test also included a module on socioemotional skills. The unique timing of the application for both tests therefore allows for the measurement of learning losses due to school closures during the pandemic in these six municipalities. Average proportion of correct answers for both rounds by level, grade (only those that participated in both rounds), and subject are shown in Figure B.3.3.1.

(Box continues on next page)

111 GTO's schooling and learning recovery strategy includes 4 main actions: i) re-enrolling and retaining students; ii) improving teaching practices; iii) recovering and accelerating learning; and iv) accompanying parents to promote learning at home.

112 Nuevo León (Northern Mexico) has been assessing students' learning outcomes from 2<sup>nd</sup> to 12<sup>th</sup> grade.

113 While results from GTO cannot be generalized nationwide, many of the socio-demographic features of the country (e.g., rural communities, small and big cities, indigenous and non-indigenous groups, people from all income levels, etc.) are, on average, fairly well captured by this state.

114 The six municipalities were Jaral del Progreso, Moroleón, Salamanca, Uriangato, Valle de Santiago, and Yuriria.

### Box 3.3. Measuring learning and promoting alliances for learning recovery: The case of Guanajuato (continued)

**Preliminary results show a decrease in average scores for all grades and subjects, with the largest learning losses, on average, being observed at the primary level.** In fact, learning losses range from 10-16% from baseline (in primary) to 7-11% (in lower secondary). In addition to learning losses, GTO is also experiencing an increase in student drop-out rates. The SEG has estimated that 70,000 students have dropped out since the pandemic started<sup>115</sup>. The WBG is providing support to GTO to: (i) assess post-pandemic learning levels and measure learning losses; (ii) communicate results to relevant stakeholders; and (iii) use these data to improve decision-making and teacher practices in the State to support the schooling and learning recovery agenda. Final data analysis is expected to take place in April 2022, and results to be disseminated with schools, teachers, students, and parents immediately thereafter. According to SEG, RIMA is just the starting phase of the education recovery strategy. In fact, a Social Pact for Education is being launched where civil society, the private sector, and religious institutions are joining forces with the public sector to ensure that students return to schools and accelerate learning. Interventions to support the learning recovery were planned to start in May 2022.

Source: Own elaboration based on RIMA data.

**Table 3.1. Selected studies for LAC on learning losses**

Country	Scope	Subject Areas	Learning Metric	Grades/Level/Ages	Results
Brazil <sup>1</sup>	Sub-national: São Paulo	Math and Portuguese	SAEB 2019 and Sample Assessment in 2021	G5, G9, G12	Learning losses for all assessed grades in math and reading. Losses equivalent to between 4-15 years of schooling in São Paulo.
Brazil <sup>2</sup>	Sub-national: São Paulo	Math and Portuguese	Standardized test scores	G6, G7, G8, G9, G10, G11, G12	Students under remote learning had a setback equivalent to 75% of the in-person learning.
Chile <sup>3</sup>	Sample	Child development indicators	Peabody Picture Vocabulary Test (PPVT) for language; Child Behavior Checklist to measure social-behavioral skills; Battelle Developmental Inventory test for general development; and Hearts and Flowers Dimensional Stroop Task test for executive function	Pre-primary	Children affected by the pandemic scored worse than the pre-pandemic cohort in three out of four developmental areas. Observed drop in general child development indicators, language development and social-emotional development. No difference in executive function.
Colombia <sup>4</sup>	National	Math, Reading, Science, Social Studies and English	SABER-11 2019 and 2020 test scores	G11	Inequality based on the characteristics of students increased significantly during the pandemic, particularly inequality according to the possession of a computer or access to Internet and according to the type of school (public or private).
Mexico <sup>5</sup> (*)	Sub-national: Southern Mexico (Campeche and Yucatán)	Math and Reading	Two household surveys (citizen-led assessments) from 2018 and 2021. The “ <i>Medición Independiente de Aprendizaje</i> ” (MIA) tool was applied.	10- to 15- year-olds	Learning losses occurred at all ages and SES groups analyzed. Losses in reading were higher for low SES group and early ages (10 and 11 years old). For example, at age 10, for reading comprehension, scores decreased by 25% in low SES groups and 15% in high SES groups.

(\*) The study compares the results of two household surveys that used the same tools to measure fundamental learning. For reading and mathematics, the MIA tool was applied. The first survey was conducted in November 2018 in Yucatán, Quintana Roo and Campeche. The second survey was implemented in May 2021 in Campeche and Yucatán. For the study, only participants between 10 and 15 years old who lived in the states of Campeche and Yucatán were selected. A socio-economic status index was generated to improve sample comparability.

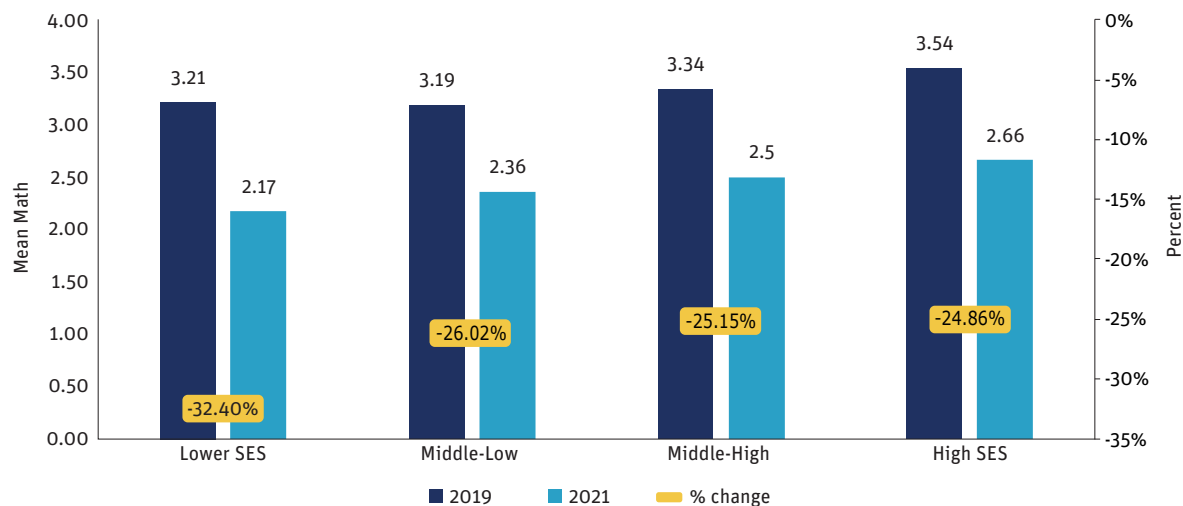
Sources: (1) São Paulo Education Secretariat (2021); (2) Cossi et al. (2021); (3) Abufhele et al. (2021); (4) García et al. (2021); and (5) Hevia et al. (2022).

**Table 3.2. Unequal learning losses: Increase in learning losses, by vulnerability characteristic**

	Brazil <sup>1</sup>	Chile <sup>2</sup>	Colombia <sup>3</sup>	Ethiopia <sup>4</sup>	India <sup>5</sup>	Kenya <sup>6</sup>	Mexico <sup>7</sup>	Pakistan <sup>8</sup>	South Africa <sup>9</sup>
<b>Age/Grade</b>									
Early Grades	+	+			+	+	+	+	
<b>Socioeconomic Status</b>									
Lower SES							+	+	
<b>Gender</b>									
Girls			+				+	+	+
<b>Location</b>									
Rural				+		+			
Other areas			+			+			

Source: Own elaboration with information from The World Bank et al. (2021). (1) Brazil: São Paulo Education Secretariat (2021); (2) Chile: Abufhele et al. (2021); (3) Colombia: García et al. (2021); (4) Ethiopia: Kim et al. (2021); (5) India: Pratham (2021); (6) Kenya: Whizz Education (2021); (7) Mexico: Hevia et al. (2022); (8) Pakistan: ITA (2021); (9) South Africa: Ardington et al. (2021).

Note: LAC region countries are highlighted in orange.

**Figure 3.14. Mexico: Learning loss in Mathematics, by SES level, 2019 vs. 2021**

Source: Hevia et al (2022).

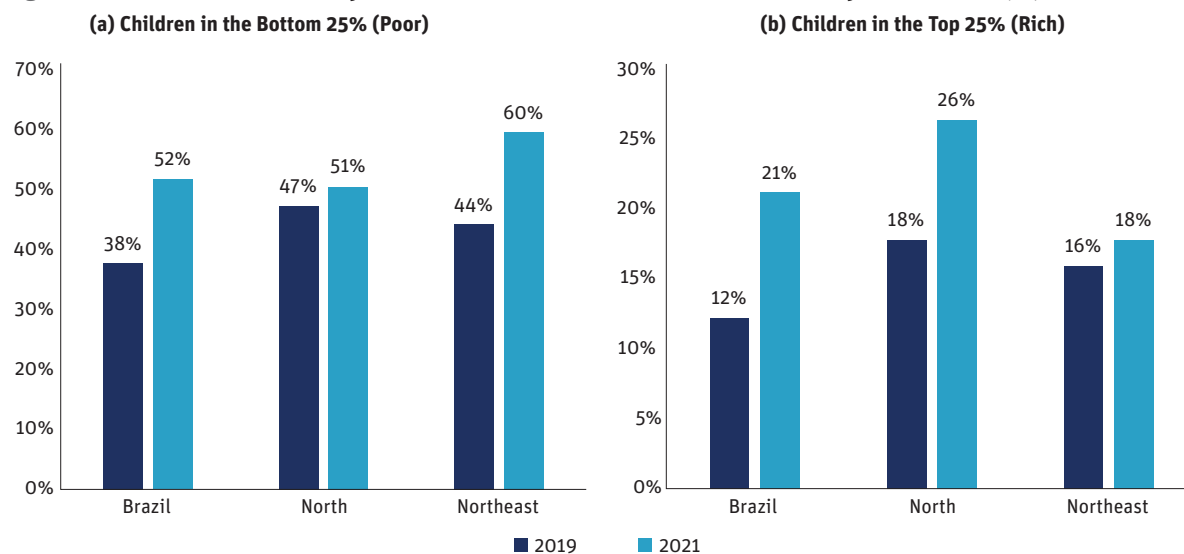
Note: Comparison of the mathematics sum means between 2019 and 2021 by SES level. The math tool includes five items (identification of numbers, addition, subtraction, division, and problem-solving), each item has a score of 1, the total score sums individual item scores for a total ranging from 0 to 5.

**On average, there are greater losses for lower-SES students, which could result in a deepening of the pre-existing learning gaps between wealthier and poorer students.** Results from Mexico reveal greater learning losses in math for lower SES students: a gap in the mean math score of 1.04 in the lowest SES group and 0.88 in

the highest SES group, or a decrease of 32% versus 25% in mean scores (Figure 3.14). A significant difference was also observed in the reading learning loss. Pakistan's poorest children suffered absolute losses in learning and are far behind expected learning, while richer students remained roughly in line with expectations<sup>116</sup>. Recent survey

<sup>116</sup> While digital inequalities existed before the pandemic, children in poorer households found it disproportionately harder to access learning resources once technological means became the primary or only means to do schooling during school closures. There is a link between wealth, access to technology and learning outcomes of children from lower wealth quartiles.

**Figure 3.15. Brazil: Share of 6/7-years-old children who cannot read and write, by income level (%), 2019 vs. 2021**



Source: PNAD-C data (3<sup>rd</sup> quarter).

Note: Poor children = lowest quartile of per capita income, PNAD-C (3<sup>rd</sup> quarter). Rich Children = highest quartile of per capita income, PNAD-C (3<sup>rd</sup> quarter).

data from Brazil<sup>117</sup>, by comparing the percentage of 6- or 7-year-olds who cannot read and write in 2019 and 2021 by region (North and Northeast) and by socioeconomic group, confirm not only an increase in the share of children not being able to read and write but also that this increase was especially strong in the bottom 25% students in the poor Northeast, illustrating the compounded effect of poverty and location (Figure 3.15).

**There is limited evidence of differences in learning losses by geographic location, although when disaggregating by gender, girls seem to have been the most impacted.** Notwithstanding the above, evidence remains limited on the impact of geography. In Ethiopia, learning levels of primary students are considerably below what would have been expected if they continued the pre-pandemic trajectory. For students in urban areas, learning progressed at less than half of the speed that would have been expected if they continued at the same pace. Progress was even lower for rural students whose learning progressed by one-third of the normal learning speed. The opposite is true for Colombia, which shows disparities between rural and urban institutions- in favor of rural schools-, with a gap close to 12 points. Colombia also presents a gender gap, with lower average test scores (SABER-11) for women than for men. However, this has been a persistent gap, and it has remained between 5 and 7 points over the 2019-2021

period. In South Africa, learning losses for girls were 20 percent and 27 percent higher than boys in local language and English reading. Girls lost 9 words per minute in reading speed, versus 6 words per minute for boys, increasing the gap. Further evidence at the country level is needed to adequately target strategies to recover learning losses, particularly for vulnerable groups. Mexico also evidences larger learning losses for girls than boys between 2019 and 2021 (among low-income households for reading and math, and in reading among high-income households).

## 3.2 The impact on transferable skills

### 3.2.1 Transferable skills in LAC prior to the pandemic

**Transferable skills are those skills that allow children and young people to become agile, adaptive learners and citizens equipped to navigate personal, academic, social, and economic challenges.**<sup>118</sup> This definition, proposed by UNICEF's Global Framework on Transferable Skills, recognizes that transferable skills are needed to adapt to various life contexts and which individuals can potentially transfer to different work and social environments. Transferable skills include cognitive, social, and

117 Using PNAD-C data (3<sup>rd</sup> quarter).

118 UNICEF (2019a).

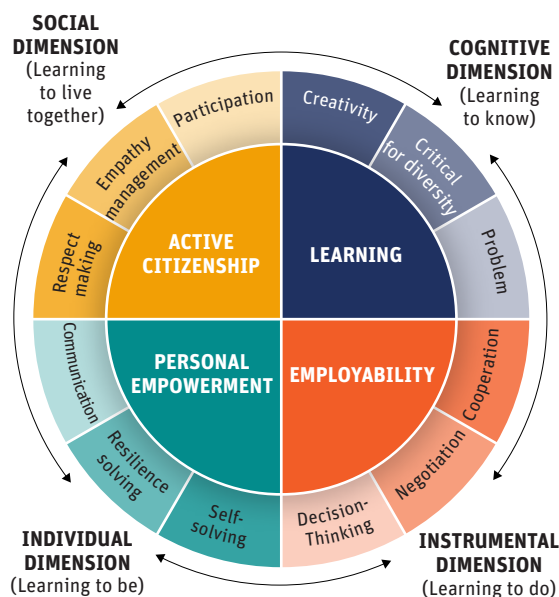
emotional functions and can be organized in four dimensions,<sup>119</sup> according to the result that its development and acquisition generates:

- Cognitive/learning dimension (learning to know): includes cognitive and metacognitive tools necessary to develop new skills and to ensure the acquisition of new knowledge. It implies mastery of the instruments of knowledge – thinking, analyzing, focusing - instead of simply acquiring information. It includes skills such as problem-solving, critical thinking, and creativity.
- Instrumental/employability dimension (learning to do): considers how to support children and young people to put into practice what they have learned, fundamentally in the world of work and entrepreneurship. It includes skills such as cooperation, negotiation, and decision-making.
- Individual/personal empowerment dimension (learning to be): refers to skills that allow self-realization and personal growth and foster self-empowerment and a sense of agency. This dimension is essential for personal protection and violence prevention, so it must be seen as an enabler of the other dimensions. It includes skills such as communication, resilience, and self-management.
- Social dimension/active citizenship (learning to live together): ethical dimension that promotes individuals to act based on human rights, consistent with democratic values, social justice and respect, for which it constitutes the ethical basis of the other dimensions. Includes skills for active citizenship such as respect for diversity, empathy, and participation.

### Transferable skills are essential for personal, academic, social, and economic development (see Figure 3.16).

The literature on transferable skills shows that some of these skills generate improvements in learning, wages and productivity, effects that in some cases may be equivalent or even greater than those of foundational skills<sup>120</sup>, and are highly valued in the world of work.<sup>121</sup> Furthermore, the acquisition of transferable skills reinforces the ability

**Figure 3.16. Core transferable skills and dimensions**



Source: UNICEF (2021e).

to accumulate skills in the future, including foundational ones.<sup>122</sup> Some transferable skills are also associated with greater well-being and better social interactions, by improving mental health, and reducing risk behaviors such as drug and alcohol use, crime and violence.<sup>123</sup>

**Measuring transferable skills presents great challenges.**<sup>124</sup> The lack of a commonly accepted taxonomy, the difficulty of directly observing a transferable skill, the susceptibility of self-report - the most widely used tool to measure transferable skills - to present measurement errors as biases, the lack of clarity of cross-cultural validity of the instruments, and the lack of understanding of what constitutes the performance level of each transferable skill, among others, makes measuring transferable skills a complex task.

**Despite these challenges, initiatives to measure and monitor transferable skills were implemented in some LAC countries prior to the pandemic.** For instance, on the social dimension, the International Civic and Citizenship

119 Delors et al. (1996).

120 Heckman et al. (2006); OECD (2015).

121 Bassi et al. (2012); Carneiro et al. (2007); Cunningham and Villaseñor (2016); Duckworth and Seligman (2005); Duckworth et al. (2007); Durlak et al. (2011); Heckman et al. (2006); Heckman and Kautz (2013); OECD (2015); Ospino (2019); Prada et al. (2019).

122 Cunha and Heckman (2007), (2008); Cunha, et al. (2006), Heckman and Kautz (2013), Busso et al. (2017).

123 Carneiro et al. (2007), Case and Deaton (2017), Durlak et al. (2011), Friedman et al. (2010), Heckman and Kautz (2012), Heckman et al. (2006), Heckman and Rubinstein (2001), Herrera et al. (2015), Lopes et al. (2004), (2011), Malouff et al. (2005), Martins et al. (2010), OECD (2015), Sánchez-Álvarez et al. (2016).

124 For more information refer to: Blyth et al. (2018), Galloway et al. (2017), Hoskins and Liu (2019), Jones et al. (2019), (2016), Lippman et al. (2014), and van de Vijver and Tanzer (2004).

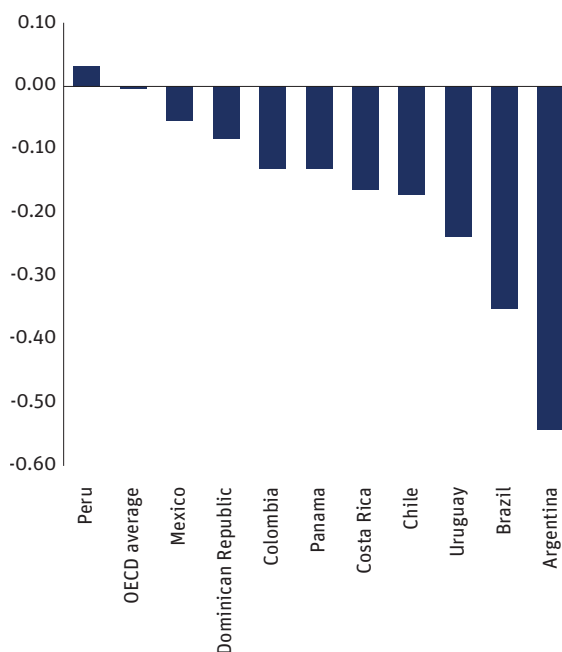


Education Study (ICCS) follows students' knowledge and understanding of civic education and citizenship, with Chile, Colombia, Mexico, Peru, and the Dominican Republic participation in 2016. PISA has measured learning, personal empowerment, and employability, alongside transversal skills such as collaborative problem-solving and creative thinking, with over 9 LAC participating countries. The OECD Survey on Social and Emotional Skills (SSES), where 10 cities participated, two of them from Colombia, assesses five transferable skills domains (task performance, emotional regulation, collaboration, open-mindedness, and engaging with others). At a regional level, ERCE 2019 measured for the first time three transferable skills - empathy, self-management and openness to diversity - in 16 LAC countries. At a national level, several countries in the region, including Argentina, Chile, Colombia, El Salvador, Mexico, and Peru, have incorporated tools to assess specific transferable skills.

**Education systems in the region have also put emphasis on developing students' transferable skills by embedding them into the general curriculum.** UNESCO's LLECE recently reviewed the inclusion of transferable skills related to education for sustainable development and global citizenship education in the national curriculum of 19 countries in the region. The evidence shows that transferable skills such as participation, collaboration and critical thinking are included in the curricula of at least 16 countries. Other transferable skills frequently included are respect, democracy, dialogue, diversity, citizenship, identity, human rights, solidarity, and responsibility, evidencing the relevance given to transferable skills in the educational systems of the region<sup>125,126</sup>.

**Some data suggests that the pre-pandemic learning crisis in LAC replicates into transferable skills.** According to ICCS 2016, the 5 countries with lower citizenship knowledge were the 5 LAC participating countries, and only Colombia and Mexico experienced improvements between 2009 and 2016. The study shows that two-thirds of students in the LAC participating countries justify a dictatorial regime when it brings order and security or economic benefits and most students also find justifications for breaking the law when, it is, for example, the only way

**Figure 3.17. PISA 2018 index of student cooperation for LAC countries**



Note: Positive values in this index mean that students perceived their peers to co-operate to a greater extent than the average student across OECD countries.  
Source: Own elaboration on the basis of OECD (2019).

to help their family or was done without bad intentions. The PISA 2018 results show that in all LAC participating countries, except for Peru, students perceive lower levels of cooperation from their peers relative to the perception in OECD countries (Figure 3.17). LAC students also exhibit less self-efficacy<sup>127</sup> than OECD peers. Similarly, PISA 2015 evaluated collaborative problem-solving, in which LAC also displays a lag with respect to the average levels of the OECD and PISA participating countries.<sup>128</sup>

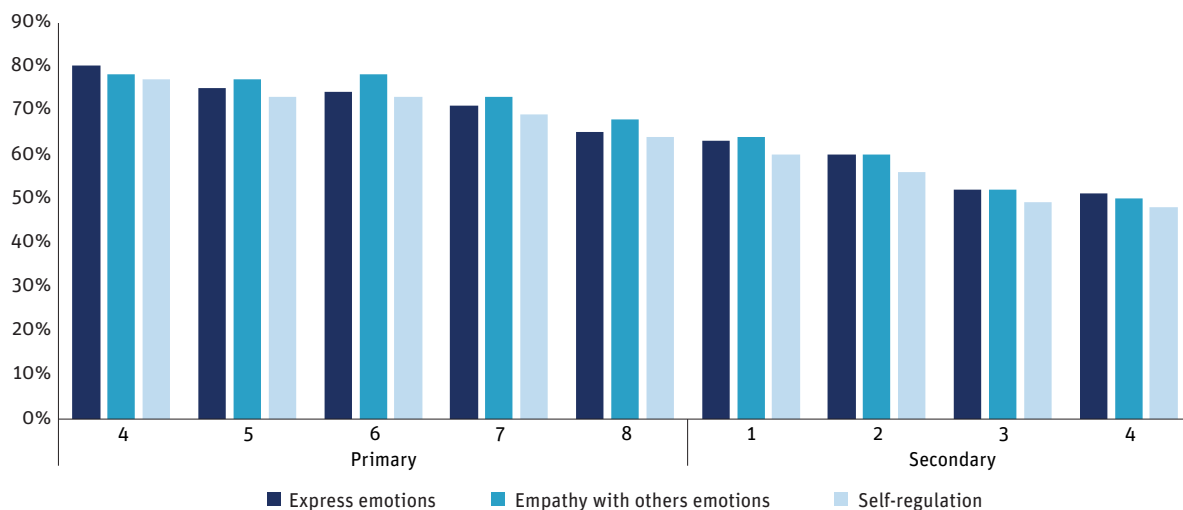
**Furthermore, there are great inequities in the acquisition of transferable skills between students.** According to the SSES, socio-economic status, migration background, gender, and age lead to differences in skill levels. For example, in Bogotá, students with higher socio-economic background present higher levels of every social and emotional skill, especially responsibility, persistence,

125 UNESCO-OREALC (2021a).

126 UNESCO-OREALC (2021c).

127 Sometimes the term *self-efficacy* is confused with the term *resilience*. Despite being related, they are not the same. *Self-efficacy* is the extent to which individuals believe in their own ability to engage in certain activities and perform specific tasks, especially when facing adverse circumstances (Bandura, 1977). *Resilience*, on the other hand, shall be understood, in general terms, as the constructive, personal ability to navigate changing – and especially challenging – circumstances successfully (American Psychological Association's Dictionary, see <https://dictionary.apa.org/resilience>). Resilient learners adjust positively to change, manage uncertainty, and respond to shocks. This starts with the student's internal world, including emotional well-being, self-efficacy, critical thinking, and growth mindset (Chernyshenko et al., 2018).

128 Bos et al. (2017).

**Figure 3.18. Chile: Share of students reporting socio-emotional learning at school, by grade (%), 2020**

Source: Chile's Agency for the Quality of Education (2021).

co-operation, sociability and achievement motivation. The ERCE 2019 results are in the same line, with socio-economic status and gender leading to differences in empathy, self-management, and openness to diversity in almost all countries. The results also show strong school effects on the acquisition of these transferable skills.

### 3.2.2 The impact of the pandemic on transferable skills

Students returning to school have been deeply impacted by the isolation and stress caused by the pandemic, with expected impacts on the acquisition of transferable skills. There is still very limited evidence of the impact of the pandemic on transferable skills, but a couple of examples point to concerns that those skills may have been negatively impacted. The 2021 Comprehensive Learning Diagnostics (*Diagnóstico Integral de Aprendizajes, DIA*) developed by the Education Quality Agency of Chile (*Agencia de Calidad de la Educación*) assessed in a comprehensive fashion learning and socio-emotional status of students returning to schools. 90% of the surveyed students in the last two years of secondary education responded that the lack of face-to-face education affected them negatively in their learning process. Around 44% of secondary schools' students stated that they were not taught emotional regulation or empathy at their schools, hindering the development of social and individual transferable skills (Figure 3.18). In the Dominican Republic,

surveys to school principals and parents in 2021 reported that 20% of parents of primary school children highlighted higher difficulties in communication of their children, and 10% that they lagged in socialization, aspects key to developing social and individual transferable skills.<sup>129</sup>

## 3.3 The implications of the pandemic for digital skills

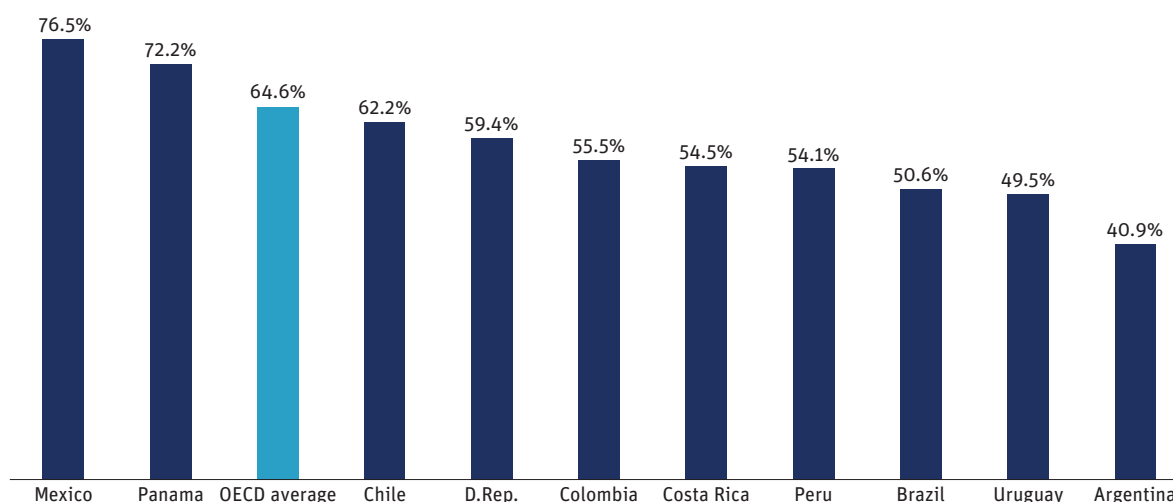
### 3.3.1 Digital skills and "ICT preparedness" prior to the pandemic

As shown in Chapter 1, many of the remote learning initiatives provided by governments during school closures were based on digital tools and platforms that assumed previous digital skills proficiency. The digital divide in the region not only relates to infrastructure, devices, and connectivity, but also to digital literacy and skills levels. Governments, schools, teachers, and students had to quickly adopt educational technologies, and available information suggests that weak digital skills might have hindered remote education efforts. There is evidence that both students and teachers lacked digital literacy and skills prior to the pandemic.

The concept of "digital literacy" in educational settings is an umbrella concept that covers a wide range

129 WBG (2022b).

**Figure 3.19. Share of students in LAC countries whose school principals agreed with the statement “Teachers have the necessary technical and pedagogical skills to integrate digital devices in instruction” (%), 2018**



Source: Own elaboration on the basis of OECD (2020a).

**of skills and tasks**, going from the basic technical skills that are needed to interact with teachers through mobile apps to receive and send information (for instance, for the WhatsApp exchanges widely used during school lockdowns) to the advanced skills needed to use adaptive learning platforms that allow for personalized instruction, or to interact with software that facilitates synchronic interactions between students and teachers<sup>130</sup>. Different strategies deployed by governments during the lockdowns required simpler or more complex digital abilities<sup>131</sup>, and very limited diagnostics on pre-existing levels of such abilities were available to guide the policy decisions<sup>132</sup>.

**There has been great improvement in national assessments of learning outcomes in LAC in recent years, but not a similar progress in data collection about students' digital literacy.** Younger generations are often considered “digital natives”, but data on specific digital competencies is scarce, and available information suggests that digital literacy is far from universal in the region, and even though the growth of remote learning might have had a positive impact for children and youth digital skills, inequities in the coverage of connectivity and digital devices might have increased gaps in such skills.

**Initiatives to measure children and teenagers' digital skills were implemented in some LAC countries.** For instance, Brazil, Chile, Costa Rica, and Uruguay participated in different waves of the Kids Online project, a survey that collect data on behavior and attitudes of children online, with special focus on safe use of Internet<sup>133</sup>. Chile and Uruguay participated in the International Computer and Information Literacy Study (ICILS), that focuses on secondary education students. ICILS 2018 findings showed interesting findings, that questioned the idea of “digital natives”: more than one third of students underperformed in digital competence. Girls outperformed boys in all participating countries, and, finally, results confirmed the correlation of lower socioeconomic status and low performance in digital skills and computational thinking, suggesting a risk of a persistent digital divide<sup>134</sup>.

**Teachers as well lacked digital skills.** Data collected by OECD in 2018 showed that, on average, one third of the students included in PISA attended schools where teachers lacked technical and pedagogical skills to effectively incorporate the technology needed for distance learning. Most of LAC countries were in a worse position than the OECD average regarding their teachers' digital education readiness, according to their school principals' perception (Figure 3.19). Evidence (even if limited) on teachers'

130 UNICEF (2020).

131 Muñoz-Najar et al. (2021) p. 48.

132 UNESCO (2019).

133 Trucco and Palma (2020).

134 European Commission (2019).

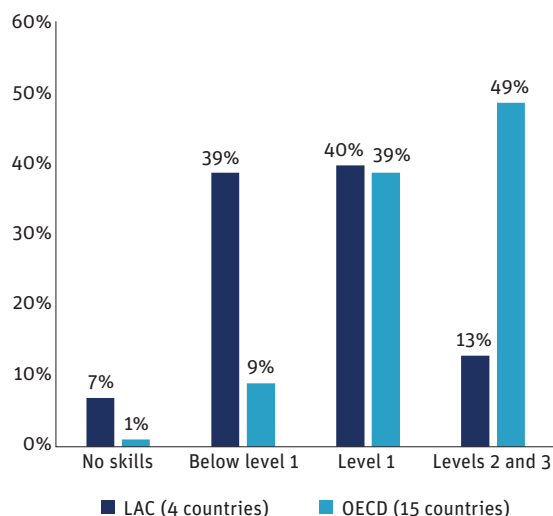
digital abilities, defined beyond basic literacy, as the cognitive competencies required to solve complex problems in a digital environment, suggests that deficits exist. An analysis of teachers' skills published in 2020, based on the Program for the International Assessment of Adult Competencies (PIAAC) databases, showed that 46 percent of the teachers of the four LAC countries included (Chile, Ecuador, Mexico, and Peru) did not reach an adequate level of digital skills, compared to 12 percent of the teachers in OECD<sup>135</sup>, as shown in Figure 3.20.

**Before the pandemic, digital training offer for pre-service teacher was often very basic and not systematic in the region, which would likely explain these gaps.**

Pre-service teacher training, even including elements for the development of digital skills, usually does not involve advanced training for incorporating technology into pedagogy (such as the use of adaptive learning technologies, the integration of computational thinking across areas, the creation of digital content, or issues related to safety in digital environments). For instance, Uruguay was the only country that before the pandemic had developed all the basic conditions for digital education (school connectivity, digital platforms, virtual tutoring, digital resources packs and digital repository<sup>136</sup>). However, even in Uruguay, universal digital skills training for teachers was not in place: even though the national EduTech program *Plan Ceibal* offers a wide range of professional development tools, not only on the specific abilities needed to use the digital tools and platforms, but also on innovative educational trends, the offer is still not incorporated into pre-service programs, and no digital training is required to become a teacher.

**Survey data suggest that insufficient prior use of digital skills, and limited effectiveness of training programs, constrained readiness levels and created high level of anxiety of teachers for remote education.** Even before the pandemic, in some LAC countries there were perceptions, among school staff, that teachers lacked sufficient time to develop their educational digital skills. Survey data collected in 2020 in Brazil showed that 67 percent of teachers felt anxiety about remote teaching, 88 percent declared that they never implemented remote learning

**Figure 3.20. Share of teachers by level of digital skills, by region (%), 2020**



Source: Own elaboration on the basis of Estrada and Lombardi (2020), using PIAAC databases. Includes teachers aged 22 to 65 years old, including all educational levels.

Note: Levels 1-3 correspond to different levels of "problem solving in technology-rich environments". LAC countries include Ecuador, Chile, Mexico, and Peru.

before, and 83 percent felt little or not at all skilled to do it.<sup>137</sup> As Muñoz-Najar and his colleagues suggest, there is no robust evidence on the effectiveness of the teacher training programs, and anxiety and stress reported by teachers might have jeopardize their impact<sup>138</sup>.

### 3.3.2 Effects of the pandemic on digital skills

**LAC countries were proactive in offering support for teachers' digital skills development during the pandemic.** In some cases, the education authorities strengthened and extended tools and strategies that were already in place, but in some other cases the support was created as a response to the pressing remote teaching needs. Figure 3.21 summarizes some good practices implemented in Uruguay, Costa Rica, and Peru, were toolboxes and dedicated platforms were made available for teachers, students, and families. Not only national governments





135 Estrada and Lombardi (2020).

136 Rieble-Aubourg and Viteri (2020).

137 Muñoz-Najar et al. (2021).

138 Muñoz-Najar et al. (2021, p. 28).

**Figure 3.21. Examples of digital toolkits with teaching resources**

DIGITAL TOOLKIT			
			
Costa Rica –Aula virtual–	Training	Guide for autonomous pedagogical tasks	
Peru –Aprendo en casa–	Massive on-line learning courses		
Uruguay –CREA–	Virtual training	Guidelines for remote teaching	Forums

Source: Barron-Rodriguez et al. (2021a). Even though CREA had been available for teachers for many years before the pandemic, while 40% of grade 6 and 25% of grade 3 teachers were using it in 2017 (Carbajal et al., 2022), these percentages rose to 95% in 2020, and 92% of the teachers were satisfied with the training offer (Ripani, 2020).

provided support for teachers digital training.<sup>139</sup> It is not clear however yet how effective have been these new tools and strategies, especially considering the challenges faced by the remote learning response.

**One of the consequences of the pandemic on education was that, more than ever before, schools were pushed to adopt tools that implied a certain degree of digital ability.** Thus, a very relevant question for the post-COVID scenario is whether the diverse kinds of remote education strategies had any positive effect on teachers and students’ digital skills. The answer cannot be definitive at this stage, as the first assessments of learning that countries implemented were, sensibly, mostly focused on foundational skills such as reading and mathematics, but there are indications of potential positive trends. School closures showed, at large scale, that the kind of digital skills that teachers need are not limited to the use of technology, but also extend to particular types of pedagogical and communicational skills, as “simply replicating a lesson designed for an in-person class is ineffective for a remote audience”<sup>140</sup>. Digital skills not only involve knowledge of digital tools, but judgement on why and how to incorporate them to maximize impact. The higher exposure to these skills during the pandemic could be very helpful in the longer-term in enhancing an effective use of technology in the classroom

in hybrid and face-to-face learning models. Students may also have become more proficient in making effective use of those digital tools. School closures also helped to show the crucial role of parents and families in the learning process, and the role and use of technology in facilitating a close interaction, experiences and abilities that can indeed also continue playing a role in normal times. Also, the pandemic pushed knowledge and debate on the advantages and limits of learning platforms, remote learning, hybrid models, and remote assessment strategies among policy makers and opinion leaders, discussions that might accelerate innovation at faster pace in the medium run<sup>141</sup>.

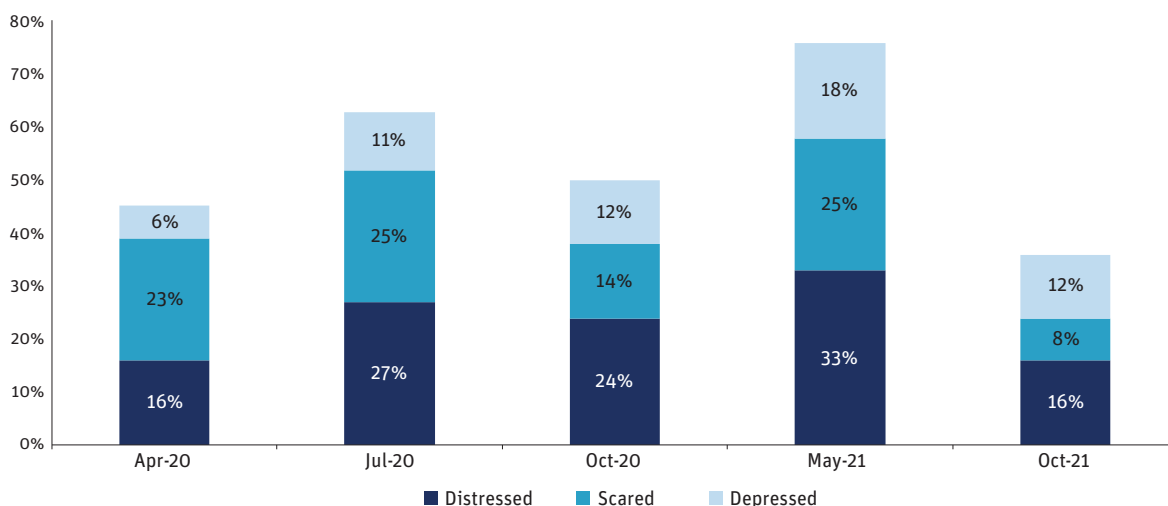
### 3.4 The impact on psychosocial health and well-being

**While not skills per se, psychosocial health and well-being play a critical role in supporting the acquisition of all other skills.** Psychosocial health and well-being are critical to ensure students can foster an adequate set of transferable skills and are equipped with critical functions to be ready to acquire the fundamentals of the learning process. They also contribute to increasing attendance and reducing dropouts. While we do not have separate

139 A rather interesting experience, not implemented by a national ministry but by a civil society organization, the Varkey Foundation, was *Comunidad Atenea*, an online community of practice where teachers from all over the region could connect, share resources, and create collaborative contents. Some of the features of *Comunidad Atenea* are similar to social networks, including the possibility of bilateral interactions, and private messaging. Within the platform, online training courses were offered, for teachers to enhance their digital abilities. The relevance of the communities of practice during the pandemic was higher than ever, not only allowing the teachers to support each other in the absence of the normal school community of peers, but also communicating and multiplying innovative experiences in the use of technology for education (IAD, 2021a).

140 Wilichowski, T. and Cobo, C. (2020).

141 Zancajo et al. (2022).

**Figure 3.22. Argentina: Share of youth reporting feeling distressed, scared, or depressed by the uncertainty of the pandemic (%), April 2020 – October 2021**

Source: UNICEF (2021a).

evidence of these dimensions before the pandemic, we do have emerging evidence of a *mental health crisis within a crisis*, which will also require urgent attention.

**There is strong evidence of a deterioration of mental health and well-being of children and youth across education levels<sup>142</sup>.** A systematic review of 36 studies from 11 countries, including Brazil from the LAC region, finds that school closures and lockdowns during the first COVID-19 wave were associated with adverse mental health symptoms (such as distress and anxiety) and health behaviors (such as higher screen time and lower physical activity) among children and adolescents.<sup>143</sup> For younger students, surveys of caregivers across the region have consistently documented shifting behaviors, with 61% of children displaying at least one symptom of mental distress.<sup>144</sup> At the higher education level, 36% and 65% of 18–29-year-olds in Mexico and Chile, respectively, report their mental health and well-being, or that of a household member, has been affected by the pandemic and crisis.<sup>145</sup> In Argentina, high frequency surveys to teenagers from April 2020 to October 2021 find high levels of self-reported pandemic stress and depression (Figure 3.22), with over 29% of adolescents not looking forward to returning to school. Data from the National Survey of Teachers in Peru (*Encuesta Nacional*

*Docente*, ENDO) reported that the top 3 difficulties faced by teachers in 2020 were supporting student’s socio-emotional problems, communicating with and motivating students.

**Teachers have also seen their personal, emotional, and professional life disrupted during the pandemic.** Together with children and parents, teachers had to rapidly adapt to new modalities of teaching and to the challenges of remote working during the pandemic, including childcare, domestic chores and taking care of family or parents. The results of ENDO 2020 in Peru show that 16.2% of teachers reported symptoms of depression, 27.3% symptoms of anxiety and over 60% reported stress during 2020. As illustrated above, switch to remote learning in a context of limited readiness also generated high anxiety in teachers.

### 3.5 Key takeaway messages

**The LAC region was already suffering from a serious learning crisis before the COVID-19 outbreak.** Unweighted results from ERCE confirm that in 2019, on average, almost half of 3<sup>rd</sup> graders did not reach the minimum proficiency level (MPL) in reading and more than two-thirds did

142 For a comprehensive review of the impact of the pandemic on children’s well-being, see UNICEF (2021f). For a treatment of the impact of the pandemic of youth’s well-being, see IDB (2022), chapter 2.

143 Racine et al. (2021).

144 Näslund-Hadley et al. (2020).

145 OECD Secretariat estimates based on the OECD Risks That Matter 2020 survey, <http://oe.cd/RTM>.

not reach it by 6<sup>th</sup> grade. Results also showed the highly unequal profile of the region, with wide disparities among countries and a pervasive persistence of socioeconomic learning gaps. Disparities in learning outcomes were also largely explained by differences within classrooms.

**The COVID-19 pandemic has deepened the crisis by severely impacting learning, with a deeper impact on the earlier grades and lower-income students.** According to recently updated simulations, the average number of LAYS lost due to the pandemic is expected to be about 1.5 years, under an intermediate scenario, translating into a decline of 12% in the projected annual earnings of the average LAC student at school today. The proportion of 3<sup>rd</sup> and 6<sup>th</sup> graders not able to adequately understand and interpret a text of moderate length could have increased, respectively, from weighted averages of 36 percent to 50 percent and 62 percent to 82 percent. Initial data on actual losses confirm these trends. Overall, simulations and the available evidence indicate that, on average, early grades, younger children, and children from lower SES have been disproportionately affected by greater learning losses. In combination with the emerging increasing number and share of out of school children in the 6-14 age range, this lays the ground for a major generational crisis. This is especially worrisome as, in turn, cumulative learning gaps have the potential to further increase dropouts of this younger cohort when it becomes older.

**The pandemic has also affected transferable skills, while showing the importance of digital skills.** Some data suggests that the pre-pandemic learning crisis in LAC replicates into transferable skills. There are also great inequities in the acquisition of transferable skills between students. Very incipient evidence shows that these skills may have been affected, especially by the isolation related to school closures. At the same time, the pandemic also revealed gaps in digital skills, while, in a bit of a silver lining, providing some opportunity for enhancing those skills. One of the pandemic consequences on education was that, more than ever before, education systems and schools were pushed to adopt tools that implied a certain degree of digital ability enhancing exposure to these skills for teachers, students, and parents, while strengthening tools and strategies to develop digital skills.

**Finally, recent evidence on the post-pandemic points to an important deterioration of well-being of children and youth across education levels.** This will hinder the acquisition of transferable skills and readiness to learn, as well as attendance outcomes.

**The gravity of the crisis requires a prompt and comprehensive response.** The next chapters document actions taken so far by LAC countries and the potential and urgency for more.



## Chapter 4

# Recovering and accelerating: Returning to schooling



**The COVID-19 pandemic has generated a negative shock in the education sector worldwide.** Chapters 2 and 3 discussed the impact that prolonged school closures had on the two critical educational outcomes schooling and learning. They also analyzed the challenges that the pandemic brought about transferable skills and digital skills, as well as well-being. Both chapters confirmed that the impact was disproportionately higher for vulnerable groups, i.e. students from more disadvantaged socio-economic backgrounds, and, at least at this stage, for the younger cohort. But what can and should be done with this somber diagnostic? If urgent action is not taken, an entire generation may suffer profound and long-lasting consequences on their human capital accumulation.

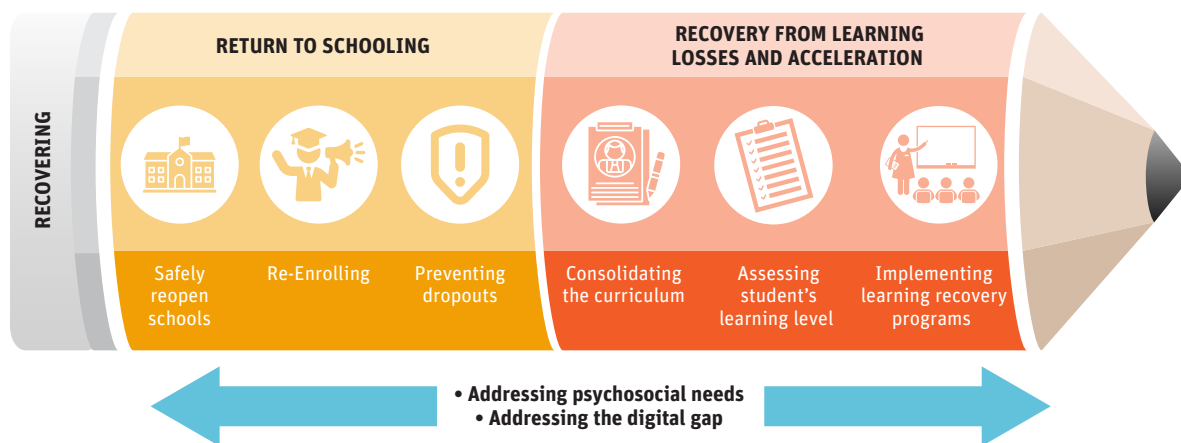
**Recovery must focus on the essentials: returning to schooling and recovering from learning losses (Figure 4.1).**<sup>146</sup> The “return to schooling” aims at ensuring that all children who were attending education prior to the pandemic can return to school, and the decline in out of school rates continues. Once students are back in the classrooms, actions also need to be taken to offset the learning losses of the past two years (“recovering from learning losses”). To be successful, this double schooling and learning agenda will require addressing the psychosocial challenges triggered by the pandemic, as well as continuing to address the digital divides that have been hampering the response. Embedded in all these priorities is the support to teachers and principals, and ensuring

adequate and efficiently used resources, to make their implementation possible.

**As countries recover, they should also aim at accelerating.** Given the need to recover, in principle, in the same number of schooling years, children and youth will need to be put on an “accelerated pathway” to learning recovery, which may not only help recover in the short-term but also achieve higher levels of learning than before the pandemic, a goal very much needed in the region given the prior low learning levels. Countries can also build on recovery efforts to make important strides on curricula and pedagogical approaches. Policies to foster return to schooling may not only help consolidate the decline in out of school rates but also accelerate it.

**This chapter delves into the “return to schooling” agenda.** More than two years have passed since the start of the pandemic, and countries in the region have been progressively reopening their school systems and prioritizing a return to face-to-face classes for students. Recent data indicates, however, that still roughly 12 million (roughly 10 percent of) students in the region are currently not benefiting from face-to-face classes. Additionally, risks of schools closing again are real depending on the evolution of the pandemic. This chapter discusses the key immediate challenges that need to be borne in mind and addressed to approach the “return to schooling” problem: (i) the reopening challenge; and (ii) the enrollment and drop-out challenge.

**Figure 4.1. The road to recovery and acceleration in LAC**



146 This framework is well aligned with the RAPID framework recently proposed by UNICEF, UNESCO, and WBG (2022). The framework is based around 5 pillars: (i) Reach all children and adolescents that should be at school and retain them in school; (ii) Assess learning levels; (iii) Prioritize teaching the fundamentals, namely critical foundational (literacy and numeracy) and problem-solving skills (critical thinking, innovation); (iv) Increase catch-up learning and progress beyond what was lost; and (v) Develop psychosocial health and well-being.

## 4.1 Reopening schools

Throughout most of the first year of the pandemic, schools in the region remained closed or mostly closed, as a health measure to control the spread of COVID-19 and safeguard students and teachers' health. This left more than 170 million students in LAC out of the possibility of in-person education, many of whom suffered from the disconnection that forced distance learning strategies entailed especially for the most disadvantaged populations<sup>147</sup>. During the second half of 2021, as health conditions improved, many countries started to progressively reopen schools and transitioned from fully remote to hybrid learning models. At the beginning of 2022, two years after the initial outbreak of the pandemic, there has been a larger-scale reopening of school systems in the region and a larger proportion of students have returned to face-to-face classes. As a result of the heterogeneity of school systems in the region, though, different countries remain at different stages of this recovery process. And it is also essential to ensure that school reopening is sustainable through the right measures and policies.

**Evidence collected during these two years shows that schools are not an important source of COVID-19 transmission<sup>148</sup>.** In fact, in-person schooling does not appear to be the main driver of infection spikes, children in school do not appear to be exposed to higher risks of infection compared to when not in school when mitigation measures are in place, and school staff also do not appear to be at a higher risk compared to the general population<sup>149</sup>. Multiple studies have shown that transmission within school settings is typically lower than community transmission when prevention strategies are in place for schools<sup>150</sup>. Furthermore, with adherence to basic mitigation strategies<sup>151</sup>, within-school transition of COVID-19 can be interrupted, even during a surge of community infections<sup>152,153</sup>. School reopening decisions should reflect evidence-based estimates of the risks associated with reopening and the risks associated with school closures.

**However, prolonged closures do negatively impact children's learning, health, and well-being especially for vulnerable groups.** As shown in the previous chapter, children's ability to read, write and do basic math has suffered, as has the development of their skills to reach their future potential. Many studies have consistently shown that children's health, development, safety, and well-being also took a hit<sup>154</sup>. And, as was emphasized repeatedly before, the most vulnerable boys and girls bore the brunt of these impacts, intensifying pre-existing gaps with their better-off counterparts. The urgency of redressing this situation for those countries in LAC whose systems are not fully open (see section 1.2 above) is to understand the criticality of evidence-based COVID-19 policymaking in schools<sup>155</sup>. And any strategy that intends to address the "return to schooling" challenge must design a clear roadmap that focuses on the top priorities for the short term.

**The first priority in the recovery phase is the safe reopening of schools, to ensure that all children return to face-to-face education as soon as possible and for good.** School reopening should be a top priority for those school systems that remain closed or mostly closed, especially. And lessons from existing experiences of school reopening should be built on to complete this process and/or make sure it is sustainable. As highlighted above, two reasons are the key rationale for this urgent strategy: (i) COVID-19 poses limited health risks for younger populations; and (ii) foundational skills are not adequately developed at home. While it is not possible to completely eliminate the risk of disease transmission in schools, evidence from reopened schools indicates that simple mitigation measures like masking, social distancing and ventilation are effective in substantially reducing transition to students and teachers. To ensure a safe return, it is therefore essential to take context-appropriate health and hygiene protocols (Figure 4.2). In addition, health policies, such as the prioritization of teachers in the vaccination process, should allow for a

147 UNICEF (2021b).

148 Ismail et al. (2021).

149 UNESCO and UNICEF (2020).

150 CDC (2021).

151 Prevention strategies include promoting vaccination, consistent and correct use of masks for people who are not fully vaccinated, physical distancing, screening testing in schools to identify cases, improved ventilation, handwashing and staying home when sick, contact tracing and routine cleaning with disinfection.

152 Zimmerman et al. (2021a, 2021b), UNESCO and UNICEF (2020).

153 Ertem et al. (2021) use data from the United States to examine the effects of different schooling models on COVID-19 case rates by comparing in-person schooling with hybrid or virtual models of education. Similarly, Fukumoto et al. (2021) compares COVID-19 case rates in Japanese municipalities where schools opened with similar municipalities that kept schools closed. Both studies conclude that there is not a consistent relationship between school reopening and COVID-19 case rates.

154 Skovgaard Jensen (2021); Hu et al. (2021).

155 Stuart and Dowdy (2021).

**Figure 4.2. Some critical safety standards for reopening schools**

Guarantee the good condition of the sanitary infrastructure in all schools, as well as access to water, soap, and disinfectants. Implement sanitation procedures.
Equip/repurpose/reconfigure schools to support social distancing.
Ensure communication and behavior change efforts of all students related to adequate handwashing, hygiene, physical distancing, correct mask use and safe water practices at schools. Develop clear and easy-to-understand protocols on hygiene measures and physical distancing measures.
Establish a monitoring mechanism to detect and contain infections in a timely manner and protocols for isolating cases, tracing their contacts, and quarantining exposed individuals.
Consider teachers as a priority group for vaccinations.

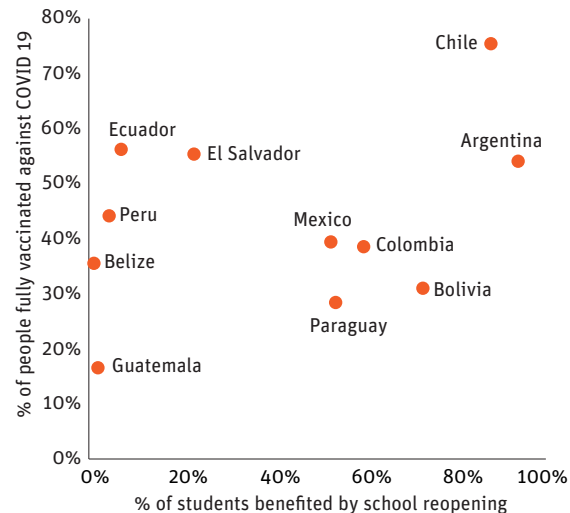
Source: UNESCO, UNICEF, WBG, World Food Programme, and UNHCR (2021); Zimmerman, Brookhart et al. (2021); Zimmerman, Akinboyo et al. (2021)

prompter return to school. In fact, teacher vaccination rates have been instrumental in the school re-opening process around the world. To date, more than half of LAC countries have most teachers vaccinated with the second dose of the vaccine.

**A strong recovery phase requires trust amongst stakeholders, and governments should continue to prioritize school staff for vaccination to promote confidence in a safe school reopening for in-person learning.** A comparison of the proportion of people fully vaccinated with the extent of school reopening (Figure 4.3) points to a generally positive correlation which highlights the importance of vaccination for school reopening. At the same time, as illustrated below, cases like Peru and Ecuador show that while vaccination rates are an important part of the equation, other health and hygiene factors and the extent to which they are applied and communicated are also important to recover trust and build impetus for a school reopening.

**An effective school reopening process and learning recovery requires prepared and well-informed and aligned leadership.** Lack of clear communication about the limitations of remote learning, and limited

**Figure 4.3. Vaccination of the population and school reopening rates in LAC**



Note: Vaccination rates are obtained from Our World in Data (<https://ourworldindata.org/COVID-vaccinations>). Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and having 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries. School reopening rates are obtained from the UNICEF COVID-19 Education Response Update 29 (October 2021) (<https://www.unicef.org/lac/media/29081/file>). Both variables consider data from October 2021.

understanding of the epidemiological risks associated with reopening and how to tackle them have been two of the potential reasons for limited reopening in certain countries. Low-income countries have struggled the most with more expensive and coordination-intensive activities, as well as with ensuring that even the most basic health mitigation measures are in place. For instance, 27 percent of low-income country respondents in the National Education Response to COVID-19 School Closures survey<sup>156</sup> reported that their country implemented guidelines in all of the schools compared with the global average of 55 percent<sup>157</sup>. This points to the importance of clear guidelines for prioritization, flexibility and providing, as needed, additional training and support to principals to lead school reopening to help with the coordination, operation and communication challenge that a safe school reopening process entails. A recent ad-hoc training program for principals in Peru provides a good example of support to principals in a difficult reopening context (see Box 4.1). Aligning messages, incentives and

156 It is important to note that the UNESCO/UNICEF/WBG/OECD survey had 3 rounds. The last round was carried out in Feb-June 2021 (see details at <https://tcg.uis.unesco.org/survey-education-COVID-school-closures/>).

157 UNESCO, UNICEF, WBG, and OECD (2021a).

### Box 4.1. Challenges for and support to school reopening in Peru

Peru's schools shut down completely as the pandemic began in March 2020. Since then, schools have been reopening, but closures have been among the longest in the region. Critical constraints to school reopening have related to lack of flexibility in the implementation of school reopening plans, lack of resources for infrastructure upgrades, limited preparedness of principals and lack of alignment in the incentives of principals and regional departments. To support reopening, Peru and the World Bank have been working on a series of measures, including communication tools and advocacy, costing tools and principal training.

School reopening costing tool to estimate resource needs to implement government school reopening plans. Significant investment in infrastructure was needed to facilitate school reopening, since half of schools do not have basic services, including water and electricity, rising to 80% in rural areas. In 2021, the World Bank piloted a school reopening costing tool adapted to the country context and needs to estimate the resources needed to reopen schools in rural secondary schools. Consultation meetings were held with the government to explain the objective and design of the tool and to understand the country context. Training sessions also took place.

Support to school principals for safe schools reopening. Early in the reopening process, school principals, who have an important say in school reopening, received multiple sources of information and were required to work more hours without receiving any extra ad-hoc training to adapt changing protocols to the new context. They were also asked to deal with multiple tasks with limited guidance on what to prioritize. In January 2021, the World Bank started a partnership with the Ministry of Education of Peru to pilot and evaluate a training program designed by the NGO Global School Leaders (GSL) and adapted it to the local context:

- The Leadership for Renewal (LFR) training program aims to improve school principals' organizational and communication skills to reduce the opportunity cost of school reopening and potentially contribute to improved attendance among students whose parents receive more timely communication.
- The pilot would identify modules and opportunities for improvement in the design before scaling contents to *PeruEduca*, the national educational platform that provides free teaching resources. It was applied in 2005 schools: 1,123 treatment, 580 control and 302 pure control. The training process included a first-level training of Local Education Authority specialists provided by the Varkey Foundation through synchronous modules, in partnership with GSL, between June and July of 2021. Between August and September of 2021, specialists trained school principals from their jurisdiction on modules A and B (see figure below).
- Evidence from focus groups organized with a set of participants highlighted that receiving training on topics such as managing well-being (A3) and tools for communication (B1) was especially helpful to support their communication with teachers and parents and promote confidence in a safe reopening process. A program like LFR is a positive complement to the support and online modules countries in the region have offered their school leaders.

A. School Reopening	B. Technology for Learning and Management
A1. Preparing the School	B1. Tools for Communication
A2. Preparing the Staff	B2. Tools for Learning
A3. Managing Well Being	B3. Tools for Management
A4. Community support	

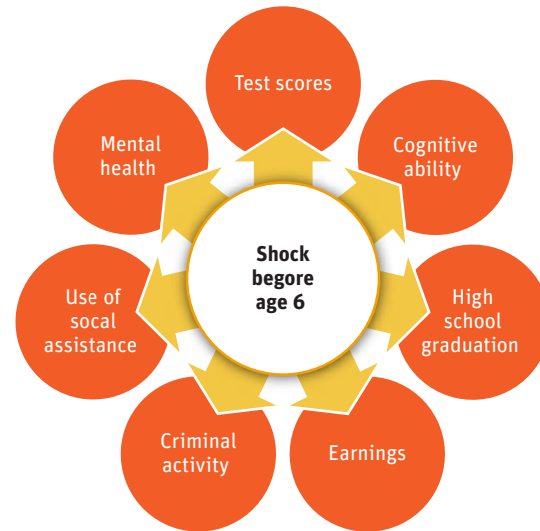
Source: Tanaka et al. (2021)

support across schools and other levels of government also can play an important role, as shown below in the case of Chile.

**In the process of prioritizing school reopening, opening ECE and primary education institutions should be a top priority.**<sup>158</sup> We have seen in previous chapters that primary education children have been the ones to suffer the most in terms of attendance and learning. It is therefore imperative to give priority to the reopening of primary schools. At the same time, and while the evidence on ECE is scarce, we also know that pre-school children have been deeply impacted and that any action to save this generation of children, and do it efficiently and effectively, needs to start from this very early age. Early childhood experiences have a profound impact on brain development-affecting learning, health, behavior and ultimately, lifetime opportunities. There is evidence from experimental and quasi-experimental studies that preprimary education improves children’s skill development – both for cognitive skills like early literacy and numeracy and social-emotional skills (like perseverance and focus). Figure 4.4 lists outcomes for which we have solid causal evidence linking early life circumstances to well-being later in life. Preschools and childcare centers also tend to be places where children can receive psychological support to deal with stressful home environments, stress which, as was documented, has increased during the pandemic. Reopening preschools can also help mitigate stress for female teachers who already must take care of students having fallen behind.

**LAC has had some good practices on the school reopening process, including experiences from Uruguay, Brazil (São Paulo) and Chile.** Uruguay was the first country in LAC to successfully return to face-to-face classes. The return to schooling was a gradual process that began by opening rural schools in April of 2020. By June 2020, almost all schools had reopened. The Health Administration drafted a protocol that schools should apply, with special attention to maintaining physical distancing in the classrooms and the playground. Face-to-face attendance was not compulsory and was combined with online learning. In São Paulo State, Brazil, schools

**Figure 4.4. Link between early shock before age six and well-being later in life**



were closed between March and September of 2020 and began to open partially between October and December of that same year. A total of 129 municipalities authorized schools to partially reopen for in-person activities, benefitting around two million students. A recent study found that, on average, no systematic association was found between school reopening and COVID-19 incidence or mortality in São Paulo State, up to 12 weeks after reopening<sup>159</sup>. School reopening in São Paulo State, while relatively timely, did not however prevent significant learning losses. A good practice in school reopening in the region is the case of Chile which spearheaded high quality, coherent and well-coordinated initiatives, related to safety and broader recovery, making them available flexibly to schools to enable them to choose the most relevant ones to their capacity, needs and contexts. Chile may however need to put more focus on the capacity of lower-income schools to help them apply more of those initiatives. A recent study from Chile showed that the amount of time schools remained open during the pandemic has become additional information that families use when choosing a school for their children<sup>160</sup>, suggesting that constraints have been more on the supply-side.

158 This is not to minimize that there may also be a strong rationale to reopen higher grades to address teenagers’ socio-emotional issues, potential crime, and violence situations, and even teenagers’ pregnancies. Hence, reopening all schools should really be the key objective at this stage of the pandemic.

159 The differences in disease activity after October 2020 across municipalities that authorized schools to reopen and those that did not were small and not statistically significant. See Cossi et al. (2022).

160 The study shows that the percentage of time that schools were open has a positive and significant effect on the preferences of families (expressed as a greater demand for available spots in the school). The study concludes that the opening of schools has been valued by families and that this information has become an important reference for their decisions regarding school selection. See WBG and CEM (2022).

However, some countries in the region have faced significant challenges for school reopening, as is the case of Ecuador, El Salvador, Honduras, Panama, Peru, and Venezuela and all federal countries. Challenges with reopening schools were many. Regrettably, constraints were found, in many of these cases, in the lack of resources to make significant investments in infrastructure to adapt spaces to social distancing, or more broadly, simply because of lack of basic services like water and/or needed hygiene-related inputs. Other challenges were related to lack of preparedness of principals, incoherence in guidelines and disconnects between schools, regional and/or central governments. Coordination issues were especially clear in federal countries as exemplified in Box 4.2.

**To sum up, school reopening strategies are the first most important step to be taken for those systems that remain closed or mostly closed.** There is substantial evidence amassed during these two years into the pandemic that clearly concludes that: (i) in-person education is the most effective education service modality; and (ii) school classrooms are not necessarily a vector of COVID-19 transmission, if school health protocols are applied consistently, hygiene resources provided, and distancing observed. Hence, ensuring school reopening must be the single most important first strategy for bringing all students back to school. And lessons from existing experiences of school reopening should be built on to complete this process and/or make sure it is sustainable. Short-term recommendations for school re-opening are therefore: (i) design a school re-opening strategy based on latest evidence of the health situation locally, coherent and clearly owned by principals and all government levels; (ii) establish and fund proper safety standards for schools that could be closely observed and clearly communicated to all stakeholders; and (iii) if unable to open fully the school system, make an effort to prioritize specific levels of education when open partially, starting from the lower levels of education. Hybrid learning models could be a short-term option to address social distancing issues in schools, and also helpful in supporting more resilient systems in the medium-term in case schools have to close again or simply to create new opportunities for enhancing teaching and learning (see Box 4.3 for some useful lessons on hybrid learning).

## 4.2 Re-enrolling and preventing dropouts

**Enrollment and attendance are crucial indicators to monitor to determine the schooling status, an essential step to ensure learning and good educational outcomes in the short and long term<sup>161</sup>.** As schools reopen it is essential that all students get back to school. Additionally, once in school students must attend it and not drop-out. This requires attention to policies to attract children and youth back to school and keep them in school.




**As presented in chapter 2, the assessment on the impact of the pandemic on schooling so far for the region has been mixed, but there are strong risks.** The arrival of the pandemic and school closures as a containment measure had significant implications on school attendance rates and engagement. Attendance rates decreased, especially for children and youth in more vulnerable families. Additionally, the 6-to-14-year-old group does seem to have been negatively impacted in terms of attendance by the end of 2021, at least in selected countries. At the same time, in the same timeline, the 15-to-17 years old had not been (yet) really affected, and so overall enrollment rates (in an admittedly limited country sample). Enrollment rates for the 2022 academic year are however not yet available, and it is possible that many students did not re-enroll, and there is a real risk of future drop-out, especially of vulnerable children and youth, based on their attendance and learning gaps, and how the economic context and financial constraints may evolve. For example, simulations undertaken by the Ministry of Education in Chile, indicated that dropout rates were expected to increase from 2.6% to 5% due to the pandemic<sup>162</sup>, following decreases in attendance rates. Policies for re-enrollment — even if just for the second part of 2022 and 2023 at this stage — and drop-out prevention need to be put in place.

**This assessment and the related policies can provide for some useful lessons.** As was shown in chapters 1 and 2, governments from across the region implemented different types of policies to counteract the negative effects of the pandemic, some of which ended up positively affecting enrollment (directly and indirectly, see Box 2.1 in Chapter 2) and attendance. Consequently, those countries which are dealing with impending school reopening processes, and all countries generalizing reopening in the 2022 academic year, should consider building on at least

161 UNESCO, UNICEF, and WBG (2021c).

162 WBG et al. (2021).

## Box 4.2. School reopening in federal countries: Challenges and lessons learned

 <b>Argentina</b>		
<p><b>Federal Organization:</b></p> <p>24 sub-national states, encompassing 23 provinces and one federal district - the Autonomous City of Buenos Aires (CABA), the capital of the country <sup>(1)</sup>.</p>	<p><b>Challenges:</b></p> <p>Consensus between national and sub-national level: In March 2021, the National Ministry of Education issued two resolutions for the nationwide return to classes for the new school year 2021. Shortly after, in April 2021, a sudden surge in contagions led the President to announce the suspension of in-person classes nationwide. The Government of CABA rejected the re-closing of schools and disputed this new Presidential decree on two grounds: (i) district's autonomy in education management dictated by the country's National Constitution; and (ii) detailed sanitary data compiled at the district level, which showed a significant deviation from national average indicators. The controversy was judicialized and the National Supreme Court ultimately upheld CABA's decision. Immediately after this legal decision was ratified, Argentina had simultaneously the bulk of its education system fully/mostly closed, with the education system in CABA being fully open.</p>	<p><b>Lessons learned:</b></p> <p>Importance of consensus and promotion of plural spaces for decision-making with different stakeholders, specialists, teachers, families, and students.</p> <p>Importance of EMIS for basing school reopening decision-making on monitoring of sanitary indicators at the local level.</p>
 <b>Brazil</b>		
<p><b>Federal Organization:</b></p> <p>27 sub-national districts, comprising 26 states and one federal district - the city of Brasilia, the capital of the country <sup>(1)</sup>.</p>	<p><b>Challenges:</b></p> <p>Safe reopening of schools with adequate conditions (water, health, infrastructure): The application of safe protocols for school reopening, and the concomitant need for investment (e.g. small civil works, refurbishment, ventilation arrangements) and accrued health-related recurrent expenses (e.g. alcohol, soap, masks), was an important challenge in Brazil. While it is the responsibility of state and municipal departments to implement actions to ensure the adequacy of school environments, funding and guidelines come from the Federal Government.</p>	<p><b>Lessons learned:</b></p> <p>Importance of determining funding obligations for safe school reopening investments/expenses, a category which did not exist prior to the pandemic (non-earmarked expense).</p> <p>Criticality of coordination across levels of government</p>
<p><b>Compulsory education:</b></p> <p>Decentralized to the sub-national level of first and second order (i.e. municipalities). States and municipalities therefore share responsibility for providing compulsory education.</p>	<p><b>Challenges:</b></p> <p>Decision-making process within compulsory education levels: The municipalities, which in the case of Brazil are a critical and integral part of the institutional architecture for the provision of educational services, also had the autonomy to decide individually about the respective levels of education under their purview (e.g. pre-primary, primary, and lower secondary). Half of the states, for example, called off the school year 2020 much earlier than the original official schedule for that year and planned for a much earlier start of school year 2021. But they could also decide on closures for specific levels of education within their purview, leading to the possibility that, within the same district, the municipality decided to close pre-primary institutions, but the state decided to keep partially open upper secondary education institutions (potentially located within the same building as a pre-primary counterpart).</p>	
 <b>Mexico</b>		
<p><b>Federal Organization:</b> 32 sub-national districts, comprising 31 states and one federal district - the Federal District of Mexico, the capital of the country <sup>(1)</sup>.</p>	<p><b>Challenges:</b></p> <p>Despite the autonomy of states in the administration of their educational systems, the school re-opening process was determined centrally through a "traffic light system" for each state. This system was driven by COVID-19 transmission rates and managed nationally by the National Health authority. The reopening situation constantly changed as states changed their epidemiological traffic light frequently.</p>	<p><b>Lessons learned:</b></p> <p>Put monitoring mechanisms in place for timely decision-making.</p> <p>Advocacy for the reopening of schools and return to face-to-face learning.</p>
<p><b>Compulsory education:</b></p> <p>Decentralized to sub-national level of first order.</p>	<p><b>Challenges:</b></p> <p>Notwithstanding the lack of "federal organization"-driven bottlenecks, Mexico faced two key obstacles:</p> <ul style="list-style-type: none"> <li>• No follow-up and monitoring mechanism to measure participation and learning through distance learning.</li> <li>• Low public awareness on the risks associated with the prolonged closure of schools.</li> </ul>	

Sources: Argentina (OECD, 2016a; UNICEF, 2022a<sup>(2)</sup>); Brazil (OECD, 2021, UNICEF, 2022a<sup>(2)</sup>); Mexico (OECD, 2016b; UNICEF, 2022a<sup>(2)</sup>).

(1) Each of the sub-national entities of the three countries can dictate its own Constitution and have the three-tier division of power (Executive, Judicial and Legislative).

(2) Updates 31 and 32.

### Box 4.3. Consolidating more robust hybrid models: An opportunity that cannot be missed

Hybrid learning systems should remain not only during the pandemic but also afterwards, in non-emergency contexts. They have the potential to transform the delivery of education generating flexibility, extending access to basic education, supporting more innovative pedagogical approaches, providing teachers with more training and development opportunities, allowing longer instructional time, and reducing the cost of learning, among other benefits.

Solid investments, planning, participatory approaches, and involvement of all concerned stakeholders are essential to ensure all the population can benefit from flexible models of learning. Hybrid models (where teaching sessions may have some students in class and some participating remotely) should be inclusive, adaptable, designed around different learning objectives, preferences, and realities, and incorporate various pedagogical approaches and technologies. High-quality hybrid models require:

1. Facilitating the interpretation of digital technology in education and training systems through the assessment of digital maturity, assessing skills through digital skills frameworks, and investing in human capital using digital skills policies and programs.
2. Overcoming the digital divides in rural areas and identify hybrid learning models appropriate to every context, including through self-sustained funding models for connectivity.
3. Integration in a national digital strategy which includes reskilling, upskilling, and capacity building to leverage digital technology for life; developing appropriate governance and regulatory frameworks; and creating and promoting public-private partnerships.

Source: Broadband Commission for Sustainable Development, International Telecommunication Union, and UNESCO (2021).

some of these regional experiences and/or implementing other policies that can assure that all children are re-enrolled and continue attending school thereafter.

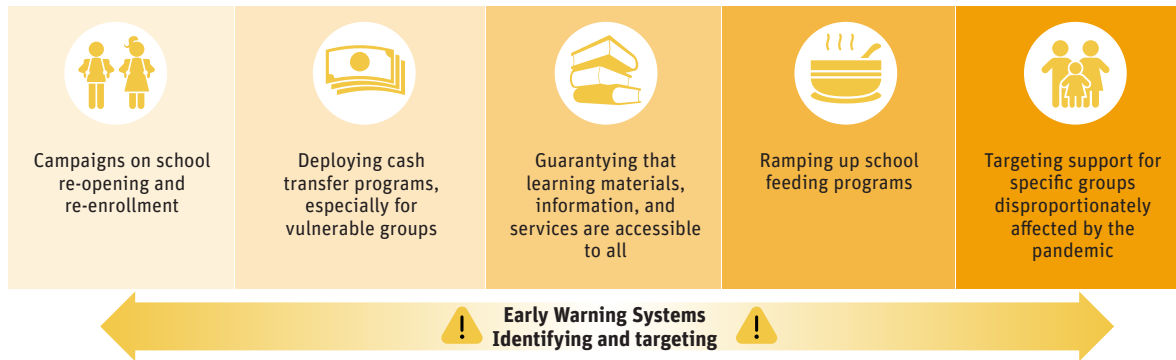
**Evidence collected during the pandemic, both from international and regional experiences, shows some successful policies to spur enrollment and attendance, and deter dropouts, that are worth noting.** Below are summarized the top 5 interventions (presented in Figure 4.5) that were proven to positively impact enrollment and attendance. It is important to highlight that these interventions build on different incentives, ranging from the use of information, to providing additional services and materials, and cash transfer programs, and these different interventions have different cost implications (information campaign on one extreme, school feeding and cash transfer programs on the other extreme). This implies that countries should make an informed decision based on their own diagnostics and funding availability.

**Five top interventions to spur enrollment and attendance (information; cash transfers; services and learning materials):**

- **Conducting inclusive information campaigns on school re-opening and re-enrollment, especially for vulnerable populations, including contacting the student's families, parents, or guardians to facilitate and encourage re-enrollment.** Several countries have rolled out back-to-school campaigns to get children back to school and learning<sup>163</sup>. The World Bank financed these types of campaigns in countries such as Madagascar, Ethiopia, and Pakistan, always placing an emphasis on students with the highest risk of dropping out. In Colombia, a campaign launched in 2021 named “*Este Cuento es Tuyo*” (This Tale is Yours) tried to incentivize children to go back to school, increasing access to and permanence in the education system. This campaign complemented an already existing program “*Todos al Cole*” (Everyone to School) which benefitted



**Figure 4.5. Successful policies to spur enrollment and attendance, and deter dropouts**



more than 54,000 primary education children following their enrollment, through the provision of psychological assistance and extracurricular activities for those students most likely to drop out<sup>164</sup>. Drop-outs would likely have been higher without these policies.

- Deploying cash transfer programs, especially for vulnerable groups.** These types of strategies, which tie cash support to families to school enrollment and attendance, have proven to be effective in different countries of the region such as Brazil, Colombia, and Mexico<sup>165</sup>. Hard conditionalities could be replaced by softer ones to broaden participation. In Brazil, under the program Bolsa Familia, cash transfers have been provided to vulnerable students which, according to the literature and a recent analysis, have led to increased enrollment<sup>166</sup>. In Uruguay, for example, an inclusive back-to-school campaign was deployed and entailed cash transfers targeted to students at high risk of dropping out of school. In Jamaica, a similar strategy was developed, targeting households with children with disabilities, and providing financial support through cash transfers. These cash transfers programs entail a significant incentive for enrollment and attendance, especially of 15-to-17 years old, as they operate as a significant income support to deal with the direct and indirect costs of schooling and have been or have the potential to be applied at scale (See Figure 4.6 for a full list of LAC countries for which Conditional Cash Transfers (CCT) programs were implemented to date).<sup>167</sup>

**Figure 4.6. Countries in LAC with previous experiences with cash transfers**

Cash Transfers		
Argentina	Dominican Republic	Mexico
Bolivia	Ecuador	Nicaragua
Brazil	El Salvador	Panama
Chile	Guatemala	Paraguay
Colombia	Honduras	Peru
Costa Rica	Jamaica	Trinidad and Tobago
		Uruguay

Source: Own elaboration based on Stampini and Tornarolli (2012).

- Guarantying that learning materials, information, and services are accessible to all, but especially to people with disabilities and students from ethnic minority groups. This includes the distribution of books, uniforms, and other school supplies.** Argentina invested US\$5.6 million in 2021 into the National Reading Plan which distributed more than 1.5 million books to schools in pre-primary, primary, and secondary levels. A total of approximately US\$30 million was invested in books and other learning supplies under the program “*Acompañar: Puentes de igualdad*” (Teaming: Bridges of Equality)” implemented to re-enroll students who interrupted learning during the pandemic. Improving learning conditions at home (including access to devices, connectivity, and availability of books) was also highly instrumental to

164 See Colombia’s National Education Ministry (2021) and Páez and Castillo (2021).

165 Attanasio et al. 2021; WBG et al. (2021).

166 WBG (2021c); WBG (2022a).

167 More broadly, CCTs are a significant intervention for poverty alleviation. The Inter-American Development Bank analyzed 19 LAC countries for which CCT programs were implemented in the past and estimated that the poverty headcount index would be on average 13% higher (with variations ranging from 1% in Paraguay to 59% in Uruguay) had these programs not been implemented. See Stampini and Tornarolli (2012).

maintain children and youth engaged in the schooling process. The World Bank's Read@Home program aims to deliver reading, learning, and play materials to hard-to-reach homes. In the Dominican Republic, notebooks and books were provided to students enrolled in public schools. According to the survey implemented by that country's Ministry of Education, around 89% of the parents and caregivers with their kids in primary, and 81% with their kids in secondary, reported that their children used those books and notebooks during the pandemic<sup>168</sup>. Uruguay invested in social inclusion and equity in education technology through "*Plan Ceibal*", distributing laptops and no-cost Internet to students and teachers, along with digital skills training.

- **Ramping up school feeding programs.** School closures not only interrupted learning but also social policies such as school feeding programs that seek to provide balanced nutrition to vulnerable children. Before the pandemic, approximately 85 million children in the LAC region used to receive meals from school feeding programs. For 11% of these children, this meal represented their main daily source of food<sup>169</sup>. During the pandemic, many countries created ways to keep providing students with their meals such as Mexico where during school closures 17 out of the 32 states continued providing food services with meals to be prepared at home<sup>170</sup>. School feeding programs should be prioritized as they are an important tool to incentivize the return to school, engage students, and guarantee food security, especially to the most vulnerable population.
- **Targeting support for specific groups that have been disproportionately affected by the pandemic, for example, girls.** Evidence from the impact of the pandemic showed that, for some specific LAC countries, effects on enrollment and attendance disproportionately affected girls (especially in lower-income households). In Paraguay, in 2020, drop-out rates for lower secondary education for girls were 23% higher than for boys<sup>171</sup>. Studies have shown that cash transfers, among others, are effective strategies for encouraging girls' enrollment as they help prevent them from resorting to paid

work to supplement family incomes or be the predominant gender to support with domestic chores or earlier siblings' childcaring<sup>172</sup>. At the regional level, other initiatives that targeted girls were the creation of materials with a gender lens, which can also help with the increasing learning gaps. For example, in Honduras, the Government tried to deploy educational resources with a gender approach through their online learning platform, where students had access to different activities with a gender focus through a "learning passport"<sup>173</sup>.

**To make sure to identify and track students most at risk of not re-enrolling and/or dropping out, several countries of the region have also been developing and implementing Early Warning Systems (EWS).** EWS, although very recent and therefore with limited evidence of their impact, have proven to be useful tools in the LAC region to date<sup>174</sup>. They all use individual and family risk factors to identify students at risk and have helped take timely actions, implementing more effective strategies to support those students, and undertaking a close follow-up, eventually preventing them from dropping out. By doing this they also support a more efficient use of resources across all interventions. Previous experiences in the United States and Guatemala have shown that this type of systems and interventions reduced the percentage of students dropping out from school by between 1 to 4 percentage points<sup>175</sup>. In Central America, Belize, Costa Rica, and El Salvador count with operational EWS as pilots or at scale. Costa Rica's EWS uses an especially wide range of variables related with the family and social environment to identify youth at risk. Guatemala and Honduras have developed systems to mitigate the risk of drop-out between primary and lower secondary.

**Chile, Peru, and Brazil have made important strides in developing EWS.** Chile implemented an EWS during 2020. More than 3,500 educational institutions implemented the system and identified 75,000 students at risk of dropping out. As shown in Figure 4.7, using administrative data not only about students' education but also health, and other factors, the system analyzes each student's situation through different dimensions: individual factors, family factors, learning factors, and community factors. These data are constantly

168 WBG (2022b).

169 IDB (2020).

170 Ibid.

171 Administrative data from the Paraguay's Ministry of Education show that, in 2020, dropout rates for LSE for girls were 5.3%, an all-time high, compared to 4.3% for boys. For perspective, drop-out rates for boys and girls in 2015 were 4.6% and 3.6%, respectively.

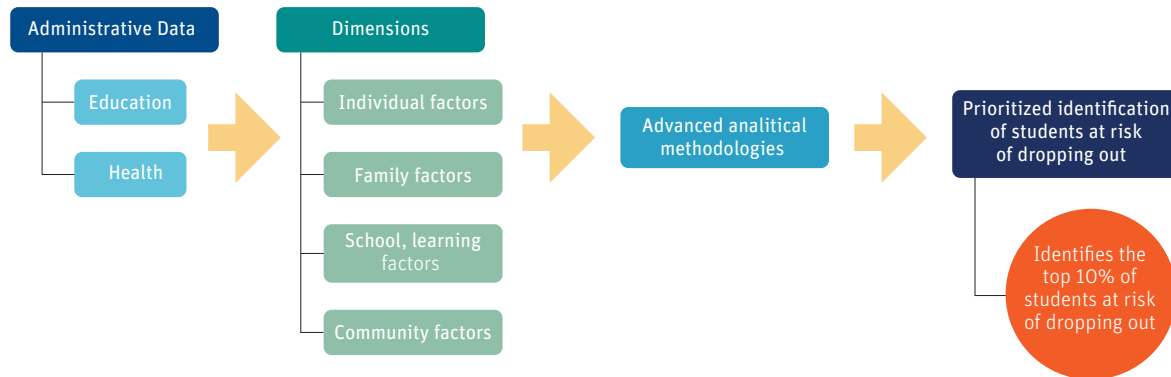
172 Malala Fund (2020).

173 WBG et al. (2021).

174 Perusia and Cardini (2021).

175 Faria et al. (2017); Haimovich et al. (2021).

**Figure 4.7. Chile: Early Warning System**



Source: Larraín (2021).

analyzed using advanced methods and algorithms that are useful to screen students at risk of dropping out, and then help take timely actions to keep these students in school. Some strategies implemented by schools to prevent dropouts included home visits, flexibilization of the curriculum, provision of textbooks and meals, close follow-up, and long-term support. Another successful experience is found in Peru with “*Alerta Escuela*”<sup>176</sup> which was launched in October 2020. According to the Peruvian government statistics, 30% of the institutions’ directors used the platform to revise at-risk situations between March and November 2021. The tool, currently being improved for clarity and simplicity, was found effective by 60% of them. Key actions taken upon identification of youth at risk included tutoring, remedial education programs, and provision of printed materials. As a result, even though 428,000 students were found at risk of dropping out, it is assessed that 89% continued studying in 2021.

**In 2021, Brazil implemented the Programa Brasil na Escola to support school retention and learning recovery.**

The EWS at the core of this program establishes a risk map based on multiple factor (to be updated every year), used to then implement targeted complementary interventions (Figure 4.8). The system is expected to be applied to more than 120,000 schools in 2022. A key question for EWS is to what extent they can be scaled-up to address dropouts in a more systematic and sustainable way, so it will be important to learn from this and other expansions in 2022.

**A temporary disconnect from school could turn into permanent drop-out if not treated with a sense of urgency; hence ensuring enrollment, attendance and potential**

**Figure 4.8. Brazil: Early Warning System**

**Early Warning System (Brasil na Escola)**

Three steps:



- 1. Dropout Risk Questionnaire**
  - Paper-Based (4x per year).
  - 12 yes/no questions (risk factors).
  - Levels of Risk (number of “Yes”).



- 2. Qualitative Evaluation**
  - Interviews “high risk” students.
  - Identifies qualitative factors.
  - Follows particular cases.



- 3. Menu of Programs**
  - Based on risk factors, students are directed to local programs.
  - “Personalized dropout interventions”

**Focused on:**

- Vulnerable schools (>70% Bolsa Familia)
- Low performing schools (IDEB < 3)

Source: Adaptation from Sartori (2021).

**dropouts are tackled adequately is essential.** School systems across LAC must go the extra mile to re-enroll students and keep them in school, giving special emphasis to age groups more affected during the pandemic, and to the most vulnerable children and youth, encouraging collective coordination and cooperation between governments, society, and media. In the short term, these efforts should focus on five core policies: (i) inclusive information campaigns on

176 See <https://alertaescuela.minedu.gob.pe/>.

school re-enrollment, contacting children's families, parents, or guardians; (ii) deploying cash transfer programs, especially for vulnerable groups; (iii) guaranteeing learning materials, information, and services are accessible to all, especially those most vulnerable; (iv) strengthening and guaranteeing continuity of school feeding programs; and (v) targeting support policies for disproportionately affected groups of interest (e.g. girls). These policies can be complemented by the development and implementation of early warning systems to identify and monitor students most at risk of dropping out, and, understandably and importantly, by policies to recover from learning losses to prevent future dropouts related to poor learning. All these interventions also have the potential to increase attendance and decrease dropouts in the long-term.

### 4.3 Key takeaway messages

**Completing the school reopening process is the first most important step that must be taken to get children and youth back to schooling.** Countries in the region have been progressively reopening their school systems and prioritizing a return to face-to-face classes for students.

It is essential that this process is brought to completion in countries where reopening is still partial and be sustainable. The school re-opening process needs to be informed by the latest evidence of the health situation locally and be coherent, and clearly owned by principals and all government levels. If a full reopening is not immediately possible, earlier grades of education should be prioritized, and hybrid learning modalities can be a possibility in the short-term. Proper and clearly communicated and funded safety standards need to be established for all schools.

**Multiple complementary efforts are needed to ensure re-enrollment of children and youth and keep them in school.** Special attention will need to be given to monitoring enrollment during 2022, to the age groups more affected during the pandemic, and to the most vulnerable children and youth, who are the most at risk of dropping out. Policies will have to include inclusive information campaigns, leverage cash transfer programs, and support access to learning materials, services, and school feeding programs, with a special focus on the most vulnerable groups. Building on the emerging country experiences, early warning systems can help identify, monitor, and target students most at risk of dropping out, also for longer-term decreases in the out of school youth population.





PHOTO BY: © GONZALO BELL / SHUTTERSTOCK.COM

## Chapter 5

**Recovering and accelerating:  
Recovering from learning  
losses, improving well-being,  
and addressing digital gaps**

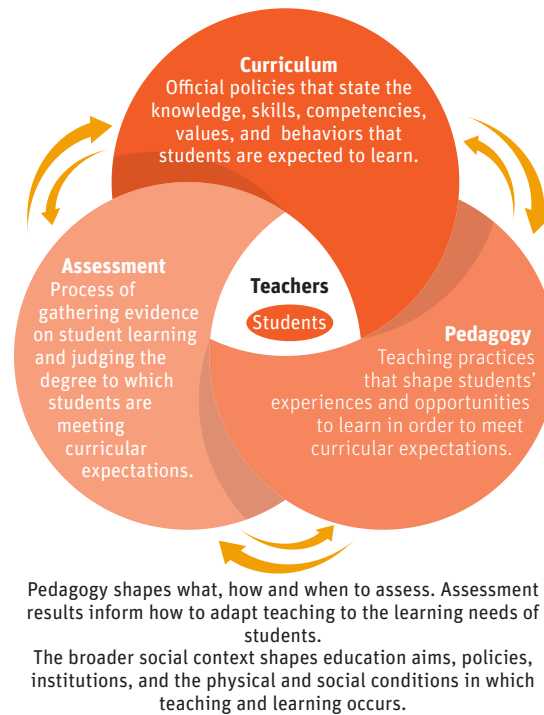
**A**s reviewed previously, recovery must focus on the essentials: returning to schooling and recovering from learning losses (Figure 4.1). Getting back and staying in school is only the first step to recover from the effects of the pandemic on education: children also and foremost need to get back to learning. Without learning it is also likely that schooling itself will suffer. Recuperating lost or forgone learning, and make up for the lost time, will require critical choices and interventions. At the same time, a deterioration of mental health and well-being of children and youth across education levels has hindered their readiness to learn and acquire both foundational and transferable skills and could also lead to increased dropouts and risky behaviors. The well-being of teachers and parents have also suffered. And, while the crisis may have been the opportunity to improve digital skills, there is still a long way to go to address digital gaps across all education levels for recovery and acceleration. Addressing these challenges also requires prompt and continuous action.

This chapter delves into the “recovering from learning losses” agenda, while also briefly discussing actions to address psychosocial and digital gaps. It will discuss critical actions related to: (i) curricular consolidation; (ii) assessment of students’ current learning levels to properly diagnose the breadth, depth, and characteristics of learning losses; and (iii) building on the curricular decisions and on the evaluation of learning losses, interventions that can help provide the needed (and presumably accelerated) learning recovery. When discussing foundational skills, the chapter will also relate when relevant to transferable skills, as defined in Chapter 3, insofar as they play an important role in the ability to accumulate skills, including foundational ones. The chapter will also provide initial insights on directions for improvement in the long run. Finally, it will also discuss some critical actions to develop psychosocial health and well-being, and review actions to address digital divides.

## 5.1 Recovering from learning losses

**Children go to school to learn.** Schools are the place where they acquire academic knowledge and skills, where they learn to care about others, where they learn to learn. School systems usually foster learning based on three main pillars or dimensions: a curriculum that states what students are entitled to learn; a pedagogy that guides how to teach towards curricular goals; and assessments that provide evidence on student learning and invaluable

**Figure 5.1. Three-dimensional model of curriculum, pedagogy, and assessment**



information to inform the changes needed in schools and education systems. In most effective school systems, these three pillars are aligned, feedbacking one each other and making synergies. They operate as an integrated system that puts students at the center and provides strong support to teachers to support students (Figure 5.1).

**All three learning pillars were greatly shaken by the COVID-19 pandemic.** In addition to the disruptions in attendance and engagement, school closures precluded covering the curriculum, teachers needed to adapt pedagogy to remote education, and assessment results were not available to inform learning and teaching, resulting in the large expected and actual learning losses highlighted in previous chapters. These issues were made worse by pre-existing institutional constraints and service delivery failures especially related to weak leadership at the school and system levels and lack of incentives to generate and use data at scale for evidence-based decision-making. Most countries were pro-active in adopting mitigating measures, but the agenda for action is still long to put children and adolescents back on a recovery and acceleration path. This section presents the challenges countries faced on each dimension, the practices they have been putting in place to address, or at least mitigate, learning losses generated by school closures,

and how to build on those and pre-pandemic practices to speed-up the learning recovery process. While the three pillars continuously feed into each other, and it is therefore important to keep in mind this articulating framework, the sequencing of the discussion adopted in this chapter aligns with the urgent agenda for action around consolidating, assessing, and taking remedial interventions, with a focus on the short-term, while highlighting potential opportunities for long-term improvement.

### 5.1.1 *Prioritizing the curriculum*

**The pandemic opened the door for countries to make substantial revisions to their curricular policies, prioritizing what was considered essential learning for all students.** Before the pandemic, there was criticism that, in general, the curricula of the countries were too broad, demanding, and rigid. However, there was neither political nor technical support for narrowing down curricula that targeted the development of high-level competencies<sup>177</sup>. With the pandemic, a turning point was reached that made the narrowing down of the curriculum a necessity. There was the urgent need to address school closures, a reduced school year calendar, and adjustments in pedagogy to adapt for remote learning. There was no way the whole curriculum could be covered in new digital, television or radio education programs.

**Curricular documents in Latin America are relatively homogeneous in their disciplinary and pedagogical approaches.** More or less, curricula expect students to learn similar contents, skills, competencies and attitudes. They emphasize solving real life problems and use a communicative and socio-cultural approach to teach languages. They endorse an active pedagogy that promotes students building their own knowledge based on their experiences, in real and significant contexts.<sup>178</sup> However, there were concerns about curriculum design and implementation<sup>179</sup>, including:

- Curricula too ambitious and complicated, covering too many subjects and skills, without a clear focus or sequence.
- Curricula with an excessive focus on content itself to the detriment of foundational and transferable skills.

- Curricular expectations that are not realistic given the real learning level of the students, with most students falling well behind the curricula.
- One size-fits all curricula that do not recognize the fact that students do not learn at the same pace, that teachers have very heterogeneous classes with students at very different learning levels.
- Teachers and supervisors being more concerned with “covering the curriculum” than with student learning.
- External control and accountability mechanisms putting more incentives on teachers covering the curriculum rather than on ensuring learning for all.

**Even as it led to substantial learning losses, the pandemic paradoxically paved the way to address some of these curricular concerns.** When school closures and remote learning became imminent, countries, to the extent possible, reacted by: (i) identifying “essential learnings” to be taught to all students, with a drastic reduction of the curricular content, skills, competencies to be taught; (ii) adopting a more deliberate focus on foundational mathematics and language skills; and (iii) allowing for greater flexibility in the implementation of the prioritized curriculum.

**Several LAC countries decided to simplify their curricula, focusing on key subject areas and “essential learnings”.** According to the last Survey on National Education Responses to COVID-19 School Closures<sup>180</sup>, 8-10 countries made adjustments to their school calendars and curricula by education cycle, increasing slightly between 2019/20 and 2020/21 (Figure 5.2). Teaching mathematics and language (reading, writing, literature) became a priority over other subject areas. Brazil, Ecuador, Honduras, Panama, and Saint Lucia are among those countries that prioritized curricula in all three cycles of the school system (primary, lower secondary and upper secondary) and during the two school years most affected by the pandemic.

**Countries should continue prioritizing their curriculum to recover learning.** As schools have been reopening, countries should keep focusing on the key subjects of language and mathematics, as well as on transferable skills

177 Valverde et al. (2020).

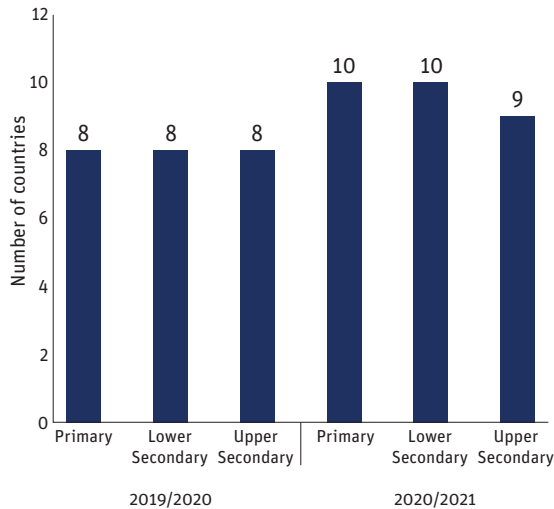
178 UNESCO-OREALC (2020).

179 See, for example, GEEAP (2020) and (2022).

180 UNESCO, UNICEF, WBG, and OECD (2021b). The 26 countries that answered this survey were: Antigua and Barbuda, Bahamas, Belize, Brazil, British Virgin Islands, Cayman Islands, Colombia, Costa Rica, Cuba, Curaçao, Dominican Republic, Ecuador, El Salvador, Grenada, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Paraguay, St Kitts and Nevis, St Lucia, Suriname, Trinidad and Tobago, Turks & Caicos Islands, and Uruguay.



**Figure 5.2. Number of LAC countries that prioritized certain areas of the curriculum or certain skills due to COVID-19, by year and school cycle, 2021**



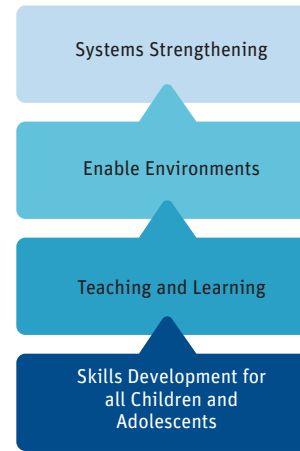
Source: UNESCO, UNICEF, WBG, and OECD (2021b). Survey on National Education Responses to COVID-19 School Closures, round 3 (Feb-Apr 2021). Overall, 26 LAC countries answered the survey.

such as critical thinking, as a means to support learning. They should also keep prioritizing teaching foundational skills that tap the actual proficiency levels of their students. For instance, if many third graders cannot still read simple stories according to curricular expectations, these students should have the right learning opportunities to allow them progress in their literacy skills. These adaptations should be done even if they depart from curricula and programs of study. Adapting curriculum and pedagogy could be further reinforced by increasing teaching time, especially for students with greater learning losses. As further discussed below, two interesting examples of reforms along these lines are found in the learning recovery program “*Acelera Brasil*”<sup>181</sup> and in the State of Ceará in the same country<sup>182</sup>.

### Moving forward

**Refocusing on foundational skills should also be a priority for the long-term.** This type of reforms is critical considering that, even before the pandemic, more than half of students did not meet minimum proficiency levels according to ERCE 2019. There is an opportunity to build back better to enhance foundational skills through

**Figure 5.3. Programmatic intervention areas through multiple pathways**



Source: UNICEF (2021e).

a set of complementary interventions focusing on increasing readiness to learn, revising the curriculum, enhancing teacher support, and improving management for learning (see Box 5.1).

**Moving forward, the crisis may also be the opportunity to reiterate the importance of transferable skills and the need for a comprehensive vision and approach to develop them.** Transferable skills development needs to occur across the life-long learning cycle and through multiple learning pathways. Transferable skills development is a cumulative process from early childhood through adolescence to adulthood, that can occur through different modalities including formal, non-formal and informal education. To improve the development of transferable skills, UNICEF’s Global Framework on Transferable Skills proposes three intervention areas for action: (1) Teaching and learning, including appropriate and context aligned curriculum, content, pedagogical practices and assessments<sup>183</sup> - an example from Argentina can illustrate pedagogical approaches to develop transferable skills (Box 5.2); (2) Enabling environments, where students feel physically, socially and emotionally secure to participate and can develop skills through positive relations with peers and adults; and (3) System strengthening, including strategies, plans and policies at the national and local level, budgets and human resources, among other (Figure 5.3).

181 Mancebo and Vaillant (2022).

182 Loureiro, Cruz et al. (2020), Loureiro, di Gropello et al. (2020).

183 One example of intervention that needs focus is teacher training. Even though over the last decade socio-emotional skills have been increasingly getting more attention across the region’s education systems, a pre-pandemic study of 12 LAC countries found that pre-service and in-service teacher training programs offered scarce opportunities in transferable skills. Arias et al. (2020).

### Box 5.1. Accelerating: Foundational skills for the future

**The lack of foundational skills among LAC students, particularly in connection with low reading comprehension levels, was a key limitation for remote learning during the COVID-19 pandemic.** This was particularly true for the most disadvantaged students, who did not have access to high-tech online platforms and synchronic virtual education. To overcome both preexisting and post-pandemic challenges, and significantly reduce “learning poverty” in the region, education systems must focus, effectively, on developing basic levels of proficiency in reading, writing, and mathematics among all students. A set of key policy actions to enhance learning opportunities in the region is presented below, grouped in four main areas:

- 1. Increase readiness to learn:** The acquisition of foundational skills in reading, writing, and math begins before formal schooling. A first necessary step to improve foundational skills is to increase quality in early childhood development and in preschool interventions with special emphasis on the most disadvantaged children and at-risk population. Interventions such as home visits and preschool are cost-effective and their effectiveness can be increased over time, through sustained improvements in teacher and classroom quality<sup>184</sup>, and direct instruction<sup>185</sup>. Making these interventions easily accessible and affordable to all parents, particularly women, is also key for their overall success<sup>186</sup>.
- 2. Improve teacher quality and effectiveness:** Evidence from the region has shown that teacher quality is of grave concern<sup>187</sup>. Recent studies in five Central American countries have shown that teachers are not receiving adequate initial teacher training. It is imperative to provide teachers and school administrators with a systematic set of tools that will allow them to foster children’s learning so they can reach their full potential. Teachers who have not received quality initial teacher training will most likely lack the tools to adequately assess what skills their students are bringing to their classrooms and which ones they are missing. Learning difficulties, however, can be prevented in young, at-risk students when timely assessments and interventions are deployed. Hence, giving teachers the tools they need to assess student learning and its progress in an effective and objective manner is key. Other recommendations are structured, and scripted lesson plans which have been proven to be effective tools to increase learning, giving teachers and children textbooks and educational resources to improve learning.
- 3. Revise the current curriculum and instructional time to emphasize critical literacy (reading and writing) skills:** Reading, writing, speaking, and understanding texts are fundamental building blocks for learning that need to be properly developed.
  - For alphabetic languages, the Science of Reading (SoR) has shown that effective reading programs and instruction are key enablers for strong literacy skills acquisition for children, from preschool to the first grades of elementary school. SoR has debunked many of the methods that, over the years, were and are still used in reading instruction. Revising methods like that of whole-language approach, and changing them, although not an easy task, is fundamental to eradicate learning poverty in the long term.

*(Box continues on next page)*

184 Araujo et al. (2016); Nores et al. (2018).

185 Näslund-Hadley et al. (2020).

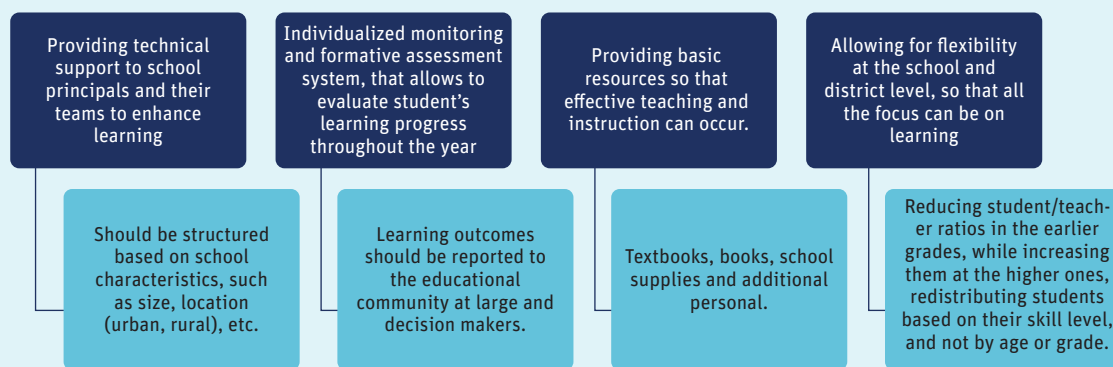
186 Mateo-Díaz and Rodríguez-Chamussy (2016).

187 Elacqua et al. (2018); Burns and Luque (2014); García et al. (2014).

### Box 5.1. Accelerating: Foundational skills for the future (continued)

- Moreover, LAC children also suffer from “writing poverty”. Very limited time is devoted to writing per se, and writing instruction, in the classroom. Therefore, effective reading and writing instruction require sufficient time to be allocated to these activities, both daily and throughout the academic year. In the case of reading, an estimated 600 hours of instruction over a three-year period are required to acquire mastery<sup>188</sup>. This needs to be reflected in the curriculum and in how teachers, schools, and district administrators organize instructional time, particularly in the first three years of primary schooling.
  - Last but not least, schools should foster active mastery of speaking and presentational skills. Being able to articulate clear ideas and present them orally to an audience, in a short period of time and in a focused manner, is an essential competence today. Teaching and training students on these abilities must be a critical ingredient of the foundational skills development process.
4. **Refocus system and school management towards foundational skills development:** Literacy, numeracy and transferable skills such as problem-solving skills are the cornerstone of learning. Hence, management for learning – and for developing these competencies - is fundamental. Figure B.5.1.1 presents some key aspects that may guide the refocusing of school management on learning such as: (i) providing technical support to the school leadership team; (ii) implementing individualized monitoring and formative assessment systems; (iii) providing basic resources for effective teaching and instruction programs; and (iv) allowing for some flexibility at the school and district level so that focus can be on learning. Supporting school principals and better aligning and allocating roles at all levels of the education system articulating those around learning is also at the core of a recent regional study on management for learning<sup>189</sup>.

**Figure B.5.1.1. Key actions for refocusing school management on learning outcomes and foundational skills**



The Response to Intervention (RtI) model and the Teaching at The Right Level (TaRL) approach are clear examples of mechanisms through which district-level and school-level management can be refocused on learning outcomes and foundational skills. RtI is a tiered intervention model that aims to ensure that all students receive the support they need to succeed academically. Over the last decades, school districts in Canada and the United States have implemented RtI initiatives with promising results<sup>190</sup>. Pratham, an Indian NGO, developed the TaRL model to target learning poverty at the primary school level. The model is aimed at improving foundational skills, regardless of age or grade level. The key elements of this approach are presented on Figure B.5.1.2.

*(Box continues on next page)*

188 Crawford and Oviedo (2022).

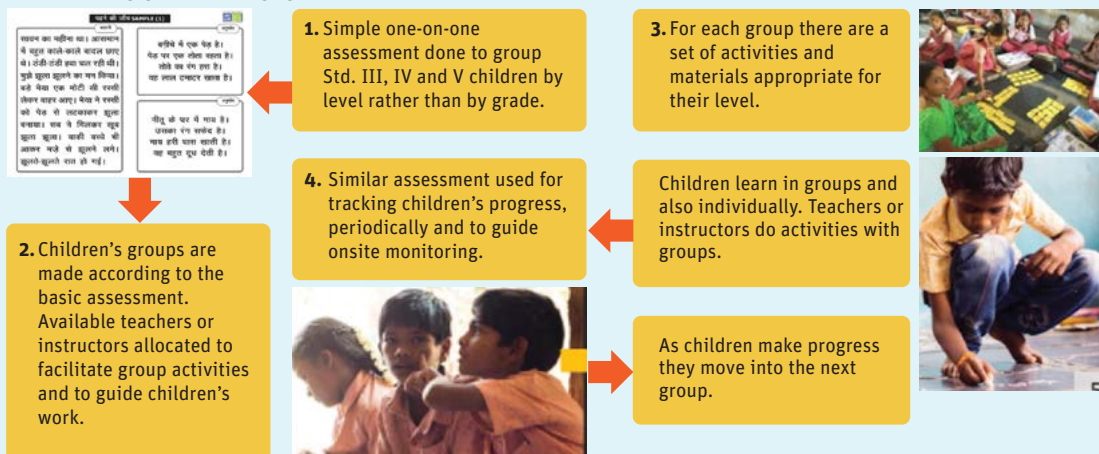
189 Adelman and Lemos (2021).

190 Connor, Morrison et. al. (2013), Connor, Phillips et al. (2018).

### Box 5.1. Accelerating: Foundational skills for the future (continued)

Figure B.5.1.2. Teaching at the right level (TaRL)

#### KEY ELEMENTS OF THE APPROACH



Source: <https://www.pratham.org/about/teaching-at-the-right-level/>

Sources : Adelman and Lemos (2021); Appelbaum (2009); Araujo et al. (2016); Banerji and Chavan (2016); Burns and Luque (2014); Connor, Morrison et al. (2013); Connor, Phillips et al. (2018); Elacqua et al. (2018); García et al. (2014); Mateo-Díaz and Rodríguez-Chamussy (2016); Näsland-Hadley et al. (2020); Nores et al. (2018); Chakera et al. (2020); Fuchs and Fuchs (2006); Jiménez et al (2021); Loureiro, Cruz et al. (2020), (2020b); Mourshed et al. (2010); O'Connor et al. (2012); Ontario Ministry of Education (2013); Rodrigues Da Cruz Boari and Crawford (2022).

### Box 5.2. PLaNEA's Program: An innovative approach to develop transferable skills

Aiming to promote learning and skills development in lower secondary education in Argentina, UNICEF Argentina has developed the PLaNEA program. PLaNEA focuses on supporting the adoption of an innovative model of *inquiry-based learning* for adolescents in secondary schools in urban areas. The strategy changed teaching and assessment practices through the introduction of *project-based pedagogy* accompanied by formative evaluations in Social Sciences, Natural Sciences, Mathematics, Spanish, and Computer Science. Its implementation involved in-service teacher training, the establishment of peer groups for both teachers and students, and the development of a component on adolescent health care. Moreover, to ensure the educational leadership necessary to sustain an innovative approach, school networks comprised of school directors, supervisors, and school counselors were formed to facilitate exchange on common issues of concern. Other important components included the provision of technical assistance to public officials to adjust regulations such as those related to school schedules, learning environments, teacher work, and promotion criteria. PLaNEA also seeks to use data (academic grades, attendance, surveys) to identify issues that require special attention and ensure policies and interventions are evidence-based and specific.

The strategy has shown positive results in education. This initiative began in 16 schools in 2018 and, as of 2022, it already covers 193 secondary schools in three provinces (Tucumán, Chaco, and Córdoba), reaching over 40,000 students, more than 2,400 teachers, and 320 directors. The main results to date include significant improvements in the school trajectory indicators of 1st year students compared to the average of schools in each of the provinces. Compared to the average of state secondary schools, schools under the program reduced school dropout rates by half, increased school promotion by 12 percentage points and reduced repetition by 17 percentage points. Internal surveys show that the vast majority of teachers surveyed (more than 80%) indicate that they observe greater participation of students in classes, greater enthusiasm, and commitment to activities. The initiative is currently under evaluation.

Sources: UNICEF (2019b); UNICEF (2021c).

## 5.1.2 Assessing learning levels and losses

**COVID-19 faced LAC countries with unprecedented challenges to maintain student assessment<sup>191</sup> practices at a juncture where they were more than never needed.** Classroom assessments could not be continued if students were no longer in the classrooms. School diplomas and examinations became unmanageable with school closures. Some national and international assessments had to be postponed, modified, or ultimately cancelled. At the same time, monitoring and supporting learning was more urgent than ever. After months of school closures and remote learning, damage has been done. Data was and is needed to diagnose the magnitude of learning losses and to inform the decision making for adequate actions. Below are reviewed the delays, changes, and innovations adopted by LAC countries during the pandemic for different types of assessment, and recommendations to move forward. Overall, learning assessments should be urgently re-prioritized, with a focus on formative assessments and complementary standardized international, regional and/or country assessments. Each assessment type has its own characteristics and strengths which countries should carefully assess when making a decision of what and how to introduce and scale-up.

### International assessments for comparing education systems

**As seen previously, the calendar of administration of international assessments<sup>192</sup> was kept mostly on track, but it will take time to have results to guide remedial actions.** PISA was postponed from 2021 to 2022 in 14 LAC countries. However, the administration of the other international assessments was not altered. TIMSS (Trends in International Mathematics and Science Study) was administered in Chile in 2018, before COVID-19, and will be administered again in 2023. PIRLS, despite the difficulties, was administered as planned in 2021 in Brazil and Chile and is scheduled to be administered again in 2026. The regional assessment ERCE was administered in 16 LAC countries in 2019 (before the pandemic). It will be implemented again 2025 for all countries participating in LLECE. Moreover, the learning alliance between the World

Bank, UNESCO, and UNICEF has been working towards implementing a new version of ERCE post-pandemic (2022-2023) with interested countries to analyze the impact of the pandemic on different population groups to better target education policies.

**Global international assessments include an agenda of innovations that was set well before the pandemic.** PIRLS, PISA, TIMSS are all evolving towards digital assessments that allow for more interactive real-life questions and problems, and for assessments that are more fitted to the skills of the students (e.g., adaptive tests). PISA 2022 will explore the measurement of creative thinking. ICCS will take a deeper look into climate change, populism, and authoritarianism.

### National assessments for monitoring purposes

**In LAC, national assessments for monitoring purposes usually refer to large-scale programs to measure learning progression towards achieving curricular objectives<sup>193</sup>.** Standardized tests and questionnaires are usually externally administered every 1-5 years to all students (census) or to nationally representative samples of students, using paper and pencil or computer-based format. Results are reported at the country, regional and/or school levels. More recent innovations have included reporting learning levels describing what students can do at each level; and learning trends over time. Results can be used to inform educational policies, school planning and, to a lesser extent, pedagogical practices. In some countries, results are “low-stakes” in the sense that no strong consequences are associated to them (e.g., *ARISTAS* in Uruguay). In others, results are “high stakes” given that they are used for accountability purposes, i.e., allowing or not schools to operate, or distributing economic or symbolic incentives such as awards, and public recognition (e.g., the Quality Assessment System – *SIMCE*, in Chile).

**Before the pandemic hit, almost all LAC countries already had in place a national assessment for monitoring learning.** These usually reported important learning gaps between what students actually knew and could do

191 In the school context, student assessment refers to the process of gathering evidence about student outcomes in order to monitor, certify, select and/or make pedagogical decisions. Student outcomes have been traditionally understood as the knowledge, skills, and/or competencies that students acquire in different academic subjects (e.g., language, mathematics, sciences).

192 International assessments refer to global (e.g., PISA, PIRLS) and regional (e.g., ERCE) programs to monitor learning and to make comparisons among countries and/or education systems. They administer tests on subject areas (e.g., mathematics, language, science) focusing on the content, skills, and competencies most valued by countries. Tests and questionnaires are administered to nationally representative samples of students. Results are reported at the country level and are used for monitoring purposes only (low-stakes). Many LAC countries participate regularly in one or more international assessments.

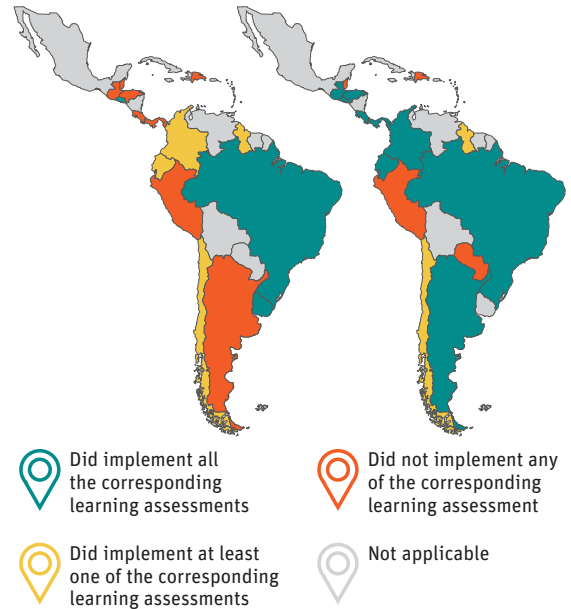
193 Ramírez and Valverde (2021), Valverde and Ramírez (2021).

vis-à-vis curricular expectations. They also highlighted inequalities along socioeconomic lines, ethnicity, and urban/rural status. These assessments were critical to raise alarms about the learning crisis even before the pandemic.

**When the pandemic hit, several LAC countries reacted by cancelling or reducing their national assessments for monitoring learning, as well as other large-scale assessments, including examinations to certify primary or secondary education, and their university entrance examinations.** A study commissioned for this report of how countries reacted to the pandemic<sup>194</sup> shows that only Brazil, El Salvador and Uruguay administered all their large-scale assessments as planned in 2020. As shown in Figure 5.4, some countries implemented at least one assessment (Chile, Colombia, Ecuador and Guyana), and others none (Argentina, Belize, Costa Rica, Dominican Republic, Guatemala, Honduras, Panama and Peru). Uruguay was the only LAC country that administered a national assessment for monitoring purposes in 2020 (computer based “ARISTAS”); all the other large-scale assessments administered that year were secondary school examinations or examinations for selection into university or tertiary education. While recognizing the effort of some countries to at least keep the assessments in some format (see Box 3.2 on Colombia/SABER in chapter 3), this was a drawback in countries’ capacity for monitoring learning. The paradox is that countries were more willing to drop their national assessments for monitoring learning rather than their certification examinations.

**However, the recovery of national assessments was fast, and it will be critical to keep this on track.** By 2021, most of the countries were back on track administering all their large-scale assessments as planned, including national assessments for monitoring purposes, secondary school examinations and university entrance examinations. Chile and Guyana reported administering at least one large-scale assessment, while Paraguay, Peru, Dominican Republic, and Belize opted for not implementing any of these assessments in 2021.<sup>195</sup> Most notably, 2021 was marked by the return of national assessments for monitoring purposes in several countries, including Argentina, Honduras, and Panama. These are positive news although

**Figure 5.4. Map of countries based on decisions made regarding the administration of learning assessments in 2020 and 2021**



Source: Herrero-Tejada et al. (2022).

Note: The map reports decisions made regarding: (a) national assessments for monitoring purposes, (b) Examinations to certify and select individual students into primary, secondary and/or tertiary education.

the lack of results yet for most 2021 assessments is a key constraint to take immediate recovery actions. In 2022, all but two countries (Belize and Ecuador) were expecting to administer all their assessments as planned, but the situation may still evolve<sup>196</sup>. It will be critical to maintain the 2021 and 2022 assessments on track.

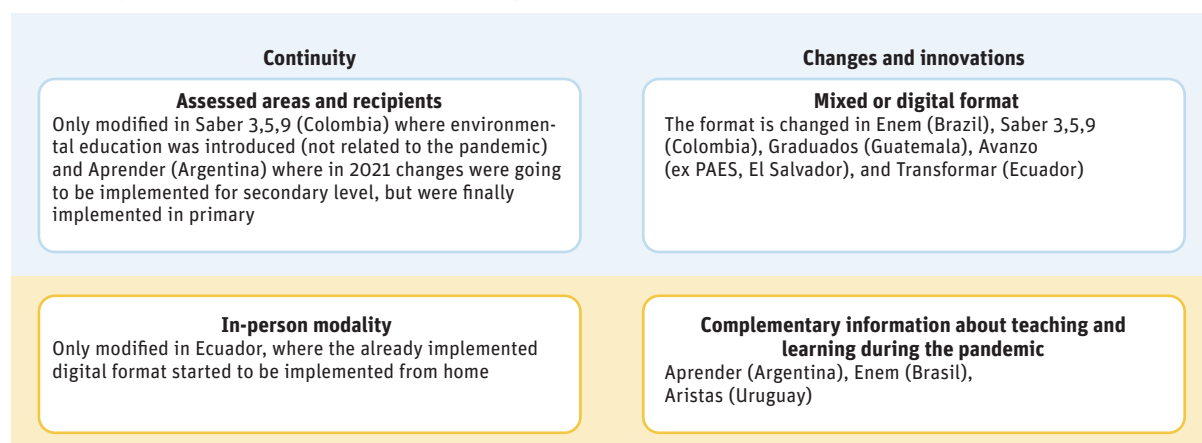
**There were adjustments in some assessments following the pandemic.** As a reaction to the pandemic, several countries adjusted their large-scale assessment programs, including national assessments for monitoring purposes, and examinations to certify and select individual students, in terms of assessed areas, modalities, formats and additional information (see Figure 5.5 for a few of these changes). The administration of student questionnaires focused on the general well-being of students received extra attention during the lockdowns.

194 Herrero-Tejada et al. (2022). Overall, 20 countries were included in this study: Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Panama, Paraguay, Peru, Dominican Republic, Uruguay and Venezuela.

195 Ibid.

196 It is worth noting that Chile’s Ministry of Education has recently asked the Education Council to cancel SIMCE 2022, but the Education Council has not yet made yet a decision.

**Figure 5.5. Continuity, changes, and innovations as a reaction to the pandemic in national assessments for monitoring purposes and examinations to certify and select individual students**



Source: Herrero-Tejada et al. (2022).

### Examinations to certify and select individual students

There are several countries in LAC where students have to pass a certification examination<sup>197</sup> in order to graduate from primary and/or secondary education, and to move into the next education level. Upper secondary school examinations may also be used for selection into university or tertiary education. In other countries, students have to take a separate examination to apply to university or tertiary education. Examinations are a key component of the education systems of these countries. They greatly shape what is taught and how it is taught in classes. They are high-stake assessments needed to transition into secondary and/or tertiary education and to obtain good quality jobs.

The last Survey on National Education Responses to COVID-19<sup>198</sup> shows that LAC countries made several changes to their certification examinations due to the pandemic, especially in upper secondary (Figure 5.6). This included the introduction of additional safety measures such as extra space between desks; adjusting the mode of administration, e.g., computer-based; postponing or rescheduling examinations; introducing alternative assessments, e.g., portfolio; and adjusting the content of the

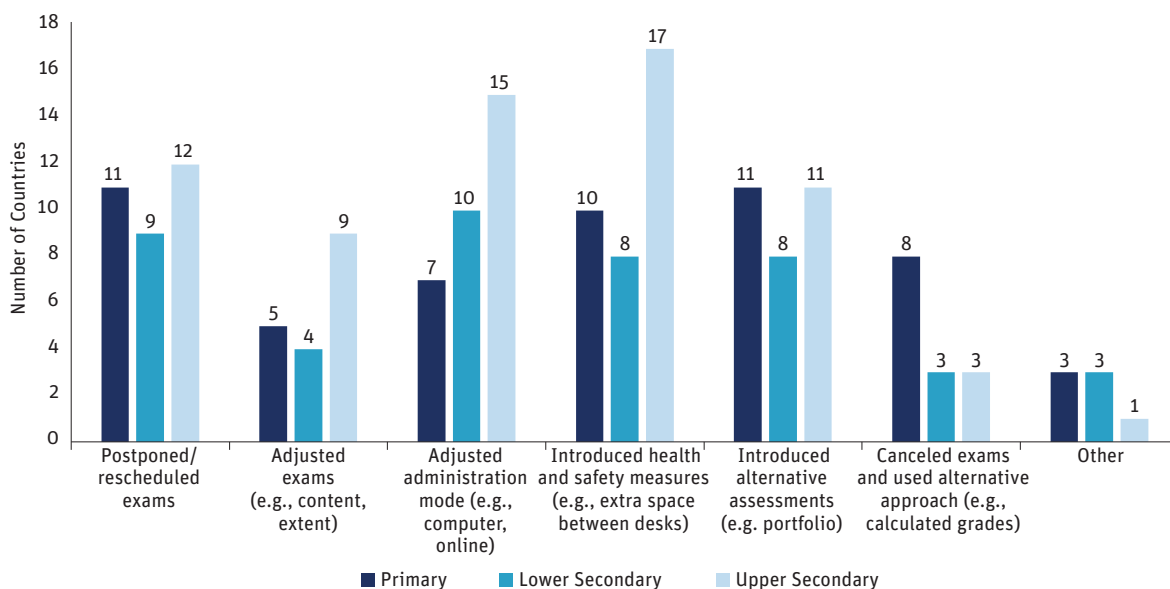
examinations. In primary education, 8 countries reported cancelling the examinations and using an alternative approach for high-stakes decision making (e.g., calculated grades), compared to only 3 countries in upper secondary. These changes were mainly implemented in Caribbean countries with a strong examination tradition.

During the pandemic, LAC countries with certification examinations were confronted with the tough decision of administering or cancelling these assessments. On the one side, it was reasonable to cancel them given that students had fewer opportunities to learn and prepare for the examinations, and social distancing and health concerns made them hard to administer. On the other side, in some countries these tests are so engrained in the national culture that it was unthinkable not to have them. Moreover, examination results are tight to selection decisions into secondary and tertiary education. Without examinations, countries would have been forced to put in place alternate selection mechanisms (e.g., calculated grades). Doing so in a rush was risky both technically and politically.

Beyond the pandemic, there is concern about the benefits of primary and secondary certification examinations in LAC, given that many countries are still struggling

197 A few countries have primary school certification examinations (e.g., Belize, Guyana, Haiti). Lower and/or upper secondary school examinations are not common in South America but are used in several Central American and Caribbean countries, such as Costa Rica, Dominican Republic, and Jamaica. In the English-speaking Caribbean countries, upper secondary examinations have a double function of certifying end-of-school and selection into tertiary education (see examinations from the CXC, which include 16 countries: Anguilla, Antigua and Barbuda, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, and Turks and Caicos Islands). In other countries, students take national university entrance examinations after graduating from secondary school (e.g., Brazil, Ecuador).

198 UNESCO, UNICEF, WBG, and OECD (2021b).

**Figure 5.6. Number of LAC countries that adjusted certification examinations due to the pandemic during school year 2019/20 and 2020/20, by type of adjustment**

Source: UNESCO, UNICEF, WBG, and OECD (2021b). Survey on National Education Responses to COVID-19 School Closures, round 3 (Feb-Apr 2021). Overall, 26 LAC countries answered the survey.

**to provide education for all.** A dramatic case is offered by Haiti, a country shaken by political, economic, and social crises. Here, only approximately 60% of children finish primary education (*école fondamentale*) and only 10% finish secondary school (*baccalauréat*). Students have to pass an examination in order to get their diploma and move on to the next education level. Around 10% of the students do not pass the examination at grade 9 (*examen de fin école fondamentale*), and many end up dropping out from school. In secondary school, failing rates for the *baccalauréat* are around 25%. In 2021, the examinations were postponed, and social distancing measures were adopted due to COVID-19. Examinations conditions suffered. Some administration centers had to be relocated due to gang violence.

### Classroom assessments conducted by teachers

**Classroom assessment is by far the most important type of assessment, and it was also the one most severely affected by the pandemic<sup>199</sup>.** Classroom assessments are

the main source of evidence for teachers to measure actual learning and learning losses<sup>200</sup>. When schools closed, classroom assessment practices were disrupted. Teachers could no longer ask their students questions in classes, observe if they could read a story with fluency and comprehension, or administer a quiz to check if they understood a concept. Teachers could not comply with school requirements to grade their students in order to inform decisions about grade promotion or repetition. They could not check on the physical or mental well-being of their students neither.

**Some of these disruptions were overcome with innovative approaches to classroom assessments.** Teachers sent weekly materials to their students via email, or talked with their students online, on WhatsApp or on the phone. Digital education allowed teachers to monitor student performance online, and also to have a grasp of their physical and mental well-being at home. These are in fact among the many innovative strategies Chilean teachers adopted as an option to more traditional classroom assessment techniques<sup>201</sup>.

199 UNESCO-OREALC and UNICEF-LACRO (2022).

200 It is also the main source of evidence for teachers to make instructional decisions and to grade students. These assessments can be formative (e.g., when used to give feedback to students) or summative (e.g., when used to grade students at the end of unit), formal (e.g., an end of unit test) or informal (e.g., when a teacher asks a question and students raise their hands); and can be used as diagnostic, intermediate or final assessments.

201 MINEDUC-Chile(2020).



**With schools reopening, teachers should be encouraged to perform diagnostic classroom assessments, and should be offered a variety of resources and training to do so.** School leaders and teachers should prioritize diagnosing the actual learning level of their students in order to target instruction<sup>202</sup>. Teachers should be offered a menu of options for them to explore, select and adapt to their own context. For instance, item banks, assessment protocols (e.g., for measuring reading fluency) and teaching and learning guides, accompanied by workshops or webinars on how to plan and implement assessments to support learning recovery. These resources could be homemade and/or compiled from publicly available repositories<sup>203</sup>. Toolkits should encompass assessments that measure a wide range of skills, including basic literacy and numeracy skills.

**In the short-term, it would also be important for teachers to complement the learning evidence collected through classroom assessment with other sources of evidence, like centrally designed formative assessments (see next section).** Both together could be used to better diagnose the real learning levels of students, including recent learning losses, to adjust pedagogy to the diverse learning needs of the whole class, and to the unique learning needs of each student.

### *Centrally designed formative assessments for internal use of the school*

**The pandemic accelerated an already existing trend toward offering centrally designed formative assessments to schools for their own internal uses.** In the last decade, countries like Brazil, Chile, Mexico and Uruguay introduced assessments that are made available for the schools and teachers to administer, score, analyze, and use to improve pedagogical practices. These assessments are meant to complement already existing ones (e.g., classroom assessments, national assessments, examinations for certification), and are not meant to grade students or to evaluate teacher performance. They also overcome important weaknesses of national and international assessments.

**In the education systems that already had centrally designed formative assessments before the pandemic, these offered a viable alternative for schools to keep**

**monitoring learning.** Students could take them on paper or in digital format, online or offline, at school or at home, at the beginning or end of the school year. It was up to the schools to decide. During the school closures, teachers could drop physical copies of the assessments at the homes of those students who could not access them online. Teachers then collected and scored the tests and uploaded the data on an online platform. These assessments have also strong potential to measure learning losses and help with the recovery effort as schools are reopening.

**There has been a growing interest to offer centrally designed formative assessments to continuously monitor learning during the pandemic and start recovering.** El Salvador, the Dominican Republic, the Province of Mendoza in Argentina, and the state of Guanajuato in Mexico are all taking their first steps along these lines. Table 5.1 lists some longer and shorter-term formative assessments adopted in LAC countries. Useful insights can be derived from a review of these programs.

**Formative assessment initiatives in LAC differ from one education system to the other, but important commonalities can be identified.** These assessments prioritize measuring foundational numeracy and literacy skills along the whole school trajectory (from grades 1-2). They are available in different test formats (i.e., paper and pencil, digital online and offline), and may integrate more traditional items or problems (e.g., using multiple-choice questions) with more innovative ones (e.g., individual assessments protocol for measuring reading fluency).<sup>204</sup> They all involve teachers during the assessment cycle. Participation is a way to empower and train teachers on how to operationalize the curriculum and measure learning indicators, on how to diagnose the learning levels of their students, and how to use results to target pedagogy to the learning needs of their students. This is in fact the approach adopted by the Dominican Republic in designing its formative assessment program. Box 5.3 provides further details for the assessment of the State of Ceará in Brazil which also illustrates some of these aspects.

**Formative assessments also have the potential to assess some critical transferable skills.** Both Chile and Colombia have included socio-emotional skills in their national formative assessment initiatives implemented

202 Luna-Bazaldua et al. (2020).

203 Free and publicly available learning assessment resources can be found in the Inter-Agency Network for Education in Emergencies, [Learning Pack 7](#); the [FLN Hub](#), and many others.

204 Herrero-Tejada et al. (2022).

**Table 5.1. Examples of centrally designed formative assessments in LAC**

Name	Country	Implementing Institution	Implementation Dates	Level and scope (during 2021)
<b>Dialect (Reading) and Diamat (math), in DIA+</b>	Chile	Ministry of Education	First implementation in 2021	64,333 children tested in reading and math.
<b>EGRA and EGMA, Tutoring</b>	Colombia	Carvajal Foundation	Since 2017 two times per year	16,000 children tested
<b>Diagnostic and formative assessments</b>	Brazil	Ministry of Education (MEC) and the Center for Public Policy and Educative Evaluation ( <i>Centro de Políticas Públicas e Avaliação da Educação, CAEd</i> )	Launched in 2021	Official data not been published yet
<b>Diagnostic Assessments MEJORED</b>	Mexico	Public Education Office ( <i>Secretaría de Educación Pública, SEP</i> ) and the National Office for the Continuity of Learning Improvement ( <i>Comisión Nacional para la Mejora Continua de la Educación, MEJORED</i> )	Launched in the academic cycle 2021-2022	516,000 students from more than 2,470 schools (basic education)
<b>Independent Learning Assessments (Medición Independiente de Aprendizajes, MIA)</b>	Mexico	Independent Learning Assessments	Since 2014	300,000 children tested
<b>Evaluating Breaks (Pausas Evaluativas)</b>	Buenos Aires, Argentina	Education office in the Ministry of Education, Buenos Aires Government	Since 2016 and annually, except in 2020	31,400 children in 3rd and 6th grades tested in math
<b>CREER Project (Proyecto CREER)</b>	Peru	GRADE	2019-2021 (first phase), since 2022 (second phase and implementation)	Training in 40 schools (1-4 teachers per school)
<b>Diagnostic Assessment IQ Platform (Prueba diagnóstica de Plataforma IQ)</b>	Dominican Republic	INICIA Foundation, and Ministry of Education	2021, applied once	30,000 students tested
<b>Learning Evaluation System (Sistema de Evaluación de Aprendizajes, SEA)</b>	Uruguay	National Administration of Public Education ( <i>Administración Nacional de Educación Pública, ANEP</i> )	Since 2011 (3rd to 6th grades), annually. In 2014 secondary levels are included	Open to private and public schools.

Source: Tejada et al. (2022).

during the pandemic, through the DIA in Chile (see Box 5.6), and *Evaluar Para Avanzar* (Assess to Make Progress) in Colombia. Both initiatives provide teachers with instruments to be applied to students at the beginning, middle and end of the school year both in academic subjects and socio-emotional learning, and the assessment results are combined with protocols, practical guidance, and pedagogical support to address the needs identified. Regular

availability of this information, paired with practical guidance on how to use it, can help support students on their learning recovery and safe return to schooling. Mexico provides another good example through their Independent Learning Assessment (MIA) in Veracruz (see Box 5.4).

**An especially appealing feature of formative assessments is their integration with pedagogy.** Two

### Box 5.3. Examples of formative assessments designed at the central level. Brazil, State of Ceará: Diagnostic Evaluations

The purpose of this assessment is to diagnose the knowledge and skills of students at the beginning of the school year, so that teachers can use results to plan their classes.

**Implementation:** The assessment is run by the secretary of education of the State of Ceará, Brazil, in coordination with municipalities to administer the assessment and support pedagogical uses at the local level. Mathematics and language tests are aligned with the curriculum, for grades 1-9. The assessment includes printed tests that are administered to the whole class, and individual sessions to measure reading fluency. Teachers from all public schools are required to administer the assessment to their students. Municipalities are responsible for printing and distributing tests to the schools, and for training teachers on how to administer and score them.

**Use of results:** Student and classroom level results are automatically available on an online platform and access to results is granted to educators at the state, regional, department, municipal, and school levels. Workshops offer educators the opportunity to understand, appreciate and reflect on how to use the results. Teachers use results to provide individual student support. At-risk students receive extra support beyond regular class time. Teachers are provided pedagogical resources and scripted lessons. Results are also used for teacher training purposes. Ceará is considered a model for improving education quality in LAC.

Sources: Loureiro, Cruz et al. (2020); Loureiro, di Gropello et al. (2020).

approaches can be identified<sup>205</sup>. On the one hand, initiatives promoted by ministries or secretaries of education usually accompany assessment results with pedagogical guidelines and resources (e.g., teaching and learning guides, item banks). It is then up to the teachers to make use of results with the support of these resources. Examples of this approach can be found in Chile, Uruguay, and the state of Guanajuato in Mexico. On the other hand, smaller scale programs and initiatives, led by civil society or others, promote the use of assessment results as an input to decide next steps in instruction, based on an already existing pedagogical intervention. For instance, *Fundación Carvajal* in Colombia administered EGRA (Early Grade Reading Assessment)/EGMA (Early Grade Mathematics Assessment) to assess foundational reading and mathematics skills in some public schools. Results were used to diagnose student learning and provide focused instruction using the teaching at the right level approach<sup>206</sup>. A similar approach was used by MIA in different school municipalities of the State of Veracruz in Mexico (Box 5.4).

**Other important considerations related to centrally designed formative assessments are their institutional**

**arrangements and costs.** Ministries/secretaries of education, assessment agencies, universities, public-private partnerships, private foundations, NGOs, and/or civil society have all been involved in the design and implementation of these assessments in LAC. It will be important to keep up with these partnerships and build the right incentives and capacities to evaluate and scale-up these initiatives. Regarding the costs, it is worth noting that these assessments are much cheaper than national assessments for monitoring purposes. Important savings are possible given that there is no need to hire external administrators, nor to print and distribute all the tests to schools (schools or local governments can print them if needed). However, new additional costs arise when integrating the assessment with pedagogical interventions (e.g., costs related to training teachers to provide focused instruction).

**LAC countries should continue the trend towards centrally designed formative assessments.** This is especially critical as results from large-scale assessments will not be available for several additional months in many countries, but also, in any case, as a strong complement to these assessments, in the context of a strengthened evaluation

205 Ibid.  
206 Ibid.

culture where formative and summative assessments work together to ultimately improve learning. Formative assessments should keep focusing on the measurement of basic literacy (e.g., decoding, reading words, sentences) and numeracy (e.g., number sense, solving simple real-life problems involving operations) skills, while seizing opportunities to also measure some critical transferable skills. They should also keep stressing teacher participation as a strategy for professional development and empowerment. Countries interested in introducing formative assessments should explore the best design options for them (e.g., grades tested; tests formats, frequency), taking into account their education goals, school culture, and resources, among others. Above all, they should explore how to integrate these formative assessments with pedagogical interventions, including learning remediation and recovery programs launched before or as a reaction to the pandemic.

### 5.1.3 Implementing learning recovery programs

**The challenges of the learning recovery are massive. School closures and the reopening of schools challenged countries to innovate in their pedagogical practices.** At first, the challenge was more focused on how to teach effectively in a remote learning environment. With the gradual reopening of schools, the challenge shifted more towards how to recover and support learning in an in-person or hybrid learning environment. The challenges were and are huge in view of the massive learning losses, which while larger for the most vulnerable students, are expected to be very widespread; the need to address the significant heterogeneity in learning levels within classrooms; and the need, to a large extent, to recover from those losses in the same number of years of schooling.

**Several approaches and options exist to address learning losses.** This could include focusing only on the foundational skills or lower the level of the whole curriculum; have, in some cases, students repeat grades; and/or scaling-up learning recovery programs. This section reviews learning remediation and recovery programs that existed before the pandemic, as well as those programs introduced as a reaction to it, building on a paper specifically undertaken for this report,<sup>207</sup> to derive useful lessons for introduction and scaling-up. Wherever possible, countries

**Figure 5.7. Different types of learning recovery programs in LAC**



Source: Mancebo and Vaillant (2022).

should prioritize interventions that already exist and adjust/improve and scale them up to adapt them to the circumstances. This may also entail generating better data and improve monitoring and evaluation capacity.

**Pre-existing learning recovery programs<sup>208</sup> received renewed attention during the pandemic.** These programs have a long tradition in LAC and refer to education interventions focusing on students who are lagging behind in their academic learning. They are usually conceived as additional, short-term support that augment regular classes. In general, they focus on foundational skills in language (especially reading) and mathematics, with the aim of avoiding students repeat classes and/or dropping out from school. Many times, they are fully integrated with assessments that provide a diagnostic of the initial learning level of students, as well as midterm and end-line measures to monitor the impact of the program. These programs adapt and personalize the curriculum to the learning needs of the students, emphasizing teaching at the right level. They are mainly offered in person, but the pandemic pushed for the adoption of remote strategies too. Figure 5.7 presents

207 Mancebo and Vaillant (2022).

208 Strictly speaking programs introduced before the pandemic were more about remediating/catching-up than recovery, but we use the term “learning recovery” programs to be more comprehensive and aligned with the most recent programs and challenges.

### Box 5.4. Example of a learning recovery program: Mexico. Teach at the Right Level (TARL)/ Medición Independiente de Aprendizajes (Independent Learning Assessment) (MIA)

Since 2016, MIA has served near 13,000 students from 27 municipalities of the state of Veracruz in Mexico and works with over 80 civil and educational organizations. To support sustainability of the intervention, MIA puts strong emphasis on working with local governments, building local capacity, and offering technical support. Evidence shows significant increases in learning scores when comparing pre- and post-intervention results.

MIA supports the development of foundational skills in mathematics and language, as well as some transferable skills (i.e., self-care, civics, socio-emotional). It uses two main strategies:

- Household measurement of students’ foundational and transferable skills at the beginning and at the end of interventions, led by independent volunteers from communities
- Short and scalable pedagogical interventions based on the principles of “teaching at the right level”.

MIA offers different types of interventions, including regular school or extra-curricular activities, summer camps and clubs for kids, as well as workshops for parents to provide learning support for their kids at home.

Beginning of intervention	Middle of intervention	End of intervention
<ul style="list-style-type: none"> <li>• Diagnostic assessment for kids from grades 3-6.</li> <li>• Sharing results and workshop with parents.</li> <li>• Grouping of students (20 max.) by learning needs</li> </ul>	<ul style="list-style-type: none"> <li>• Reading intervention: 20 sessions of 90 min. each.</li> <li>• Math intervention: 20 sessions of 90 min. each.</li> <li>• At least 2 sessions per week.</li> </ul>	<ul style="list-style-type: none"> <li>• Final assessment for kids at grades 3-6.</li> <li>• Sharing results and end of the intervention.</li> <li>• Citizen-led actions to support sustainability of the intervention.</li> </ul>

Source: Own elaboration on the basis of information from MIA’s website (<https://www.medicionmia.org.mx/>).

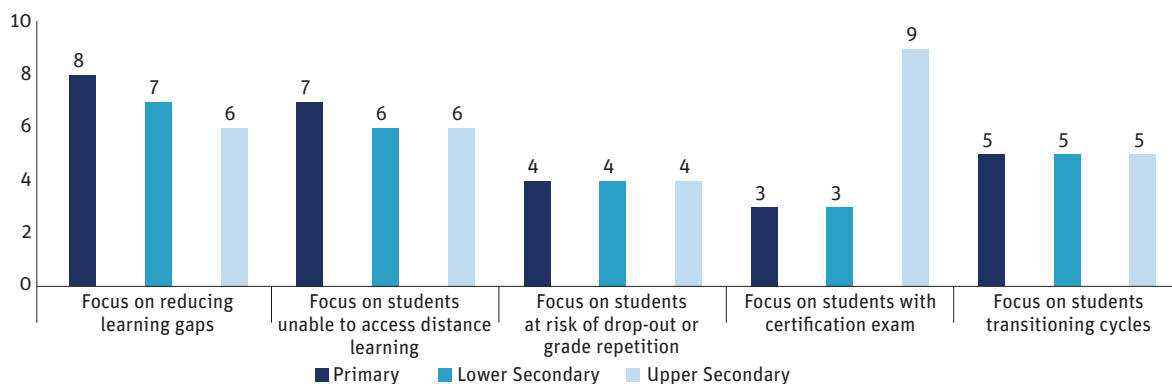
pre-existing flagship programs in LAC and Box 5.4 provides further details on one of these programs. Annex 5.1 provides a global snapshot of such programs beyond LAC.

**Despite their commonalities, learning recovery programs can be very heterogeneous in their aims, design, and implementation features.** Six main (non-exclusive) categories can be distinguished<sup>209</sup>:

- **Catch-up:** Interventions targeting students who need to recover specific content, skills, competencies in order to catch up and benefit from regular instruction in the classroom. E.g., Early Learners, the Caribbean.
- **Accelerating programs:** Interventions targeting over-aged students or students who dropped out and have returned or are planning to go back to school. E.g., *Acelera Brasil*.
- **Tutoring:** Individual or small group interventions provided by one person to one student or to a small group of students. E.g., *Aula Global*, Colombia
- **Teaching at the right level:** Interventions that group students based on their actual skills or learning level in order to provide targeted instruction. E.g., TaRL/ MIA, Mexico.
- **Extra instructional time:** Extension of the instructional time by providing extra-curricular activities. E.g., *Jornada Extendida*, Dominican Republic.
- **Computer based programs:** Interventions that provide more personalized instruction with tailored or adaptative educational programs, learning games, activities or the like. E.g., PAM, *Aprendizaje asistido*, Uruguay and Khan Academy, Brasil.

209 Mancebo and Vaillant (2022).

**Figure 5.8. Number of LAC countries that implemented wide remedial measures to address learning gaps when schools reopened after the first closure in 2020, by type of remedial measure**



Source: UNESCO, UNICEF, WBG, and OECD (2021b). Survey on National Education Responses to COVID-19 School Closures, round 3 (Feb-Apr 2021). Overall, 26 LAC countries answered the survey.

**Another key feature of learning recovery programs is who provides the pedagogical intervention.**

In some cases, the person in charge could be an active teacher from the school, a future teacher or a retired one. In others, students from the same school provide assistance to other students. It is common to see remedial programs benefiting from parents or other community members. Interventions may rely on paid staff or volunteers to operate. Tutors are typically used to provide one-on-one instruction or instruction to small groups of children with similar learning needs. A concern, though, is the little or no training these people receive, both to provide academic and emotional support. This is a critical constraint given the deficit of qualified teachers in LAC and working conditions that make it hard for them to get additional training.<sup>210</sup>

**There is evidence of the positive impact of some of the flagship learning recovery programs in LAC and beyond.**

In Colombia, students participating in “*Aula Global*” showed significantly better results when comparing achievement scores before and after the tutoring intervention, and when comparing results from the intervention versus control group. Students in the intervention group were also less likely to repeat grades and to drop out from school<sup>211</sup>. “Teach at the right level” programs have proved cost-effective to boost learning in developing countries such as Chile, Mexico, India, and Kenya.<sup>212</sup> The use of the computer-based programs in Uruguay has also proven effective to boost

learning, especially among lower-income students.<sup>213</sup> Annex 5.1 summarizes information about flagship programs in and outside LAC that existed before the pandemic, and related evidence to substantiate their impact.

**LAC countries also responded to the pandemic by launching new “emergency measures” for learning recovery.**

Many of these initiatives built on the same principles and approaches of already existing programs. As shown in Figure 5.8, the most common measures widely implemented when schools reopened were: remedial measures with a special focus on students in upper secondary with a certification examination; remedial measures to reduce student learning gaps in primary and lower secondary education; and remedial measures with a special focus on students who were unable to access distance learning in primary education. Several of these programs were introduced after regular school time or during scheduled school holidays. Brazil, Cuba, and several English-speaking Caribbean Islands are among the countries that reported implementing wide remedial measures in different school cycles.

**Despite a learning crisis on the continent, programs launched with the pandemic seem to remain on the margins of education systems.**

They may exist as relatively small and short-lived initiatives or projects and many do not go beyond a pilot or initial phase. They may be located in a particular school or network of

210 Ibid.

211 Mancebo and Vaillant (2022).

212 J-PAL (2019).

213 Perera and Aboal (2019).

schools or serve the students within the boundaries of a municipality or school district. Or their reach may be constrained by limited access to technology and connectivity issues.

**Institutional arrangements may be weak and local in nature, further threatening the scalability and sustainability of these emergency programs.** For instance, when projects only exist within a school or within the boundaries of a municipal or district office of education, or when they are led by civil society. This institutional fragility may be also observed in the day-to-day operations of some projects. It is common to see little coordination between the remedial program and the regular school activities. Teachers may not even know there is a learning recovery program in their schools and, if they do know, they may perceive it as a threat. Why is someone else teaching my kids? Why are they using a different pedagogical approach than the one I use in classes?

**A key question that remains is how effective these new programs have been to respond to the pandemic.** While these interventions are highly valued from a conceptual point of view (i.e., theory of action, personalized pedagogical approach), the evidence to substantiate their impact is limited. When COVID-19 hit, there was little time for designing the interventions themselves, not to mention for designing any program evaluation. Without any baseline, midline or end line data, it is hard to gauge their impact on learning.

### Lessons learnt

**Both well established and new programs launched during the pandemic offer a promising path for recovering from learning losses in the short-run and improving learning in the longer-run in LAC.** Their more personal approach to learning, their focus on the overall well-being of students, and their greater flexibility to operate beyond school boundaries, are all desirable features that should stay beyond the pandemic.

**The key question is how to do it.** How to provide personalized pedagogy in the context of mass education? How to deal with constraints such as shortages of qualified teachers, institutional capacity, and limited human, physical and financial resources? How to transfer and adapt programs from one country to the other? How to ensure their scalability and sustainability?

**Figure 5.9. Key questions for countries to consider when implementing and scaling-up learning recovery programs**

<p><b>Does it make sense?</b></p> <ul style="list-style-type: none"> <li>• Is there a clear theory of action of how the program will support learning?</li> <li>• Is the program a good fit for my country given school culture, values, practices?</li> <li>• Is the program disruptive but within the boundaries of acceptable?</li> </ul>
<p><b>Does it work?</b></p> <ul style="list-style-type: none"> <li>• Is the program effective on reaching its objectives?</li> <li>• What is the evidence of program impact?</li> <li>• Do students, teachers and parents like the program?</li> </ul>
<p><b>How much does it cost?</b></p> <ul style="list-style-type: none"> <li>• How much money needs to be disbursed?</li> <li>• Is the program relatively cheap compared to regular operations or new interventions?</li> <li>• Is the program cost-effective?</li> </ul>
<p><b>Is it manageable?</b></p> <ul style="list-style-type: none"> <li>• Are the institutional requirements to implement the program reasonable?</li> <li>• What team is needed to implement the program ?</li> <li>• What and how much training do teachers and tutors need?</li> <li>• What physical infrastructure is needed?</li> <li>• What technological infrastructure is needed?</li> </ul>

**Countries willing to implement learning recovery programs at scale will need to pay attention to critical questions and features which are more or less conducive to scalability.** Figure 5.9 elaborates on those questions and Table 5.2 highlights such critical features for the flagship programs reviewed.

**To sum up, countries must urgently step-up initiatives and programs to recover from learning losses and accelerate the learning process, building, as much as possible, on existing programs, evidence and lessons.** The focus of these programs should primarily be on foundational literacy and numeracy skills, including decoding and reading simple words; and number sense and operations. To maximize learning, especially in the earlier grades, instruction should be provided in the

**Table 5.2. Critical features needed to adapt, scale-up, and ensure sustainability of flagship learning recovery programs**

Type of program	Requirements		
	Pedagogical Model	Human Resources	Institutional and other aspects
<b>Catch-up</b>	Curriculum adaptation.	<p>Identification of necessary human resources</p> <p>Training for teachers in charge of the catch-up groups.</p>	<ul style="list-style-type: none"> <li>• Accurate definition of the program's institutional aspects</li> <li>• Definition of the role of each of the participants</li> <li>• Clear definition of the objectives of the program</li> <li>• Diagnostic assessment tests</li> <li>• To group students according to their learning level</li> <li>• Evaluation of the program</li> <li>• Financing</li> </ul>
<b>Accelerate</b>	Understanding the model "Learning acceleration".	<p>Identification of necessary human resources</p> <p>Teachers' training with focus on the "Learning Acceleration" model.</p>	<ul style="list-style-type: none"> <li>• Accurate definition of the program's institutional aspects</li> <li>• Definition of the role of each of the participants</li> <li>• Clear definition of the objectives of the program</li> <li>• Diagnostic assessment tests</li> <li>• To group students according to their learning level</li> <li>• Evaluation of the program</li> <li>• Financing</li> </ul>
<b>Tutoring</b>	Designing strategies to support a personalized pedagogical support.	<p>Identification of necessary human resources</p> <p>Teachers' training with focus on personalized pedagogical support strategies.</p>	<ul style="list-style-type: none"> <li>• Accurate definition of the program's institutional aspects</li> <li>• Definition of the role of each of the participants</li> <li>• Clear definition of the objectives of the program</li> <li>• Diagnostic assessment tests</li> <li>• Evaluation of the program</li> <li>• Financing</li> </ul>
<b>Teach at the Right Level (TaRL)</b>	Designing strategies of a personalized pedagogical support.	<p>Identification of necessary human resources</p> <p>Teachers' training with focus on personalized pedagogical support strategies.</p>	<ul style="list-style-type: none"> <li>• Accurate definition of the program's institutional aspects</li> <li>• Definition of the role of each of the participants</li> <li>• Clear definition of the objectives of the program</li> <li>• Diagnostic assessment tests</li> <li>• To group students according to their learning level</li> <li>• Evaluation of the program</li> <li>• Financing</li> </ul>
<b>Extended Pedagogical Time</b>	Designing strategies for extra pedagogical time usage.	<p>Identification of necessary human resources</p> <p>Teacher training for classroom and other roles (physical education, art, ludic activities, for example).</p> <p>Training on usage of extra pedagogical time.</p>	<ul style="list-style-type: none"> <li>• Accurate definition of the program's institutional aspects</li> <li>• Definition of the role of each of the participants</li> <li>• Clear definition of the objectives of the program</li> <li>• Diagnostic assessment tests</li> <li>• Infrastructure availability</li> <li>• Evaluation of the program</li> <li>• Financing</li> </ul>
<b>Computer-assisted learning program</b>	Availability of self-learning computer programs with exercises, feedback and personalized support.	<p>Identification of necessary human resources</p> <p>Classroom teachers and assistants' training</p> <p>Assistants' training focused on: personalized assistance to students according to the chosen platform.</p> <p>Classroom teachers' training focused on: digital literacy with especial emphasis to the chosen platform.</p>	<ul style="list-style-type: none"> <li>• Clear definition of the objectives of the program</li> <li>• Availability of IT infrastructure (hardware, software and connectivity)</li> <li>• Evaluation of the program</li> <li>• Financing</li> </ul>

Source: Mancebo and Vaillant (2022).



mother tongue of the students<sup>214</sup>. To recover learning losses, these programs need to start by diagnosing the actual learning level of students, and to keep monitoring it during the intervention. Good monitoring and evaluation systems and strengthening institutional capacities to implement at scale will be critical. Teachers, tutors, parents, and other implementers need to be trained on how to target instruction, by teaching at the right level of students. This would require training on how to interpret diagnostic results and how to adjust pedagogy to the real learning needs of their students. Priority should be given to hands-on, continuous training together with teaching guides and pedagogical resources for teachers. Targeted instruction has strong potential to also improve learning in the longer run in LAC.<sup>215</sup> While information on unit costs is unfortunately missing for most type of programs, based on critical features to adapt and scale-up and evidence of results, programs like “Teaching at the right level” may be especially promising to both recover and accelerate (as illustrated by the Mexico and India cases – also see Boxes 5.1 and 5.4). Other programs, however, such as very structured “catch-up” and “tutoring” programs may be lighter in terms of required training. As pedagogy improves, it will also be critical to maintain an alignment between pedagogy, assessment, and curricula.

**Beyond these specific interventions, a focus on early childhood education will be essential in supporting readiness to learn, acquisition of transferable skills and socio-emotional growth in both the short and longer-term.** Pre-primary education provides children with cognitive stimulation and socio-emotional development, which prepares them for their future course of learning and their life trajectory. Children who lag behind in learning during the early years are found to stay behind for the remaining time they spend at school.<sup>216</sup> Emerging evidence from the current crisis also suggests that pre-primary education may have a protective effect against learning loss.<sup>217</sup> As countries recover, it is therefore also critical that they

put special focus on pre-primary education to make sure recovery starts early (Box 5.5).

## 5.2 Addressing psychosocial health and well-being

**Psychosocial health and well-being of students require explicit support and prioritization during school reopening and the recovery phase.** Despite the limited data, the global nature of the pandemic has allowed to realize that many students have experienced emotional distress over the last 2 years. The previous chapters documented a deterioration of mental health and well-being of children and youth across education levels in several countries. Even before the pandemic, schools played a key role as a platform for providing other essential services such as school feeding programs, health services and psychosocial support, in addition to education. As schools reopen, focusing on the psychosocial health and well-being of students will, on the one hand, have positive effects on attendance and retention, and on the other hand, facilitate learning.

**A comprehensive response package is needed.** In alignment with the recently published RAPID framework<sup>218</sup>, core actions to be included in the package could comprise: (i) providing students with nutritious meals; (ii) guaranteeing adequate water, sanitation, and hygiene services; (iii) ensuring students’ safety through appropriate risk screening and protection services; (iv) giving students spaces to play; and (v) assure access to critical mental health and psychosocial support. Besides meeting students’ special needs, it is also important to train teachers and school leadership teams on psychosocial support. These actions could be complemented by the collection of real-time information on the current psychosocial needs of students to establish specific actions and support during the recovery phase.

214 WBG (2021d).

215 That is a pedagogy that provides more tailored and sustained support for students that are at different learning levels. Even before the pandemic, there was a need to tailor instruction to the diverse knowledge and skills of the students, and to the needs of students who were not learning at school. The rationale for implementing remedial programs in LAC should change from exceptional, short-term interventions towards the provision of a more permanent support during regular class hours. The shift caused by the pandemic and the programs implemented to recover from the learning losses are providing an opportunity for “normalizing” some remedial programs that can be scaled up to a personalized approach to education.

216 Nugroho et al. (2021).

217 Ibid.

218 UNICEF, UNESCO, and WBG (2022).

### Box 5.5. Recovering and accelerating in ECE

**Evidence has shown that children’s access to high-quality ECE benefits early skill development as well as longer-term physical and mental health, educational attainment, and earnings<sup>219</sup>.** Existing evidence from different disciplines has confirmed that what happens during the first years of life has life-long consequences. Positive and negative experiences in early childhood (before the age of 8 years) have long-term implications with respect to physical and mental health, life-long learning and positive participation in their communities and society.

**The pandemic seems to have had a strong impact on ECE education where children from disadvantaged contexts appear to be the most affected.** According to McCoy et al. (2021), at least 167 million children have lost access to early educational support. At the same time, low-income countries tend to be the most affected. In 2020, high-income countries reported an average of 46 pre-primary instruction days lost due to COVID-19, while low-, lower-middle and upper-middle income countries respectively lost 90, 122, and 106 days<sup>220</sup>.

**Beyond the long-term impact on learning, the closure of early education facilities and limited interactions with extended families also deprived children from multidimensional benefits.** School closures have led young children to (i) miss out opportunities to experience rich and sustained social interactions that promote growth, development, emotional regulation, and learning; (ii) lose access to critical services such as the provision of varied, nutritionally balanced, and quality food, the delivery of routine immunization, and the early detection and notification of risks for children; and/or (iii) miss protective environments provided by ECE centers for children (and other family members) living in a family context with physical or emotional violence. Young children have been exposed to multiple risks over the past few years, including few and poor learning opportunities, which may pose significant risks to their present and future development. There are, however, evidence-based interventions that can be promoted to reverse this challenge.

**There has been less government response to the pandemic’s effects on children in pre-primary education (who, at the same time, were less likely to have options for learning remotely while their schools were closed).** Few government guidelines covering remote-learning responses to COVID-19 closures refer to pre-primary education specifically<sup>221</sup>. Only 60 percent of countries had digital and broadcast learning available for pre-primary schools, while almost all countries (more than 95 percent) had these options available for primary and secondary levels. Fewer than one in five Lower Middle-Income Countries (LMICs) reported that over 75 percent of pre-primary students took part in remote learning (Figure B.5.5.1).<sup>222</sup>

**Therefore, the call for action is in specific areas to address ECE challenges in the region and prepare families and early childhood education systems to deal with the low levels of school readiness of new children entering the school system post-COVID-19.** UNICEF has called for 10% of both domestic financing and international aid in education to be allocated to pre-primary education<sup>223</sup>. Protecting and continuing to increase pre-primary education budgets to reach this target is important to allow countries to respond and recover from COVID-19 learning losses. Every dollar (US\$) spent on pre-primary education is estimated to result in US\$ 9 of benefits to society<sup>224</sup>. Moreover, there are short-term recommendations in other specific areas: (i) Reopening ECE Services; (ii) Recovering Normality: Mental Health and Well-Being of Children and Caregivers; and (iii) Recovering Lost Learning.

*(Box continues on next page)*

219 McCoy et al. (2021).

220 Ibid.

221 Nugroho et al. (2021).

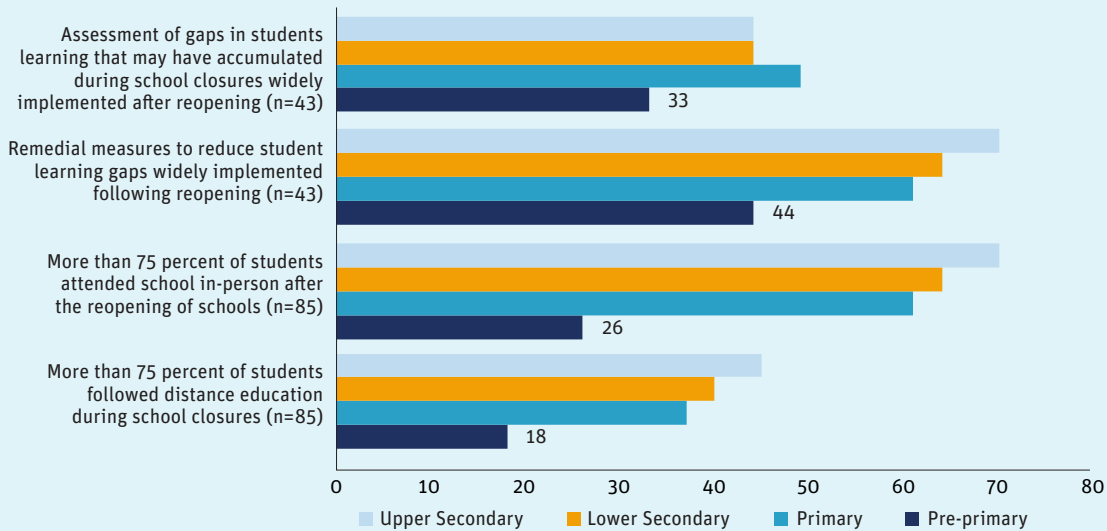
222 Ibid.

223 Ibid.

224 Ibid.

**Box 5.5. Recovering and accelerating in ECE (continued)**

**Figure B.5.5.1. Pre-primary students in LAC: Remote learning during school closures, and support received following reopening, 2021**



Source: Nugroho et al. (2021)

- 1. The reopening of presential service provision and ensuring that children receive supportive and nurturing learning opportunities is an urgent priority.** Closed early childhood services and schools should be reopened immediately, particularly since COVID poses limited health risks for this population and since many of these early skills are not adequately developed in the home. Not only will this help return children to learning, as well as stimulating environments that promote their integral development, but it would also help women return to the labor market. We make an urgent call to governments and public and private service providers in the Latin America and Caribbean region to take all necessary measures for the safe reopening of early childhood care centers and preschools.
- 2. If measures restricting in-person attendance persist, it is critical to ensure the need for improved access to Internet and mobile phone services to enable the provision of remote or hybrid learning opportunities.** Additionally, it is important to strengthen the implementation of programs and strategies that ensure learning continuity for children, especially for those in situations of extreme vulnerability, with special educational needs, or living in isolated or rural areas (e.g., virtual instruction, television, and radio shows, family-friendly apps). Efforts by governments, agencies, civil society, and relevant partners to support young children and their families will be critical, for example guaranteeing that remote-learning strategies are complemented by services that support parents and caregivers to provide warm, stimulating care, while also ensuring their own mental health and financial security<sup>225</sup>. At the same time, as pre-schools reopen, pre-pandemic subsidies for childcare as well as nutritional supplementation should be restored as well.

(Box continues on next page)

225 McCoy et al. (2021).

**Box 5.5. Recovering and accelerating in ECE (continued)**

3. **Focus on behavioral skills that help children later in life. A setting of stability and tranquility in pre-sential early learning programs to reduce stress for children is the most critical objective, even more than recovering academic/cognitive skills.** Children may have experienced traumatic experiences such as bereavement or illness of a loved one, housing or food instability, parental unemployment or financial burden, distancing from family and community members, or ongoing toxic stress such as violence in the home / domestic violence or various forms of abuse exacerbated by confinement. It is important to destigmatize conversations about all aspects of well-being, including mental health and self-care. The ECE workforce should be supported in this effort with tools, trainings, and resources. They can also play an important role to invite members of the community to express their needs, successes, and challenges to establish a sense of stability and feeling well. These models support children's socio-emotional awareness and encourages their own expression.
4. **Early childhood services and schools need to provide parents and caregivers with as much support as possible, making information as well as resources and capacity building opportunities available to them.** Establishing helplines to foster dialogue can help identify the concerns of parents and caregivers during and after the pandemic and regular communication helps to reduce fear, to encourage children's return to early childhood centers and to schools, and to make it easier for parents and caregivers to understand and implement protection measures<sup>226</sup>. During the pandemic, the Bank and others have funded trials of remotely delivered parenting programs, and some have generated impact. For example, an impact evaluation funded by the Bank in Guatemala found that parenting content delivered through voice messages sent to cell phones improved children's vocabulary and increased parents' participation in play activities. At the same time, this light-touch intervention improved caregiver mental health.
5. **Governments and partners should introduce accelerated, bridging, or remedial programs.** Successful case studies from the following three types of programs include: (i) Accelerated school readiness programs that usually take place in the school holiday period, prior to Grade 1 in primary school; (ii) Bridging programs that take place in the first months of Grade 1; (iii) Remedial programs that take place in the first two years of primary school. These types of programs have been used successfully to provide transitional pre-primary education for children who would otherwise not be able to access it at all. They can have multiple benefits: ameliorate the long-term impact of school closures on pre-primary-aged children directly affected by COVID-19; contribute to the expansion of the pre-primary education provision; and strengthen the resilience of the education system in facing future crises.

**The analyses of successful programs (as discussed above) provide useful lessons learned for each of the 5 areas of the conceptual framework for ECE.** The Reopening of ECE centers and pre-schools, along with the priority to ensure efficient recovery and to ensure future resilience provides an opportunity to strengthen and re-imagine ECE systems (quality, equity/inclusiveness, resilience/sustainability) within the following ways: Planning and budgeting, curriculum implementation, workforce development, parents and community engagement, and quality assurance.

Sources: McCoy et al. (2021); Nugroho et al. (2021).

**There have been some examples in the region of interventions to support psychosocial health and well-being.** Chile provides a good example of a balanced learning and socio-emotional recovery package (Box 5.6). And similarly, also does the State of Guanajuato in Mexico with his comprehensive recovery package in the context of its Social Pact for Education (as seen in Box 3.3). Of note is also the new Ecuador multi-pillar plan and strategy to promote learning recovery “Learning on Time” (*Aprender a Tiempo*)<sup>227</sup>. The plan has four key pillars: 1) socioemotional support, 2) prioritization of reading and math, 3) strategies to prevent school dropout, and 4) recovery of academic skills. However, one constraint for the design and implementation of psychosocial recovery packages is still the limited hard evidence available on the effectiveness of various interventions, which also flags the importance of improving good data for decision-making.

**As they support students, it is essential that the psychosocial needs of teachers be also part of the conversation.** It is time to start gathering data on teachers’ particular challenges and expectations during school reopening. The pandemic has introduced new sources of job-related stress for teachers as education systems have been navigating between remote and hybrid education. In addition to this, teachers, 70% of which are female, have had to disproportionately face additional stressors such as taking care of their own children at home, and household administration. As these teachers under stress provide support to students, their personal well-being becomes paramount. Portals and platforms with support resources and instruments and surveys that can gather information on teachers’ preferences and expectations are needed across the region. Peru provides an example of both (Box 5.7).

**Finally, it will also be important to identify and align other actors in the education system, and beyond, to support students and teachers.** Beyond teachers, school counsellors, school management teams, local and regional authorities can also play important roles support the well-being of students and teachers upon returning to school. School counsellors for instance could play a critical role, even more relevant for low-achieving or low-income students.<sup>228</sup> Now more than ever, aligning school

psychologists, orientation teams, teacher mentors or coaches can be a powerful tool to ensure teachers are supported and have the adequate tools to support students. Some of the services provided may also require collaboration with other governmental sectors such as health and child protection.

### 5.3 Addressing digital gaps

**The availability and quality of available infrastructure, lack of student and teacher digital competencies, and institutional constraints, have been hindering the effectiveness of remote and hybrid learning and constraining digital innovations.** As shown in Chapter 1, a central aspect limiting the success of virtual and hybrid learning in the region, and which also affects other efforts at supporting digital innovations in education, is that access to and quality of the Internet services is still very unequal. Internet access and quality is also an issue in schools, where it can constrain recovery and acceleration. In Chile, almost 1 out of 3 schools does not have Internet access.<sup>229</sup> Lack of proper equipment and digital skills (e.g., lack of knowledge on how to use digital platforms) are essential constraints affecting the effectiveness of hybrid learning, and more broadly the use of technology in education.<sup>230</sup> As seen previously, lack of adequate digital skills was an important pre-pandemic challenge for both students and teachers, and so have been institutional constraints.

**LAC countries have begun implementing policies and programs to reduce the digital divides, but efforts require higher and sustained investment.** Some LAC countries invested in improving Internet connectivity in schools and/or providing subsidized Internet access to families. In Uruguay, “Ceibal en Casa” made an agreement with the National Telecommunication Agency (ANTEL acronym in Spanish), the state national Internet provider and market leader, and Claro, a private Internet provider, trying to connect and provide resources to all students, especially those most vulnerable. For instance, the Governments of Argentina, Peru, Chile, and Ecuador made significant investments to improve equipment and Internet

227 See <https://educacion.gob.ec/aprender-a-tiempo/>.

228 Mulhern (2020).

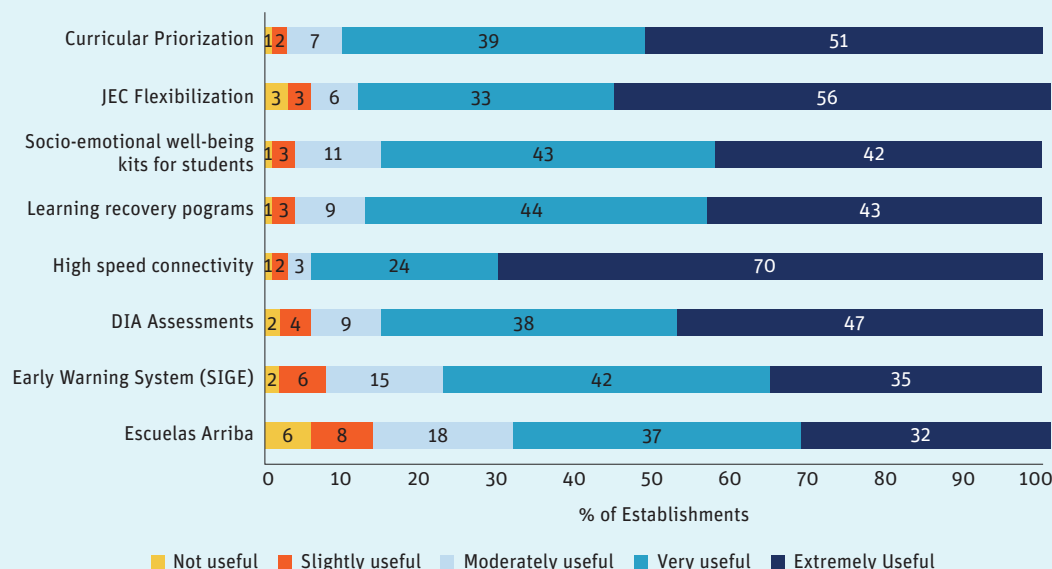
229 Del Castillo (2021).

230 In order to enable countries to identify good practices and areas where EdTech policies can be strengthened and monitor progress as countries take action, the World Bank, with the support from Imaginable Futures, has created the EdTech Readiness Index (ETRI). This tool will increase learning opportunities and reduce inequalities while investments in EdTech are done. The index is organized around 6 pillars: school management, teachers, students, devices, connectivity, and digital resources. The first three pillars are the actors in the education system, while the last three are the inputs and infrastructure that the actors need to use EdTech.

### Box 5.6. The strengths of the recovery response in Chile

To support schools during the reopening, the Ministry of Education of Chile developed the “Chile recovers and learns” (*Chile se Recupera y Aprende*) strategy, implemented since April 2021. The strategy was articulated around: (i) keeping and attracting students back to school; (ii) recovering and leveling learning; and (iii) socio-emotional well-being, as described below. While hard evidence of impact is not yet available, survey results (from the 2022 *Encuesta de Monitoreo Nacional del Sistema Educativo*) have showed overall high levels of satisfaction with these measures (Figure B.5. 6.1).

Figure B.5.6.1. Evaluating key recovery policies for 2022



#### Keeping and attracting students back to school

- SMS/WhatsApp campaign.** Parents of tutors of out-of-school children were contacted and encouraged to send their children back to school.
- Early warning system.** The Ministry of Education implemented a nationwide early warning system to alert schools of the 10% of students with the highest risk of dropout. Schools could then mitigate dropout with targeted and timely support to students at risk.

#### Recovering and leveling learning

- Diagnostic.** The Education Quality Agency (*Agencia de Calidad de la Educación*) developed a set of “comprehensive learning diagnostic” (*Diagnóstico Integral de Aprendizajes – DIA*) tools to assess aspects related to well-being of students and socio-emotional skills, as well as students’ learning in math and language. Tools were delivered to schools to be used three times over the school year (March, August, and December). These instruments helped produce reports with results at the classroom and school levels. Schools received orientation on how to use the tools and the diagnostic results. The DIA diagnostic increased from a coverage of 20% of students in 2020 to 80% in 2021.

(Box continues on next page)

### Box 5.6. The strengths of the recovery response in Chile (continued)

- b. Curricular prioritization.** The curricular prioritization identified the main learning goals for each grade and gave flexibility to schools for implementing a study plan aligned with their methodologies and internal organization.
- c. Learning recovery.** Schools were able to enroll in a plan for recovering learning, where they received support in pedagogical practices and resources to recover learning, a set of guidelines for teachers and students, and continuous monitoring and feedback. Teachers received training and the Ministry of Education monitored closely with in-field visits.

#### Socio-emotional well-being

Each school received a kit of resources to support teachers and students to promote positive relationships and school climate during school reopening.

Source: MINEDUC-Chile and WBG (2022).

### Box 5.7. Tools and surveys for teachers' well-being in Peru

- Peru implemented the strategy “*Te Escucho Docente (I Listen to You, Teacher)*”, a portal where teaching staff can access resources and support to address their socioemotional needs that includes materials to cope with stress or anxiety management in response to the health emergency and remote work.
- Every two years the Peru's National Teacher Survey (ENDO) collects information on teachers on their sociodemographic and socioeconomic characteristics, their professional career, their perceptions regarding the working conditions that increase their well-being and, on the policies and programs that impact their work, as well as on their values and future expectations.

Source: Own elaboration on the basis of information from the Ministry of Education of Peru.

connectivity for primary, secondary, and technical schools nationally (Table 5.3). Brazil implemented a new program (*Programa Inovação Educação Conectada*, PIEC) to support the universalization of public schools' access to broadband Internet and to promote the use of digital technology in basic education.<sup>231</sup> Moreover, LAC countries provided students and teachers from vulnerable populations with devices such as computers, smart phones, or tablets to address the digital divide. Countries like Argentina, Ecuador, Panama, St. Lucia, Saint Vincent, and the Grenadines engaged in large procurement contracts to buy and distribute thousands of computers and tablets to teachers and students. Efforts however will need to be

further ramped-up and sustained. IAD (2021b) shows that \$47 billion is required to connect the region to the Internet for educational purposes by 2030. Overall, it will also be critical to ensure that investments in infrastructure are not only for emergency but for the “long term” to support learning acceleration and resilience.

**As seen previously, a positive effect of the crisis was the pro-activeness supporting teachers and students' digital skills development during the pandemic. As schools return to normal, it would be relevant to understand the way digital skills were applied during remote teaching, so as to plan relevant strategies for future**

231 The program started in 2017 with the goal of providing connectivity to at least 44.6 percent of students, and in 2019, this target was revised to 85 percent of students. The PIEC, which entered its third stage in 2022, now aims to reach 100 percent students in basic education by 2024.

**Table 5.3. Selected initiatives to improve Internet connectivity for schools and students in LAC**

Country	Program	Budget	Program scope
Ecuador	<i>Campaña “Conectando al Futuro”</i>	-	To reduce connectivity gaps of teachers and students by providing them with Internet access and tablets, prioritizing those living in rural areas.
Perú	<i>Estrategia “Todos y todas conectados”</i>	USD 50.7 million*	The objective is to give connectivity to 18,000 schools guaranteeing access to the TV learning program “ <i>Aprendo en casa</i> ” implemented by the government.
Chile	<i>Conectividad para la “Educación 2030”</i>	USD 16 million**	To give high speed Internet access to more than 10.000 educational institutions (around 3.273.00 students) by 2029.
Argentina	“Juana Manso”	USD 21 million	To give students access to digital technology and devices (i.e. 70.000 computers).

Source: UNESCO ([https://siteal.iiep.unesco.org/respuestas\\_educativas\\_COVID\\_19](https://siteal.iiep.unesco.org/respuestas_educativas_COVID_19)). Different sources. \*This amount corresponds to USD \$14 million for the Internet access strategy and \$USD 36.6 million included for the National Telecommunication Program (Pronatel) in 2021. \*\*This amount corresponds to the upper limit per year.

**training.** For instance, one recent survey among teachers in Greece showed intense use of digital tools for finding and developing educational resources, but little to no use of such tools for student assessment or for feedback purposes -key features of a meaningful teaching-learning cycle<sup>232</sup>. Several European education systems, like Portugal, Belgium, Estonia, and Czechia, have invested recently in specific digital training strategies for teachers<sup>233</sup>, and most OECD education systems purposely included teachers’ digital skills development as a core area in their recovery plans (Belgium, France, Germany, Greece, and Spain<sup>234</sup>). Furthermore, robust measures of digital skills are not only needed for better design and implementation of blended learning policies, which will remain very relevant in the post-pandemic, but also for better planning of the future trajectory of students. Recent evidence points out at the increase in the demand of digital skills for different sectors. Even though this trend preceded the pandemic, a business survey in 2021 that involved various regions and companies showed that the prioritization of digital abilities was 16% higher than in 2019<sup>235</sup>.

**A more comprehensive understanding of digital literacy must go beyond the abilities needed for the**

**interaction with digital devices and solutions. Digital competencies frameworks for teachers and for students should be supported and so periodic assessments of digital skills.** Digital literacy needs to include capabilities such as critically consuming and producing digital contents, or problem-solving skills to both systematize and decompose a problem and formulate strategies to choose an adequate solution<sup>236</sup>. Definitions of digital literacy have covered different domains, from general capabilities for learning, living, and working in a digital society<sup>237</sup> to the more complex definitions used by UNESCO, the European Union or London School of Economics/International Telecommunication Union, that include evaluation and creation of digital content, communication, online safety skills, self-control in the use of online resources, the ability to distinguish credible and high quality contents, the understanding of which technology is more appropriate for each objective, among others. The complexity implied by digital literacy, and the range of skills and tasks that it involves, highlights the relevance of adopting digital competencies frameworks for teachers and for students, that define minimal levels of competence, at least at the national level, to regularly monitor level of performance and collect evidence for design and re-adequate contents

232 Perifanou et al. (2021).

233 European Schoolnet (2021).

234 Zancajo et al. (2022).

235 Feijao et al. (2021).

236 Alexander et al. (2016); Van Laar et al. (2020).

237 JISC (2014).



and strategies. Several national and regional examples exist already (even in the region, where Chile and Colombia have developed national competencies framework for teachers) that could be adapted to each national context and policy objectives (See Box A.5.2 in Annex 5.2). Equally important will be to ensure that digital skills are also regularly assessed through standardized/common regional instruments in the field of digital skills. A repeat of the ICILS should be encouraged.

**Assuming basic connectivity and digital skills gaps are addressed and that the right incentives and capacities are in place to make use of the data and technology innovations, there is potential to build on data and technology to improve service delivery through strengthened information systems, platforms to enhance targeted learning or, yet, innovative and sustainable uses of remote and hybrid learning.** As well illustrated in recent reports,<sup>238</sup> leveraging efficiency-enhancing technological and data innovations, introduced before or during the crisis by some countries, could be especially instrumental in improving service delivery. Improving access to, quality and timeliness of data, including through stronger Education and Management Information Systems (EMIS) and monitoring and evaluation systems, can have multiple applications, from supporting school reopening processes, to student and outcome monitoring and efficient allocation of human, physical and financial resources across areas and schools. Early warning systems reviewed previously are a good example of information used to monitor student attendance and frame support interventions which could help improve the efficiency in the use of resources. As seen above, comprehensive assessment systems to monitor and support student learning and well-being, and to timely monitor and evaluate programs and interventions, are critical to improve student learning and scale-up what works. Comprehensive information systems can also include invaluable information on student graduation and employment rates, by integrating tracer and labor market surveys, essential tools to track the quality and relevance of secondary and tertiary programs. Technology is also at the core of computer-based adaptive learning programs, illustrated above through the cases of the PAM platform in Uruguay, as well as in Ecuador, where an adaptive computer-assisted remediation program, supported by the World Bank, has been used to support students in technical and technological institutes<sup>239</sup>. While very promising, bringing to scale these programs is still a challenge.

Technology could also help develop hybrid learning models to increase access and expand the school day in efficient ways. The recent Digital Equity Law just approved in Panama (Box 5.8) is an excellent example of a strong legal and institutional framework to enable these and other large-scale innovations. During the closure of schools and the recovery phase, Panama has been a leader in the region in the design of a long-term vision on the role of education technology to accelerate learning and reduce learning gaps between poor and vulnerable students and those from better-off socioeconomic backgrounds.

## 5.4 Key takeaway messages

**Addressing the massive learning losses requires action on three critical interrelated pillars.** School systems usually foster learning based on three main pillars or dimensions: a curriculum that states what students should learn; a pedagogy that guides how to teach towards curricular goals; and assessments that provide evidence on student learning. These three pillars were greatly disrupted during the school closures, in a context of very challenging remote learning experiences, leading to large learning losses. It is imperative for all countries of the region to frame their learning recovery process around these three pillars, building, when possible, on measures and programs pre-existing the pandemic or newly introduced, while addressing pre-existing institutional constraints and service delivery failures.

**Curriculum should be consolidated with a focus on foundational skills.** The pandemic opened the door for countries to make substantial revisions to their curricular policies, prioritizing what was considered essential learning for all students. Teaching mathematics and language (reading, writing, literature) became a priority over other subject areas in several countries. Countries should keep prioritizing foundational skills in the short and longer-term, while integrating transferable skills as a necessary complement.

**Learning assessments should be urgently re-prioritized.** Data was and is needed to diagnose the magnitude of learning losses and to take adequate actions. Most large-scale national assessments were cancelled in 2020. Most resumed in 2021, but with results not yet available. Teacher led formative classroom assessments had to be

238 Including WBG (2021a).

239 Angel-Urdinola (2020).

### **Box 5.8. The Long-term vision of the role of education technologies in accelerating learning and reducing learning gaps in Panama**

On April 6, 2022, Panama approved a far-reaching law called the Digital Equity Law (*Ley de Equidad Digital*). This law establishes the general guidelines for the formulation, development, and implementation of education public policies aimed at increasing the equity of the education system. To achieve this, the law proposes the implementation of pertinent teaching-learning models, including the delivery of flexible modalities for the education services, facilitated by the technological transformation, which guarantee the delivery of creative and innovative education services for students to acquire the digital competencies and skills throughout their educational trajectories.

The main objectives of the law are the following:

- Implementing a large-scale technological and digital transformation to accelerate learning among students through the definition of plans that address the multiple dimensions of the transformation, including the use of flexible modalities for the delivery of education services in all grades.
- Providing the education system progressively with access to the necessary technological infrastructure, including energy, connectivity, digital devices, digital content, and education platforms to support pedagogy and accelerate learning among students.
- Consolidating and integrating the progress made during the pandemic for the development of education platforms and digital content available for public schools.
- Promoting innovations and facilitating pre-service and in-service teacher training to guarantee their curricular pertinence and the mastery of the new teaching-learning models, in alignment with the technological and digital transformation of the education sector.
- Implementing a national curriculum that is strengthened by the digital competencies needed for the development of 21<sup>st</sup> century skills, in all education levels across public and private schools
- Creating a continuous evaluation system that promotes innovation, research, and technological development, focused on improving decision making, the efficacy of education platforms, the improvement of learning outcomes, and the impact evaluation of the implementation of this education public policy.

The Digital Equity Law has set a landmark regional example on how to build from the lessons learned during the pandemic with a focus on the long term and the sustainability of the education policies. This law will be critical to articulate efforts and build partnerships within the public sector and with the private sector to work together to make sure education technologies translate into more learning for students, particularly those from disadvantaged backgrounds. The law is expected to benefit 935,522 students from the formal and non-formal components of the regular and non-regular education subsystem in Panama from initial, pre-school, primary, lower secondary, and upper secondary education.

Source: Digital Equity Law, Official Gazette of the Republic of Panama, April 6, 2022.

largely discontinued. Some countries built on pre-existing or introduced new centrally driven formative assessments. These complementary assessment efforts need to be urgently stepped-up everywhere to diagnose the real learning levels of students, including recent learning losses. Formative assessments are especially promising at this stage. At the same time, international, regional and/or national standardized assessments should continue to be fostered to generate comparable data for benchmarking learning losses and inform educational policies and education sector planning. Overall, what is needed is a strengthened evaluation culture where formative and summative assessments work together to ultimately improve learning.

**Learning recovery programs should be scaled-up.** Countries should step-up initiatives and programs to recover from learning losses, building on lessons from pre-existing and new programs. These programs should focus on foundational literacy and numeracy skills. Good monitoring and evaluation systems and strengthening institutional capacities to implement at scale will be critical. Teachers, tutors, parents, and other implementers need to be trained and supported on how to target instruction, by teaching at the right level of students. Targeted instruction has strong potential to also accelerate learning in the longer run. Supporting a prompt recovery in early childhood education will be essential to tackle lack of readiness to learn.

**At the same time, it will also be important to address psychosocial health and well-being.** The crisis also generated important disruptions in psychosocial health and well-being with implications for readiness to learn and skills development. Countries should put in place diagnostic assessments to provide timely data on the effects of the pandemic on these aspects and design comprehensive strategies to address them, which should be evaluated. These strategies need to include enhanced training of and support for teachers who are often called to be first responders.

**Finally, as countries move forward through the recovery and acceleration stages, addressing digital divides should also be a priority.** Efforts to connect families and schools should continue, with focus on both the access and quality of the Internet access. This needs to be combined with proper equipment and devices and enhancing digital skills of students and teachers. Digital competencies frameworks and periodic assessments of digital skills should be mainstreamed. Assuming basic digital gaps and constraints to make use of the data and technology innovations are addressed, there is potential to build on data and technology to improve service delivery through strengthened information systems, platforms to enhance targeted learning, or, yet, innovative and sustainable remote and hybrid learning models.



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## Chapter 6

# Conclusion

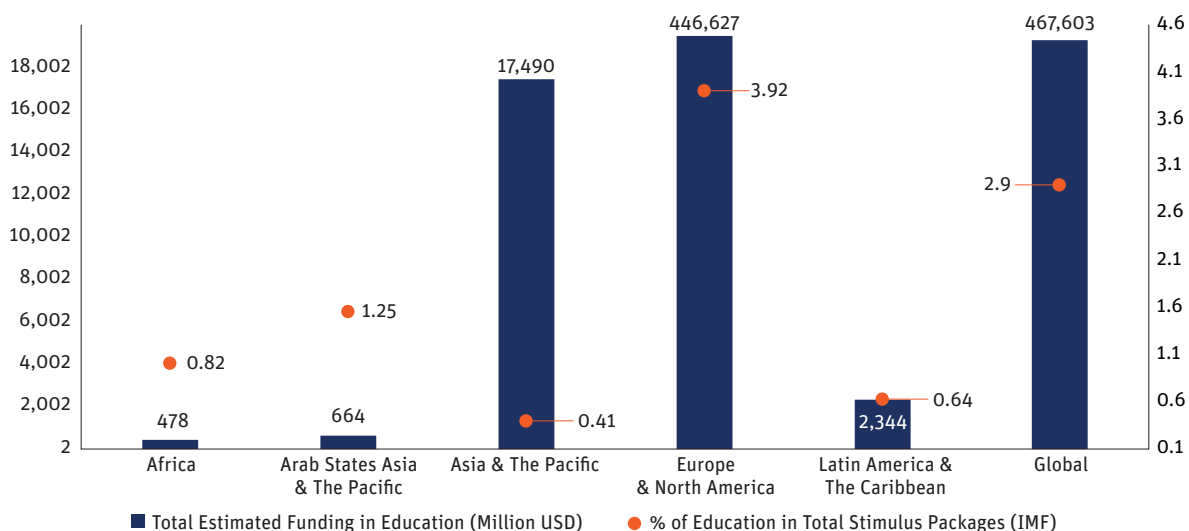
**The impact of the pandemic on education in LAC was strong, and affected schooling, learning, and skills development.** While the full effect of the pandemic on schooling is not year clear, household surveys and administrative data collected for this report show that students aged 6-14 seem to have been the most affected, with a consistent decrease in attendance rates. But everybody is at risk. High levels of disengagement during distance schooling are expected to lead to future dropouts through learning gaps, especially for vulnerable groups. In fact, learning already took a huge toll. Updated simulations show a large increase in the proportion of 3<sup>rd</sup> and 6<sup>th</sup> graders not able to adequately understand and interpret a text of moderate length. Documented losses from a handful of LAC countries with robust data to date point to large significant drops in grade-appropriate reading and math scores, erasing decades of improvement. And this is likely only the tip of the iceberg as more assessments become available. Early grades and vulnerable populations seem to be the groups most disproportionately affected. Lastly, the impact on psychosocial health and well-being of students and teachers was noticeable, as was the one on digital capabilities, which were put to test during the pandemic, where the pre-existing digital divide ended up being a significant hurdle. Some came to refer to the segregation trend engendered during the remote learning experience in the pandemic as: Zoom vs. Whatsapp schools<sup>240</sup>.

**This severe disruption to the schooling and learning process of LAC students did not yet translate, however,**

**into a sufficiently broad-based commitment and response.** Countries rushed to respond to the crisis with remote learning packages, policies to retain students in the education system, and, to a lesser extent, measures and programs to start recovering from learning losses, showing noticeable efforts to address the severe disruptions, but much more needs to be done. Worryingly, although countries went out of their way to deploy massive stimulus packages in response to the health crisis, only limited resources, with the caveat that some funding may have supported cross-sectorial efforts and that more recent information is not yet available, were allocated to the education sector. And once again here, LAC was disproportionately affected, which has constrained an adequate fully-fledged response. While in Europe and North America, roughly 4% of the stimulus packages went to education and training, the corresponding value for LAC, Africa and Asia was roughly 1%. Indeed, there were large disparities by income level: while in high-income countries, on average, countries allocated 3% to education; in low- and lower-middle-income countries, the same figure was less than 1%.

**Against this background, and expecting increasing schooling and learning gaps moving forward, the education recovery agenda in LAC is huge.** Efforts need to be stepped-up. The report is clear in its mandate: “return to schooling” and “recover and accelerate learning” should be the top priority strategies for the agenda moving forward and require a full package of actions, which will need to be broadly supported. These strategies and actions are

**Figure 6.1. Allocation to education in total COVID-19 stimulus packages, by region (million USD and %), 2021**



Source: UNESCO (2021)

240 See Romero et al. (2021).

consistent with the sizeable inequalities that pervade the region, with different countries being at different stages of the recovery agenda. Still, recovering, accelerating, and improving should be a common denominator and a unifying framework to save the potentially devastating human capital loss for the “pandemic generation”. The goal is simple: we need to avoid that the exogenous shock suffered by the 170 million students in LAC that went through a real “educational turmoil” end up becoming an educational tragedy with a “lifetime human capital disability”.

**The first task ahead is the “return to schooling”, as we need to ensure the region is back on track to continue reducing its OOSP.** Prior to the pandemic, the region was steadily reducing the number of children and adolescents of compulsory school age that were outside the educational system. The pandemic seems to have paused this downward trend, at least for the 6-to-14-year-old group. Risks of future dropouts are also very high. The proposal to redress the setback is two-fold. First and foremost, it is essential to instill a sense of urgency to safely reopen all schools, especially in those few places where educational institutions continue to remain closed. This can be achieved notably by consistently applying a set of safety standards that could help along the process. The second element of the strategy is to reach out to re-enroll, hence the importance of communication campaigns to reach those most likely to have decided to drop out, and prevent future dropouts, through a combination of smart policies and programs, especially targeting the most vulnerable groups. EWSs and EMISs must be essential ingredients of the strategy, as the report describes.

**An even more urgent complementary strategy given the emerging evidence on learning losses is the “recovery and acceleration of learning”, capital to the skills building process that is fostered in classrooms.** This strategy, nonetheless, requires prioritization, as the dimension of the task could look daunting otherwise. A three-tiered approach is also offered by the report. First, to prioritize the curriculum. The report suggests to zero in on foundational skills, namely critical literacy – involving reading, writing, and speaking skills – and numeracy. Transferable skills (such as problem solving and critical thinking) should also be integrated in the prioritized curriculum. Second is to measure the extent of learning losses. In-classroom assessments, especially those of formative nature, are core tools to diagnose the depth, breadth, and characteristics of the learning that was lost during the pandemic, both of the “forgotten” and the “foregone” types. At the same time, international, regional and/or national standardized

assessments should continue to be fostered to generate comparable data for benchmarking learning losses and inform educational policies and education planning.

**Third, it is crucial to implement at scale adequate learning recovery programs.** Learning losses are expected to be widespread, and learning heterogeneity to have increased, requiring a scale-up of reforms, initiatives and programs to recover. Several remedial interventions for learning recovery have now proven to be effective, so countries could build on those adjusting them as needed, all of which highlight the criticality of the new paradigm: targeted (as opposed to standardized) learning. All programs should focus on foundational literacy and numeracy skills. Good monitoring and evaluation systems and strengthening institutional capacities to implement at scale will be critical. Teachers, tutors, parents, and other implementers need to be trained and supported on how to target instruction, by teaching at the right level of students. This approach is critical to also improve learning in the longer run.

**The two key strategies comprised within the schooling and learning recovery agenda need to be accompanied by a solid approach to address psychosocial health.** Monitoring mental health and well-being of students and teachers is just as critical to track educational progress as standardized learning assessments are for documenting the status of learning. Recovery programs and interventions to support teachers and students’ psychosocial health and well-being will be a vital element in the recovery.

**In addition, the pandemic surfaced the challenge of bridging the digital gap.** Education systems must get ready for any new eventual “sequel” of the pandemic, irrespective of the form of the shock. The experience of the forced (and rushed) application of remote/distance learning delivery channels has left an indelible mark: learning effectiveness rested, for the most part, on the quality of access to digital infrastructure and the quality of digital skills. Building the backbone of a new “back-up system” to replace in-person education – or simply to continue providing hybrid education where this is still the case – is therefore critical. But this requires investments in both physical and human ICT capital. These investments are also needed to spur innovations in service delivery.

**LAC’s agenda for action is clear.** Countries need to enhance their investments to recover, accelerate and improve learning. The agenda for action developed in this report has highlighted the urgency of four clear commitments to

**Figure 6.2. The four commitments of the education recovery in LAC**

<b>Schooling: Leave no one behind and prevent dropouts</b>	<b>Learning and well-being: Recover and enhance foundational skills and well-being</b>	<b>Teachers: Value and support teachers</b>	<b>Advocacy and financing: Place education recovery at the top of the public agenda</b>
<ul style="list-style-type: none"> <li>• Reopen all schools in a sustainable way.</li> <li>• Support inclusive information campaigns on school re-enrollment, deploy cash transfer programs and ensure learning materials, information, and services are accessible to all, especially those most vulnerable.</li> <li>• Implement early warning systems to identify and monitor students at risk of dropping out.</li> <li>• Address psychosocial health and well-being of students.</li> <li>• Address digital divides, with a focus on connectivity, digital skills and institutional capacity.</li> </ul>	<ul style="list-style-type: none"> <li>• Consolidate curricula with focus on foundational (and transferrable) skills.</li> <li>• Assess learning levels, with summative and formative assessments.</li> <li>• Scale up initiatives and programs to recover from learning losses, with focus on teaching at the level of the student and building on pre-existing and new strategies and programs.</li> <li>• Address psychosocial health and well-being of students.</li> <li>• Address digital divides, with a focus on connectivity, digital skills and institutional capacity.</li> </ul>	<ul style="list-style-type: none"> <li>• Address human resource gaps and strengthen teacher professional development.</li> <li>• Strengthen teachers' pedagogical and digital skills.</li> <li>• Support health and well-being of teachers.</li> </ul>	<ul style="list-style-type: none"> <li>• Fund schools' safety protocols, digital upgrades, and all programs and measures at scale.</li> <li>• Mobilize multiple stakeholders in the delivery and financing effort.</li> <li>• Look for efficiency gains in use and allocation of resources, through better data, technological innovations and institutional reforms for service delivery improvements.</li> </ul>

achieve this goal: (i) a commitment to schooling – so as to ensure that no student is left behind and/or drops-out; (ii) a commitment to learning and well-being – to prioritize foundational skills and foster appropriate levels of human capital formation along the way; (iii) a *commitment to teachers* – to make sure teachers are valued and supported throughout; and (iv) a *commitment to advocacy and financing* – insofar as the education recovery agenda is a responsibility of all and needs sufficient, and wisely used, resources for its implementation. The report has intended to provide an actionable roadmap to ascertain which are solid measures, programs, interventions, and strategies to achieve the first three commitments and flag some risks and opportunities to achieve the fourth commitment.

**The fourth commitment is about advocacy and funding, which also presents opportunities for partnerships and efficiency improvements.** A broad-based commitment and response are essential to avoid that a real educational turmoil ends up becoming an educational tragedy with large economic and social implications. The region needs to protect education budgets first. With rising inflation, affecting all income-level countries, real education budget amounts for the current school year are expected to be

even lower than in the previous school year.<sup>241</sup> The schooling and learning recovery package has a “price-tag”. Improving school safety has a cost and so implementing at scale programs to support attendance and recover from learning losses. IAD (2021b) shows that \$47 billion is required to connect the region to the Internet for educational purposes by 2030. Notwithstanding the primary role of ministries of education and public funding, the response can also build on the partnerships that have developed during the crisis. There have been multiple examples of such partnerships in the region that have been reviewed in this report. To cite a couple of examples: ministries/secretaries of education, assessment agencies, universities, private foundations, NGOs, and/or civil society have been involved in the design and implementation of formative assessments and learning recovery programs; collaborations between telecommunication agencies, Internet providers and education ministries were critical to provide low-cost Internet connections and expand access to platforms during school closures. Further strengthening and developing these partnerships for education is an opportunity provided by the crisis. There is also potential for efficiency improvements, to complement additional funding efforts, building on data, technology, and institutional reforms.

241 UNICEF, UNESCO, and WBG (2022).

# References

- Abufhele, A.; Bravo, D.; Lopez, F.; and Soto-Ramirez, P. (2021). "Developmental Losses in Young Children from Pre-Primary Program Closures During the COVID-19 Pandemic." Inter-American Development Bank.
- Adelman, M. and Lemos, R. (2021). "Managing for Learning: Measuring and Strengthening Education Management in Latin America and the Caribbean". Washington, DC: World Bank doi:10.1596/978-1-4648-1463-1. License: Creative Commons Attribution CC BY 3.0 IGO.
- Alexander, B.; Adams Becker, S.; and Cummins, M. (2016). "Digital Literacy: An NMC Horizon Project Strategic Brief". Volume 3.3, October 2016. Austin, Texas: The New Media Consortium.
- Angel-Urdinola, A. (2020). "Use of Adaptive Computer-Assisted Remediation Programs to Prevent Student Dropout in the Context of COVID-19". World Bank Blogs.
- Appelbaum, M. (2009). "The One-Stop Guide to Implementing RTI: Academic and Behavioral Interventions, K-12". Corwin Press.
- Araujo, M. C.; Carneiro, P.; Cruz-Aguayo, Y.; and Schady, N. (2016). "Teacher Quality and Learning Outcomes in Kindergarten". *The Quarterly Journal of Economics*, 131(3):1415– 1453.
- Ardington, C.; Wills, G.; and Kotze, J. (2021). "COVID-19 Learning Losses: Early Grade Reading in South Africa". *International Journal of Educational Development*. Volume 86, October 2021, 102480.
- Arenas, A. and Gortázar, L. (2022). "Learning Loss One Year after School Closures: Evidence from the Basque Country". Working paper. EsadeEcPol-Center for Economic Policy.
- Arias, E.; Hincapié, D.; and Paredes, D. (2020). "*Educar para la Vida. El Desarrollo de Habilidades Socioemocionales y el Rol de los Docentes*" (Educating for Life. Socio-emotional Skills Development and the Role of Teachers). Washington D.C.: Inter-American Development Bank.
- Attanasio, O.; Cardona-Sosa, L.; Medina, C.; Meghir, C.; and Posso, C. (2021). "Long Term Effects of Cash Transfer Programs in Colombia". Cowles Foundation for Research in Economics, Yale University. Discussion Paper No. 2293.
- Azevedo, J.P. (2020). "Learning Poverty: Measures and Simulations". Policy Research Working Papers. The World Bank. doi:10.1596/1813-9450-9446
- Azevedo, J.P.; Akmal, M.; Cloutier, M.H.; and Wong, Y.N. (2022). "COVID-19 Learning Loss Simulations: Global Update". Washington, D.C.: The World Bank Group. Unpublished Manuscript.
- Azevedo, J.P.; Hasan, A.; Goldemberg, D.; Iqbal S.; and Geven, K. (2020). "Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates". Policy Research Working Paper 9284; World Bank Group: Education Global Practice.
- Bandura, A. (1977). "Self-efficacy: Toward a Unifying Theory of Behavioral Change". *Psychological Review*, 84(2), 191-215.
- Banerji, R. and Chavan, M. (2016). "Improving Literacy and Math Instruction at Scale in India's Primary Schools: The Case of Pratham's Read India Program". *Journal of Educational Change* 17, no. 4, p. 453-475.
- Barron-Rodriguez, M., Cobo, C., Muñoz-Najar, A., and Sánchez Ciarrusta, I. (2021a). "Remote Learning During the Global School Lockdown: Multi-Country Lessons". Washington, D.C.: The World Bank Group.
- Barron-Rodriguez, M., Cobo, C., Muñoz-Najar, A., and Sánchez Ciarrusta, I. (2021b). "What is Hybrid Learning? How Can Countries Get it Right?". World Bank Blog, April 27, 2021.
- Bashir, S. and Miyamoto, K. (2020). "Digital Skills: Frameworks and Programs". World Bank, Digital Economy for Africa (DE4A).
- Bassi, M.; Busso, M.; Urzúa, S.; and Vargas, J. (2012). "*Desconectados: Habilidades, Educación y Empleo en América Latina*" (Disconnected: Skills, Education and Employment in Latin America). Washington, DC: Inter-American Development Bank.
- Bassi, M.; Busso, M.; and Muñoz, J. (2015). "Enrollment, Graduation, and Dropout Rates in Latin America: Is the Glass Half Empty or Half Full?". *Economía* vol. 16, No.1 (Fall), pp. 113,115-156, Brookings Institution Press.
- Bellei, C.; Contreras, M.; Ponce, T.; Yañez, I.; Díaz, R.; and Vielma C. (2022). "The Fragility of the School-in-Pandemic in Chile". In: Reimers F.M. (ed.), *Primary and Secondary Education During COVID-19*. Springer, Cham.
- Blyth, D.; Jones, S.; and Borowski, T. (2018). "SEL Frameworks - What Are They and Why Are They Important?". Frameworks Briefs Introductory Series No 1, Measuring SEL.



- Bos, M.S.; Moffa, N.; Vegas, E.; and Zoido, P. (2017). “*América Latina y el Caribe en PISA 2015: ¿Sabemos Trabajar Juntos para Resolver Problemas?*” (Latin America and the Caribbean in PISA 2015: Do We Know How to Work Together to Solve Problems?). Note 11, CIMA, Inter-American Development Bank.
- Broadband Commission for Sustainable Development, International Telecommunication Union, and UNESCO (2021). “Connecting Learning Spaces: Possibilities for Hybrid Learning”, Working Group on Digital Learning.
- Burns, B. and Luque, J. (2014). “Great Teachers: How to Raise Student Learning in Latin America and the Caribbean”. Washington DC: The World Bank.
- Busso, M.; Cristia, J.; Hincapié, D.; Messina, J.; and Ripani, L. (2017). “*Aprender Mejor: Políticas Públicas para el Desarrollo de Habilidades*” (Learning Better: Public Policies for Skills Development). Washington D.C.: Banco Interamericano de Desarrollo.
- Carbajal, F.; Tuzman D.; and Rovner H. (2022). “*Cierre de Escuelas en Pandemia – Los Aprendizajes en Uruguay* (School Closures during the Pandemic – Learning Outcomes in Uruguay). The World Bank. Unpublished Manuscript.
- Carneiro, P.; Crawford, C.; and Goodman, A. (2007). “The Impact of Early Cognitive and Non-Cognitive Skills on Later Outcomes”. Centre for the Economics of Education.
- Case, A. and Deaton, A. (2017). “Mortality and Morbidity in the 21st Century”. Brookings Papers on Economic Activity 2017(1), 397-476.
- CDC (2021). “Science Brief: Transmission of SARS-CoV-2 in K-12 Schools and Early Care and Education Programs – Updated”. Centers for Disease Control and Prevention.
- Chakera, S.; Haffner, D.; and Harrop, E. (2020). “UNICEF Eastern and Southern Africa Region Working Paper – Structured Pedagogy: For Real-Time Equitable Improvements in Learning Outcomes”. UNICEF: Nairobi.
- Chernyshenko, O.; Kankaras, M.; and Drasgow, F. (2018). “Social and Emotional Skills for Student Success and Well-Being: Conceptual Framework for the OECD Study on Social and Emotional Skills”. OECD
- Chile’s Agency for the Quality of Education (2021). “*Resultados Diagnóstico Integral de Aprendizaje 2021*” (Results from the Integral Learning Assessment 2021). Agencia de Calidad de la Educación, Chile.
- Colombia’s National Education Ministry (2021). “*Este Cuento es Tuyo, una campaña para fomentar el acceso y la permanencia escolar en Colombia*” (This Tale is Yours, a Campaign to Foster School Access and Retention in Colombia). News Note. Ministerio de Educación Nacional, Colombia.
- Connor, C. M.; Morrison, F. J.; Fishman, B.; Crowe, E. C.; Al Otaiba, S.; and Schatschneider, C. (2013). “A Longitudinal Cluster-Randomized Controlled Study on the Accumulating Effects of Individualized Literacy Instruction on Students’ Reading from First through Third Grade”. *Psychological Science*, 24, 1408–1419.
- Connor, C.M.; Phillips, B.M.; Kim, Y.; Lonigan, C.J.; Kaschak, M.P.; Crowe, E.; Dombek, J.; and Al Otaiba, S. (2018). “Examining the Efficacy of Targeted Component Interventions on Language and Literacy for Third and Fourth Graders Who Are at Risk of Comprehension Difficulties”. *Scientific Studies of Reading*, 22(6), 462-484.
- Cossi, J.; Dória, C.; Leal, O.; Lichand, G. (2021). “The Impacts of Remote Learning in Secondary Education: Evidence from Brazil during the Pandemic”. Education Division. Technical Note N°IDB-TN-02214. Washington, DC: Inter-American Development Bank.
- Cossi, J.; Dória, C.; Leal, O.; and Lichand, G. (2022). “Reopening Schools in the Pandemic Did Not Increase COVID-19 Cases or Deaths in Sao Paulo State, Brazil”. Education Division. Technical Note N°IDB-TN-02415. Washington, DC: Inter-American Development Bank.
- COVID-19 Excess Mortality Collaborators (2022). “Estimating Excess Mortality Due to the COVID-19 Pandemic: A Systematic Analysis of COVID-19-Related Mortality, 2020–21”, *The Lancet*, Published online: March 10, 2022.
- Crawford, M. and Oviedo M.E. (2022). “Early Grade Reading Rainbow: A Quick Guide to Ending Learning Poverty (English)”. Washington, D.C.: World Bank Group.
- Cunha, F.; Heckman, J.J.; Lochner, L.; and Masterov, D.V. (2006). “Chapter 12. Interpreting the Evidence on Life Cycle Skill Formation”. In E. Hanushek and F. Welch, editors. *Handbook of the Economics of Education*, 1(12): 697–812, Amsterdam: North-Holland.
- Cunha, F. and Heckman, J.J. (2007). “The Technology of Skill Formation”. *American Economic Review* 97(2) May: 31–47.
- Cunha, F. and Heckman, J. J. (2008). “Formulating, Identifying and Estimating the Technology of Cognitive and Noncognitive Skill Formation”. *Journal of Human Resources*, vol. 43, no. 4, 2008, pp. 738–82.
- Cunningham, W. and Villaseñor, P. (2016). “Employer Voices, Employer Demands, and Implications for Public Skills Development Policy Connecting the Labor and Education Sectors”. Policy Research Working Paper No. 7582. Washington, D.C.: The World Bank.
- Del Castillo, B. (2021). “*Colegios sin Internet Llegan a 2.680 en el País y Plan Busca Conectarlos de Aquí a 2022*” (Schools without Internet Reach 2,680 in the Country and Plan Seeks to Connect Them by 2022). May 28. *La Tercera Newspaper*.
- Delors, J; Amagi, I.; Carneiro, R.; Chung, F.; Geremek, B.; Gorham, W; Kornhauser, A.; Manley, M.; Padrón, M.; Savané M.; Singh, K.; Stavenhagen, R.; Won Suhr, M.; and Nanzhao, Z. (1996). “Learning: The Treasure Within”. Report

- to UNESCO of the International Commission on Education for the Twenty-first century. Paris: UNESCO.
- Duckworth, A.L.; Peterson, C.; Matthews, M.; and Kelly, D. (2007). "Grit: Perseverance and Passion for Long-Term Goals". *Journal of Personality and Social Psychology*, 92(6), 1087.
- Duckworth, A.L. and Seligman, M.E.P. (2005). "Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents". *Psychological Science* 16(12). 939–944.
- Durlak, J.; Weissberg, R.; Dymnicki, A.; Taylor, R.; and Schellinger, K. (2011). "The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions". *Child development* 82(1). 405-432.
- Elacqua, G.; Hincapié, D.; Vegas, E.; and Alfonso, M. (2018). "*Profesión: Profesor en América Latina, ¿Por qué se Perdió el Prestigio Docente y Cómo Recuperarlo?*" (Profession: Teacher in Latin America, Why Teacher's Prestige Has Decayed and How to Regain It?). Washington, DC. Inter-American Development Bank.
- Ertem, Z.; Schechter-Perkins, E.; Oster, E.; Van den Berg, P.; Epshtein, I.; Chaiyakunapruk, N.; Wilson, F.; Perencevich, E.; Pettey, W.; Branch-Elliman, W.; and Nelson, R. (2021). "The Impact of School Opening Model on SARS-CoV-2 Community Incidence and Mortality". *Nature Medicine*, Volume 27.
- Estrada, R. and Lombardi, M. (2020). "Skills and Selection into Teaching: Evidence from Latin America". Caracas: CAF.
- European Commission (2019). "The 2018 International Computer and Information Literacy Study (ICILS) – Main Findings and Implications for Education Policies in Europe". Luxembourg: Publications Office of the European Union.
- European Schoolnet (2021). "Recovery and Resilience Plans for Education: Agile Collection of Information", Brussels, Belgium.
- Faria, A.M.; Sorensen, N.; Heppen, J.; Bowdon, J.; Taylor S.; Eisner, R.; and Foster, S. (2017). "Getting Students on Track for Graduation: Impacts of the Early Warning Intervention and Monitoring System after One Year". American Institutes for Research.
- Feijao, C.; Flanagan, I.; Van Stolk, C.; and Gunashekar S. (2021). "The Global Digital Skills Gap: Current Trends and Future Directions". Santa Monica, CA: RAND Corporation.
- Friedman, H. S.; Kern, M. L.; and Reynolds, C. A. (2010). "Personality and Health, Subjective Well-Being, and Longevity". *Journal of Personality*, 78(1), 179-216.
- Fuchs, D. and Fuchs, L. S. (2006). "Introduction to Response to Intervention: What, Why and How Valid is It?". *Reading Research Quarterly*. 41(1) 93–99.
- Fukumoto, K.; McClean, C.; and Nakagawa, K. (2021). "No Causal Effect of School Closures in Japan on the Spread of COVID-19 in Spring 2020". *Nature Medicine*, Volume 27.
- Fundação Lemann (2021). "*O Impacto da Pandemia na Alfabetização no Brasil*" (The Impact of the Pandemic on Education in Brazil). Press News published at <https://fundacaolemann.org.br/noticias/o-impacto-da-pandemia-na-alfabetizacao-no-brasil>.
- Galloway, T.; Lippman, L.; Burke, H.; Diener, O.; and Gates, S. (2017). "Measuring Soft Skills and Life Skills in International Youth Development Programs: A Review and Inventory of Tools". Washington, DC: USAID's YouthPower Implementation IDIQ- Task Order 1, YouthPower Action.
- García, S.; Maldonado, D.; Llanes, L.M.; and Rodríguez, M. (2021). "*Desigualdad en la Educación en Colombia durante el COVID-19*" (Inequality in Education in Colombia during COVID-19). Universidad de los Andes and Fundación Barco.
- García, S.; Maldonado, D.; Perry, G.; Rodríguez, C.; and Saavedra, J. E. (2014). "*Tras la Excelencia Docente: Cómo Mejorar la Educación de Todos los Colombianos*" (Seeking Teaching Excellency: How to Improve Education Quality for all Colombians). Fundación Compartir, Punto Aparte.
- GEEAP (2020). "Cost-Effective Approaches to Improve Global Learning. What Does Recent Evidence Tell Us Are "Smart Buys" for Improving Learning in Low- and Middle-Income Countries?". Recommendations of the Global Education Evidence Advisory Panel [K. Akyeampong, T. Andrabi, A. Banerjee, R. Banerji, S. Dynarski, R. Glennerster, S. Grantham-McGregor, K. Muralidharan, B. Piper, J. Saavedra, S. Schmelkes, and H. Yoshikawa]. Washington D.C.: The World Bank Group; London: The Foreign, Commonwealth, and Development Office; and Building Evidence in Education (BE2).
- GEEAP (2022). "Prioritizing Learning during COVID-19: The Most Effective Ways to Keep Children Learning during and Post-Pandemic". Global Education Evidence Advisory Panel [K. Akyeampong, T. Andrabi, A. Banerjee, R. Banerji, S. Dynarski, R. Glennerster, S. Grantham-McGregor, K. Muralidharan, B. Piper, S. Ruto, J. Saavedra, S. Schmelkes, and H. Yoshikawa]. Washington D.C., London, Florence: The World Bank, FCDO, and UNICEF Office of Research - Innocenti.
- Haimovich, F.; Vázquez, E.; and Adelman, M. (2021). "Scalable Early Warning Systems for School Dropout Prevention: Evidence from a 4.000-School Randomized Controlled Trial". Policy Research Working Paper; No. 9685. World Bank, Washington, DC: The World Bank Group.
- Heckman, J.J. and Kautz, T. (2012). "Hard Evidence on Soft Skills". *Labour Economics* 19(4). 451-464.

- Heckman, J.J. and Kautz, T. (2013). "Fostering and Measuring Skills: Interventions that Improve Character and Cognition". National Bureau of Economic Research (NBER) Working Paper 19656. Cambridge, MA: National Bureau of Economic Research.
- Heckman, J.J. and Rubinstein, Y. (2001). "The Importance of Noncognitive skills: Lessons from the GED Testing Program". *American Economic Review* 91(2). 145-149.
- Heckman, J. J.; Stixrud, J.; and Urzúa, S. (2006). "The Effects of Cognitive and Noncognitive Abilities on Labour Market Outcomes and Social Behavior". *Journal of Labour Economics*, 24(3): 411-482.
- Herrera, L.; Buitrago, R.; Lorenzo, O.; and Badaea, M. (2015). "Socio-Emotional Intelligence in Colombian Children of Primary Education". *An Analysis in Rural and Urban Settings*. *Procedia-Social and Behavioral Sciences* 203. 4-10.
- Herrero-Tejada, A.; Flórez, A.; Stanton, S.; and Fiszbein, A. (2020). "*Cambios e Innovación en la Práctica Docente en la Crisis del COVID-19*" (Changes and Innovation in the Teaching Practice during the COVID-19 Crisis). Inter-American Dialogue and Teach for All.
- Herrero-Tejada, A.; López, M.; Finoli, M.; Hevia, F.; Stanton, S.; and Fiszbein, A. (2022). "*Evaluación en Pandemia: ¿Cómo Diagnosticamos las Pérdidas de Aprendizajes para Informar los Esfuerzos de Recuperación?*" (Pandemic Evaluation: How to Diagnose Learning Losses to Inform Recovery Efforts). Inter-American Dialogue.
- Hevia, F. J.; Vergara-Lope, S.; Velásquez-Durán, A.; and Calderón, D. (2022). "Estimation of the Fundamental Learning Loss and Learning Poverty Related to COVID-19 Pandemic in Mexico." *International Journal of Educational Development*.
- Hoskins, B. and Liu, L. (2019). "Measuring Life Skills in the Context of Life Skills and Citizenship Education in the Middle East and North Africa". United Nations Children's Fund (UNICEF) and the World Bank.
- Hu, D.; Zhang, H.; Sun, Y.; and Li, Y. (2021). "The Effects of the Measures against COVID-19 Pandemic on Physical Activity among School Aged Children and Adolescents (6-17 years) in 2020: A Protocol for Systematic Review". *PLoS ONE* 16(7): e0255520.
- IAD (2021a). "*El Uso de la Tecnología para Innovar la Práctica Docente: Retos y Lecciones Aprendidas en la Pandemia*" (The Use of Technology to Innovate in Teaching Practices: Challenges and Lessons Learned during the Pandemic). The Inter-American Dialogue. Washington, DC.
- IAD (2021b). "*El Estado de la Conectividad Educativa en América Latina - Desafíos y Oportunidades Estratégicas*" (The State of Educational Connectivity in Latin America - Challenges and Strategic Opportunities). The Inter-American Dialogue. Washington, DC.
- IDB (2020). "*Iniciativas de Alimentación Escolar durante la Emergencia Sanitaria*" (School Feeding Initiatives during the Health Emergency). Washington, DC: Inter-American Development Bank.
- IDB (2022). "How to Reboot Education Post-Pandemic - Delivering on the Promise of a Better Future for Youth". Washington, DC: Inter-American Development Bank.
- ITA (2021). "Measuring the Impact of COVID-19 on Education in Pakistan"; Idara-e-Taleem-o-Aagahi (Centre of Education and Consciousness), Lahore: Pakistan.
- IMF (2021). World Economic Outlook Database.
- INEEd (2021). "*Aristas 2020. Primer Informe de Resultados de Tercero y Sexto de Educación Primaria*" (Aristas 2020. First Report with Results for Third and Sixth Grades). Instituto Nacional de Evaluación Educativa, Uruguay.
- Ismail, S.; Saliba V.; Lopez Bernal, J.; Ramsay, M.E.; and Ladhani, S. (2021). "SARS-CoV-2 Infection and Transmission in Educational Settings: A Prospective, Cross-Sectional Analysis of Infection Clusters and Outbreaks in England". *The Lancet*, Vol.21, pp. 344-353.
- Jisc (2014). "Developing Digital Literacies". Online Guide, available at <https://www.jisc.ac.uk/guides/developing-digital-literacies>.
- J-PAL Abdul Latif Jameel Poverty Action Lab. (2019). "Tailoring Instruction to Students' Learning Levels to Increase Learning". J-PAL Policy Insights.
- Jiménez, J. E.; Gutiérrez, N.; and de León, S. C. (2020). "Universal Screening for Prevention of Reading, Writing, and Math Disabilities in Spanish". *Journal of Visualized Experiments: JoVE*, (161), 10.3791/60217.
- Jones, S.; Bailey, R.; Brush, K.; and Nelson, B. (2019). "Introduction to the Taxonomy Project: Tools for Selecting and Aligning SEL Frameworks". Frameworks Briefs Comparative Series No 1, Measuring SEL.
- Jones, S.; Bailey, R.; Brush, K.; Nelson, B.; and Barnes, S. (2016). "What is the Same and What is Different? Making Sense of the «Non-Cognitive» Domain: Helping Educators Translate Research into Practice". Harvard Graduate School of Education.
- Kattan, R. and Székely M. (2017). "Analyzing Upper Secondary Education Dropout in Latin America through a Cohort Approach". *Journal of Education and Learning*. Vol.6, No. 4.
- Kim, J.; Rose, P.; Tiruneh, D.T.; Sabates, R.; and Woldehanna, T. (2021). Blog: "Learning Inequalities Widen Following COVID-19 School Closures in Ethiopia".
- Larraín, E. (2021). "*Sistema de Alerta Temprana - Ministerio de Educación - Gobierno de Chile*" (Early Warning System - Ministry of Education - Government of Chile). Presentation delivered at the "Recovering Schooling and Learning After COVID-19 in LAC Series #1 - Early Warning

- Systems” Webinar organized by the Inter-American Dialogue, December 14.
- Lewis, K.; Kuhfeld, M.; Ruzek, E.; and McEachin, A. (2021). “Learning during COVID-19: Reading and Math Achievement in the 2020-21 School Year”. Center for School and Student Progress. Nwea Research.
- Lippman, L.; Anderson Moore, K.; Guzman, L.; Ryberg, R.; McIntosh, H.; Ramos, M.; Caal, S.; Carle, A.; and Kuhfeld, M. (2014). “Flourishing Children: Defining and Testing Indicators of Positive Development”. Springer Science and Business Media.
- Lopes, P. N.; Brackett, M. A.; Nezek, J. B.; Schütz, A.; Sellin, I.; and Salovey, P. (2004). “Emotional Intelligence and Social Interaction”. *Personality and Social Psychology Bulletin*, 30(8), 1018-34.
- Loureiro, A.; Cruz, L.; Lautharte, I.; and Evans, D. (2020). “The State of Ceará in Brazil is a Role Model for Reducing Learning Poverty”. The World Bank.
- Loureiro, A.; Di Gropello, E.; and Arias, O. (2020). “There is No Magic: The formula for Brazil's Ceará and Sobral Success to Reduce Learning Poverty”. World Bank. Blogpost
- Luna-Bazaldúa, D.; Levin, V.; and Liberman, J. (2020). “Guidance Note on Using Learning Assessment in the Process of School Reopening”. Washington, DC: The World Bank.
- Malala Fund (2020). “Girls’ Education and COVID-19. What Past Shocks Can Teach Us About Mitigating The Impact of Pandemics”. Malala Fund.
- Maldonado, J.E. and De Witte, K. (2021). “The Effect of School Closures on Standardized Student Test Outcomes”. *British Educational Research Journal*. Vol 48, No 1, February 2022, pp. 49-94
- Malouff, J. M.; Thorsteinsson, E. B.; and Schutte, N. S. (2005). “The Relationship Between the Five-Factor Model of Personality and Symptoms of Clinical Disorders: A Meta-Analysis”. *Journal of Psychopathology and Behavioral Assessment*, 27(2), 101-114.
- Mateo-Díaz, M. and Rodríguez-Chamussy, L. (2016). “Cashing in on Education: Women, Childcare, and Prosperity in Latin America and the Caribbean”. *Latin American Development Forum*.
- Mancebo, M.E. and Vaillant, D. (2022). “*Programas de Recuperación de Aprendizajes: Evaluación de la Evidencia y el Potencial para América Latina*” (Learning Recovery Programs: An Assessment of the Evidence and the Potential for Latin America). Washington DC: Inter-American Dialogue.
- Martins, A.; Ramalho, N.; and Morin, E. (2010). “A Comprehensive Meta-Analysis of the Relationship between Emotional Intelligence and Health”. *Personality and Individual Differences*, 49(6), 554-564.
- Meinck, S.; Fraillon, J.; and Strietholt, R. (2022). “The Impact of the COVID-19 Pandemic on Education - International Evidence from the Responses to Educational Disruption Survey (REDS)”. UNESCO
- McCoy, D. C.; Cuartas, J.; Behrman, J.; Cappa, C.; Heymann, J.; López Bóo, F.; Lu, C.; Raikes, A.; Richter, L.; Stein, A.; and Fink, G. (2021). “Global Estimates of the Implications of COVID-19-Related Preprimary School Closures for Children’s Instructional Access, Development, Learning, and Economic Well-being”. *Child Development*, 92(5), e883-e899.
- MINEDUC-Chile (2020). “*Deserción Escolar: Factores de Riesgo y Prácticas de Prevención en Contexto de Pandemia* (School Drop-Out: Risk Factors and Prevention Practices in the Context of the Pandemic)”. Ministry of Education of Chile, Research Unit.
- MINEDUC-Chile and WBG (2022). “*Sistematización y Revisión de la Experiencia de Chile para las Políticas y Medidas Educativas en el Contexto de la Pandemia*” (A Systematization and Revision of the Chilean Experience with Education Measures and Policies in the Pandemic Context).
- Mourshed, M.; Chijioke, C.; and Barber, M. (2010). “How the World’s Most Improved School Systems Keep Getting Better”. New York, N.Y.: McKinsey and Company.
- Mulhern, C. (2020). “Beyond Teachers: Estimating Individual Guidance Counselors’ Effects on Educational Attainment”.
- Muñoz-Najar, A.; Gilberto, A.; Hasan, Amer; Cobo, C.; Azevedo, J. P.; and Akmal, M. (2021). “Remote Learning during COVID-19: Lessons from Today, Principles for Tomorrow”. Washington, D.C.: World Bank Group.
- Näslund-Hadley, E.; Hernandez-Agramonte, J.M.; Montaña, K.; Namen, O.; Alpizar, G.; Luna, U.; Ochoa Foschini, L.; Rodríguez, J.F.; Peña de Osorio, B.; Biehl, L.; Maragall, J.; Mendez, C.; and Thomson, J. (2020). “Remote Initial Education and Mental Health during the COVID-19 Pandemic”. Washington, DC: Inter-American Development Bank.
- Nores, M.; Figueras-Daniel, A.; Lopez, M.A.; and Bernal, R. (2018). “Implementing aeioTU: Quality Improvement Alongside an Efficacy Study - Learning while Growing”. *Annals of the New York Academy of Sciences: Special Issue Implementation Research and Practice for Early Childhood Development*. 1419 (2018) 201–217
- Nugroho, D.; Youngkwang, J.; Akito, K.; and Lopez, F. (2021). “It’s Not Too Late to Act on Early Learning: Understanding and Recovering from the Impact of Pre-Primary Education Closures during COVID-19”. *Innocenti Research Briefs* no. 2021-03.
- O’Connor, E.P and Witter Freeman, E. (2012). “District-Level Considerations in Supporting and Sustaining RTI

- Implementation". *Psychology in the Schools*, Vol. 49(3), Wiley Periodicals, Inc.
- OECD (2015). "Skills for Social Progress: The Power of Social and Emotional Skills", OECD Skills Studies, OECD Publishing, Paris
- OECD (2016a). Country Profile: Argentina.
- OECD (2016b). Country Profile: Mexico.
- OECD (2019). PISA 2018 Results. What School Life Means for Students' Lives. Volume III. OECD Publishing, Paris.
- OECD (2020a). PISA 2018 Results. Effective Policies, Successful Schools. Volume V. OECD Publishing, Paris.
- OECD (2020b). "Learning Remotely When Schools Close. Insights from PISA". OECD Publishing, Paris.
- OECD (2021). "Education in Brazil: An International Perspective". OECD Publishing, Paris.
- Ontario Ministry of Education (2013). "Learning for All – A Guide to Effective Assessment and Instruction for All Students, Kindergarten to Grade 12". [Ebook] (1st ed., pp. p. 11-24).
- Ospino, C. (2019). "*El Rol de las Habilidades Socioemocionales para la Productividad en los Mercados Laborales del Siglo XXI*" (The Role of Socio-Emotional Skills on Labor Markets' Productivity in the XXI Century). Technical Note No. IDB-TN-1687. Washington, D.C.: Inter-American Development Bank.
- Páez, J. and Castillo D. (2021). "*Estrategia para el Acceso y la Permanencia Educativa de Niños y Niñas*" (Strategy for Boys and Girls' Educational Access and Retention). Todos al Cole. Juntos Construimos Futuro.
- Perera, M., and Aboal, D. (2019). "The Impact of a Mathematics Computer-Assisted Learning Platform on Students' Mathematics Test Scores". Maastricht Economic and Social Research Institute on Innovation and Technology.
- Perifanou, M.; Economides, A.; and Tzafilkou, K. (2021). "Teachers' Digital Skills Readiness during COVID-19 Pandemic". *International Journal of Emerging Technologies in Learning (ijET)* – eISSN: 1863-0383 – Vol. 16, No. 08.
- Perusia, J.C. and Cardini, A. (2021). "*Sistemas de Alerta Temprana en la Educación Secundaria: Prevenir el Abandono Escolar en la Era del COVID-19*" (Early Warning Systems for Secondary Education: Preventing School Drop-Out in COVID-19 Times); Centro de Implementación de Políticas Públicas para la Equidad y el Crecimiento (Center for the Implementation of Public Policies for Equity and Growth - CIPPEC): Documento de Políticas Públicas (Public Policy Documents) #233, September 2021.
- Prada, M.F.; Rucci, G.; and Urzúa, S. (2019). "Training, Soft Skills and Productivity: Evidence from a Field Experiment in Retail". IDB Working Paper Series No. IDB-WP-1015. Washington, D.C.: Inter-American Development Bank.
- Pratham. (2021). "Annual Status of Education Report".
- Racine N.; McArthur B.A.; Cooke J.E.; Eirich R.; Zhu J.; and Madigan S. (2021). "Global Prevalence of Depressive and Anxiety Symptoms in Children and Adolescents During COVID-19: A Meta-Analysis". *JAMA Pediatr.* 2021;175(11):1142–1150.
- Ramírez, M.J., and Valverde, G.A. (2021). "How to Ensure the Validity of National Learning Assessments? Priority Criteria for Latin America and the Caribbean". In: Manzi, J.; García, M.R.; and Taut, S. (eds.). *Validity of Educational Assessments in Chile and Latin America*. Springer, Cham.
- Rieble-Aubourg, S. and Viteri, A. (2020). "COVID-19: Are We Prepared for Online Learning?". CIMA Brief, No. 20, Washington, D.C., Inter-American Development Bank.
- Ripani, F. (2020). "*Uruguay: Ceibal en Casa*" (Ceibal at Home). Education Continuity Stories Series, OECD Publishing, Paris.
- Rodrigues Da Cruz Boari, L. and Crawford, M., (2022). "The Science of Reading in Practice: An Analysis of Instructional Materials for Literacy in Selected States and Municipalities in Brazil". Washington, D.C: The World Bank Group.
- Romero, C.; Krichesky, G.; and Zacarías, N. (2021). "*Escuelas WhatsApp y Escuelas Zoom. Desigualdad y Segregación Educativa durante la Pandemia COVID 19 en Argentina*" (WhatsApp Schools and Zoom Schools. Education Inequality and Segregation during the COVID-19 Pandemic in Argentina). Working Document N°10, Escuela de Gobierno Universidad Torcuato di Tella (UTDT).
- Sánchez-Álvarez, N.; Extremera, N.; and Fernández-Berrocal, P. (2016). "The Relation Between Emotional Intelligence and Subjective Well-Being: A Meta-Analytic Investigation". *The Journal of Positive Psychology*, 11(3), 276-285.
- São Paulo Education Secretariat (2021). "*O Impacto da Pandemia na Educação - Avaliação Amostral da Aprendizagem dos Estudantes*" (The Impact of the Pandemic on Education - Sampling Assessment of Student Learning). Ministry of Education. Presentation available at Ministry's website.
- Sartori, M. (2021); "*Programa Brasil Na Escola – Ministerio de Educação - Brasil*" (Brazil at School Program – Ministry of Education – Federal Government of Brazil). Presentation delivered at the "Recovering Schooling and Learning After COVID-19 in LAC Series #1 – Early Warning Systems" Webinar organized by the Inter-American Dialogue, December 14.
- Skovgaard Jensen, S. and Reimer, D. (2021). "The Effect of COVID-19-Related School Closures on Students' Well-Being: Evidence from Danish Nationwide Panel Data". *SSM - Population Health*. Volume 16, December 2021, 100945.

- Stampini, M. and Tornarolli, L. (2012). "The Growth of Conditional Cash Transfers in Latin America and the Caribbean: Did They Go Too Far?". Inter-American Development Bank.
- Stuart, E.A. and Dowdy, D. (2021). "Evidence-Based COVID-19 Policy-Making in Schools". News and Views.
- Tanaka, N.; Holla, A.; Pan, Y.; and Takeda, N. (2021). "Measuring the Cost of School Re-Opening and Learning Recovery". Unpublished Manuscript. Washington, D.C.: The World Bank Group.
- Todos pela Educação (2021) "*Nota Técnica: Taxas de Atendimento Escolar* (Technical Note – School Attendance Notes)". Technical Note.
- Tomasik, M.; Helbling, L.; and Moser, U. (2021). "Educational Gains of In-Person vs. Distance Learning in Primary and Secondary Schools: A Natural Experiment during the COVID-19 Pandemic School Closures in Switzerland" *International Journal of Psychology*, Vol.56 (4): pp.566-576.
- Trucco, D. and Palma, A. (2020). "Childhood and Adolescence in the Digital Age. A Comparative Report of the Kids Online surveys on Brazil, Chile, Costa Rica, and Uruguay". Project Documents (LC/TS.2020/18.REV.1), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC).
- UNESCO (2019). "Recommendations on Assessment Tools for Monitoring Digital Literacy within UNESCO's Digital Literacy Global Framework". UNESCO Institute for Statistics.
- UNESCO (2020). "COVID-19 Education Response: How Many Students Are at Risk of Not Returning to School? Advocacy Paper". UNESCO Digital Library.
- UNESCO (2021); "Uneven Global Education Stimulus Risks Widening Learning Disparities". Program and Meeting Document.
- UNESCO and UNICEF (2020). "In-Person Schooling and COVID-19 Transmission: A Review of the Evidence".
- UNESCO, UNICEF, and WBG (2021c). "COVID-19 Learning Losses: Rebuilding Quality Learning for All in the Middle East and North Africa". UNESCO, Paris, UNICEF, New York, and World Bank, Washington, DC. © World Bank.
- UNESCO, UNICEF, WBG, and OECD (2021a). "What's Next? Lessons on Education Recovery: Findings from a Survey of Ministries of Education amid the COVID-19 Pandemic". Paris, New York, Washington D.C.: UNESCO, UNICEF, World Bank.
- UNESCO, UNICEF, WBG, and OECD (2021b). Survey on National Education Responses to COVID-19 School Closures, Round 3. Paris, New York, Washington D.C.: UNESCO, UNICEF, World Bank, OECD.
- UNESCO, UNICEF, WBG, World Food Programme, and UNHCR. (2021). "Framework for Reopening Schools Supplement: From Reopening to Recovery - Key Resources".
- UNESCO-OREALC (2020). "*¿Qué se Espera que Aprendan los Estudiantes de América Latina y el Caribe? Análisis Curricular ERCE 2019*" (What is Expected that Students from Latin America and the Caribbean Learn? ERCE 2019's Curricular Analysis). Santiago, Chile: UNESCO-OREALC (Regional Office for Latin America and the Caribbean).
- UNESCO-OREALC (2021a). "Assessment of Socioemotional Skills among Children and Teenagers of Latin America: Framework for the ERCE 2019 Module Work." Santiago, Chile: UNESCO-OREALC (Regional Office for Latin America and the Caribbean).
- UNESCO-OREALC (2021b). "*Los Aprendizajes Fundamentales en América Latina y el Caribe - Evaluación de Logros de los Estudiantes - ERCE 2019 - Resumen Ejecutivo*" (Foundational Learning in Latin America and the Caribbean – Assessment of Learning Outcomes – ERCE 2019 – Executive Summary). Santiago, Chile: Regional Office for Latin American and the Caribbean (OREALC).
- UNESCO-OREALC (2021c). "*Resultados Regionales: Habilidades Socioemocionales en América Latina y el Caribe: Estudio Regional Comparativo y Explicativo (ERCE 2019)*" (Regional Results: Socioemotional Skills in Latin America and the Caribbean: ERCE 2019). Santiago, Chile: UNESCO-OREALC (Regional Office for Latin America and the Caribbean).
- UNESCO-OREALC and UNICEF-LACRO (2022). "*Educación en América Latina y el Caribe en el Segundo Año de la COVID-19*" (Education in Latin America and the Caribbean in the Second Year of COVID-19). Santiago, Chile: UNESCO-OREALC (Regional Office for Latin America and the Caribbean).
- UNICEF (2019a). "Global Framework on Transferable Skills". UNICEF, New York.
- UNICEF (2019b). "Argentina: Every Child Learns. UNICEF Education Strategy 2019-2030". UNICEF, Argentina.
- UNICEF (2020). "Guidance on Distance Learning Modalities to Reach All Children and Youth During School Closures. Focusing on Low- and No-Tech Modalities to Reach the Most Marginalized". UNICEF, New York.
- UNICEF (2021a). "*El Impacto de la Pandemia COVID-19 en las Familias con Niñas, Niños y Adolescentes - Quinta ronda - Informe de resultados*" (The Impact of the COVID-19 Pandemic on Households with Female and Male Children and Adolescents - Fifth Round - Results Report).
- UNICEF (2021b). "COVID-19 and School Closures. One year of Education Disruption".
- UNICEF (2021c) "*Planea. Nueva Escuela para Adolescentes* (Planea. New School for Adolescents)". Technical Note.
- UNICEF (2021d). "Reopening With Resilience: Lessons from Remote Learning During COVID-19 – Latin America and the Caribbean". Innocenti Research Report.

- UNICEF (2021e). “The Importance of Transferable Skills Development in Latin America and the Caribbean”. Discussion Paper.
- UNICEF (2021f) “The State of the World’s Children 2021 – On My Mind: Promoting, Protecting and Caring for Children’s Mental Health”
- UNICEF and ITU (2020). “How many Children and Young People Have Internet Access at Home? Estimating Digital Connectivity during the COVID-19 Pandemic.” International Telecommunication Union, UNICEF, New York, 2020.
- UNICEF, UNESCO, and WBG (2022). “Where Are We on Education Recovery?”. United Nations Children’s Fund (UNICEF).
- UNICEF LACRO (2020). “Report: Education on Hold - A Generation of Children in Latin America and the Caribbean are Missing Out on Schooling because of COVID-19”. Panama: UNICEF’s Regional Office for the Latin America and the Caribbean (LACRO).
- Valverde, G.A.; Marshall, J.; and Soto, M.A. (2020). “*El Aprendizaje de Matemática en América Latina y el Caribe*” (Mathematics Learning in Latin America and the Caribbean). In Arias, A., Cristo, J., Cueto, S.: *Aprender Matemática en el Siglo XXI. A Sumar con Tecnología (Learning Mathematics in the XXI Century. Let’s Learn How to Add Using Technology)*. Washington DC: Inter-American Development Bank.
- Valverde, G.A. and Ramírez, M.J. (2021). “Contemporary Practices in the Curricular Validation of National Learning Assessments in Latin America: A Comparative Study of Cases from Chile, Mexico, and Peru”. In: Manzi, J.; García, M.R.; and Taut, S. (eds.) *Validity of Educational Assessments in Chile and Latin America*. Springer, Cham.
- Van de Vijver, F. and Tanzer, N. K. (2004). “Bias and Equivalence in Cross-Cultural Assessment: An Overview”. *Revue Européenne de Psychologie Appliquée/European Review of Applied Psychology*, 54, 119-135.
- Van Laar, E.; Van Deursen, A.; Van Dijk, J.; and De Haan, J. (2020). “Determinants of 21st-Century Skills and 21st-Century Digital Skills for Workers: A Systematic Literature Review”. SAGE Open.
- Whizz Education (2021). “Measuring the impact of COVID-19 on learning in rural Kenya”.
- Wilichowski, T. and Cobo, C. (2020). “From Coping to Improving and Accelerating: Supporting Teachers in the Pandemic and Beyond.” World Bank blog.
- WBG (2021a). “Acting Now to Protect the Human Capital of Our Children: The Costs of and Response to COVID-19 Pandemic’s Impact on the Education Sector in Latin America and the Caribbean”. World Bank, Washington, DC.
- WBG (2021b). “COVID-19 in LAC: High Frequency Phone Surveys - Technical Note”. World Bank, Washington, DC. © World Bank.
- WBG (2021c). “Encouraging Re-Enrollment”. April 2021.
- WBG (2021d). “Loud and Clear - Effective Language of Instruction - Policies for Learning”. Washington, DC: The World Bank Group.
- WBG (2022a). “Brazilian Human Capital Review”. Washington, DC: The World Bank Group. Unpublished Manuscript.
- WBG (2022b). “*Educación para Todos Preservando la Salud: Una Mirada al Funcionamiento de la Educación Pública a Distancia en República Dominicana en Aíempos de COVID-19*” (Education for All while Caring for Health: An Overview to Public Remote Learning Education in the Dominican Republic during COVID-19).
- WBG (2022c). “The Learning Crisis in Latin America and the Caribbean and the COVID-19 Pandemic: Sobering Results of a Deepening Trend”. Regional Note.
- WBG (forthcoming a). “Afro-Descendant Inclusion in Education. An Anti-Racist Agenda for Latin America”. Washington, DC: The World Bank Group. Unpublished Manuscript.
- WBG (forthcoming b). “The State of Global Learning Poverty: 2022 Update”. Washington, DC: The World Bank Group. Unpublished Manuscript.
- WBG, UNESCO and UNICEF (2021). *The State of the Global Education Crisis: A Path to Recovery*. Washington, D.C., Paris, New York: The World Bank Group, UNESCO and UNICEF.
- Zancajo, A.; Verger A.; and Bolea, P. (2022). “Digitalization and Beyond: The Effects of COVID-19 on Post-Pandemic Educational Policy and Delivery in Europe”. *Policy and Society*, Volume 41, Issue 1. Pages 111–128.
- Zimmerman, K.; Brookhart, A.; Kalu, I.; Boutzoukas, A.; McGann, K.; Smith, M.; Maradiaga, G.; Armstrong, S.; Weber, D.; Moorthy, G.; and Benjamin, D. (2021). “Community SARS-CoV-2 Surge and Within-School Transmission”. *Pediatrics* Volume 148, Issue 4.
- Zimmerman, K.; Akinboyo, I.; Brookhart, M.; Boutzoukas, A.; McGann, K.; Smith, M.; Maradiaga, G.; Armstrong, S.; Bristow, H.; Parker, D.; Zadrozny, S.; Weber, D.; and Benjamin, D. (2021) *Incidence and Secondary Transmission of SARS-CoV-2 Infections in Schools*. *Pediatrics*. 2021;147(4).



# Annexes



# Annex 1.1. Remote learning channels - strengths, limitations, and requirements



## Low-tech: Paper & printed material

### Strengths:

- Reach: Students without internet, electricity and devices can participate
- Inclusion of the poor and most vulnerable

### Strengths:

- Limited content delivered & requires a certain level of reading skills and subject mastery to use effectively.
- No or little two-way interaction between teachers and students
- Student comprehension difficult to assess
- Student engagement & attendance difficult to monitor

### Requirements to be effective:

- Frequent interactions with teachers & support from family members
- Frequent assessment on content
- Communication between household & school
- Efficient delivery of material & relevant content developed



## Low/medium-tech: Text messages & phone calls

### Strengths:

- Reach: Students without internet connection or computer can access materials on a frequent basis
- Allows for interaction between teachers and students
- Potential to complement one-way communication modalities easily

### Strengths:

- Limited learning material & content can be covered
- Little interactions & challenging to keep track of multiple messages
- Difficult to assess learning
- Limited individual student access to mobile or phone

### Requirements to be effective:

- Supplemental material for students to continue to be engaged
- Support from household members
- Requires access to mobile phone device & credit



## Low/medium-tech: TV and Radio

### Strengths:

- Reach: Students without internet or computer access can participate
- Frequency, accessibility, and potential for large content coverage
- Limited parental involvement required for consumption

### Strengths:

- One-way communication
- Limited tailoring of learning
- Student engagement & attendance difficult to monitor
- Student comprehension difficult to assess
- Risk excluding students without access to Radio & TV

### Requirements to be effective:

- Radio and TV Devices
- Recording of classes & relevant content
- Frequent interactions with teachers & support from household members
- Frequent assessments on content
- Complementary material



## High-tech: Online platforms

### Strengths:

- Wide range of functions to increase learning experience (adaptive software, tailoring of learning, various contents, two/multi way communication etc.)
- Provides learning flexibility for students
- Complement to virtual and face-to-face classroom learning
- Potential to facilitate monitoring of attendance, engagement, and learning

### Strengths:

- Exclusion of students without devices
- Connectivity challenges - access, costs and effectiveness
- In-person interaction missing

### Requirements to be effective:

- High tech devices & connectivity
- Systems with platform license and high level of management capacity
- Teacher trained on platform
- Teacher & student digital and socio-emotional skills
- Two/Multi-way communication solutions
- Monitoring of attendance, engagement and assessments of comprehension

## Annex 1.2: School Closure Tracker - Methodology

UNESCO's Global Monitoring of School Closures uses a 4-category classification for characterizing the closing of school systems (Fully closed, Partially Closed, Fully Open, and Academic Break). This methodology builds on UNESCO's breakdown by adding more variance to the definition of "partially closed" through the creation of 3 categories off the "Partially Closed" category, as follows: (i) a "Mostly Closed" category, which attempts to capture a situation where, on average, two-thirds or more (66%+) of the school system were closed on a given date; (ii) a "Partially Closed/Open" category, which comprise a so-called "average" situation where less than two-thirds, but more than one-third of the school system was closed (between 33% and 66% closed); and (iii) a "Mostly Open" category, which tries to describe a situation where the proportion of schools closed in the system is lower than one-third (33%- Closed).

To carry out such a categorization, this report consolidates three sources of data: (i) *UNESCO's Global Monitoring of School Closures* (<http://COVID19.uis.unesco.org/global-monitoring-school-closures-COVID19/>); (ii) *UNICEF's Monthly Monitoring of School Closures* (<https://www.unicef.org/lac/respuesta-educativa-de-alc-frente-al-COVID-19>); and (iii) *country-specific web research* (especially for dealing with data gaps, inconsistencies, school calendars, academic breaks, and/or simply to calculate shares of "partially closed", as per the methodology described below).

The methodology for data handling, including a detailed step-by-step description is included below:

### Step 1: Create Original Tracker with UNESCO's Database (4-Category Classification)

- Download UNESCO's database ("Global monitoring of school closures/ Data") (<https://en.unesco.org/COVID19/educationresponse#durationschoolclosures>).
- Select desired fields (Date, Country, Region, Status) and delete the rest
- Filter LAC countries (45 total)<sup>242</sup>

Filter LAC countries (45 total)			
Anguilla	Chile	Haiti	Saint Vincent and the Grenadines
Antigua and Barbuda (OECS)	Colombia	Honduras	Sint Maarten (Dutch part)
Argentina	Costa Rica	Jamaica	St. Martin (French part)
Aruba	Cuba	Mexico	Suriname
Bahamas	Curaçao	Montserrat	Trinidad and Tobago
Barbados	Dominica	Nicaragua	Turks and Caicos Islands
Belize	Dominican Republic	Panama	Uruguay
Bermudas	Ecuador	Paraguay	Venezuela
Bolivia	El Salvador	Peru	Virgin Islands (US)
Brazil	Grenada	Puerto Rico	
British Virgin Islands	Guatemala	Saint Kitts and Nevis	
Cayman Islands	Guyana	Saint Lucia (OECS)	

<sup>242</sup> The UNESCO database does not include Puerto Rico, St Martin (French Part), or the Virgin Islands. These countries are, however, listed along with others below for convenience and completion.

- Fix errors in dates. For example: errors in numeric dates (e.g. data downloaded in Feb 2022 for Uruguay, Saint Vincent and the Grenadines, Venezuela, British Virgin Islands).
- Filter out weekends. Assign numbers 1-7 for each weekday. Eliminate Saturday and Sundays. You should then have daily data per country.
- Assign a letter to each status (“Fully open”, “Partially open”, “Closed due to COVID-19”, and “Academic break”)
- Organize daily data in rows (1 row per country) for the period above. Place dates in columns and transpose the daily status for each country.

### **Step 2: Disaggregate “Partially Closed” Into Three Categories Using Unicef Monthly Monitoring Reports**

- Download UNICEF reports at <https://www.unicef.org/lac/respuesta-educativa-de-alc-frente-al-COVID-19>.
- Analyze the country-specific summaries, one by one, identifying the periods when schools were “partially closed”. Next, check in each report the school opening status attempt to re-classify the “partially closed” periods for the two extreme cases, i.e.
  - Mostly Closed: If less than 33% of schools were open
  - Mostly Open: if more than 66% of schools were open
- For the purposes of the new categorization, attempt to retrieve information on the share of total schools in the system that are closed. In the absence of data on share of total schools, use the share of students not attending face-to-face classes as a “proxy”.
- Record the information for each period (in a separate file) and then update the tracker.

### **Step 3: Fill in Gaps With Further Research**

- If a given country is not included in UNICEF reports, or if information on school closures – or number of students in face-to-face classes - is not reported there either, perform a country-specific web research, prioritizing official information from Ministries of Education’s websites. In the absence of official information, use secondary sources, like most important digital newspapers of the given country.
- Update tracker.

**STEP 4: Calculate the “share of effective school days” per category**

- Add all the days per category.
- Estimate the “effective school days” indicator using the total number of days minus the total days on academic break.
- Estimate the “share of effective school days” per category (see example below).

							% of effective days				
	Fully Closed	Mostly Closed	Partially Open/Closed	Mostly Open	Fully Open	Effective Days (without academic break)	Fully Closed	Mostly Closed	Partially Open/Closed	Mostly Open	Fully Open
Honduras	293	85	16	0	8	402	73	21	4	0	2
Venezuela	304	0	27	16	10	357	85	0	8	4	3
El Salvador	228	160	0	0	7	395	58	41	0	0	2
Panama	276	70	51	0	8	405	68	17	13	0	2
Mexico	268	25	56	0	15	364	74	7	15	0	4
Ecuador	200	185	0	0	9	394	51	47	0	0	2
Peru	172	192	0	0	10	374	46	51	0	0	3
Jamaica	139	138	19	0	9	305	46	45	6	0	3
Guatemala	165	158	63	0	10	396	42	40	16	0	3

## Annex 2.1. Compulsory Education Age for 45 countries in LAC

Compulsory Education Age for 45 countries in LAC						
3 to 16	3 to 17	3 to 18	4 to 11	4 to 15	4 to 16	4 to 17
Peru Saint Martin (French part)	Mexico	Venezuela (Bolivarian Republic of)	Barbados	Guatemala	Costa Rica Turks and Caicos Islands	Bolivia (Plurinational State of) Brazil Honduras Uruguay
4 to 18	5 to 8	5 to 11	5 to 12	5 to 14	5 to 16	5 to 17
Argentina Curaçao Sint Maarten (Dutch part)	Puerto Rico	Nicaragua	Suriname	Bahamas Belize Colombia Panama	Bermuda British Virgin Islands Dominica Grenada Guyana Montserrat Saint Kitts and Nevis Saint Lucia Saint Vincent and the Grenadines	Anguilla Antigua and Barbuda Cayman Islands Dominican Republic Ecuador Paraguay United States Virgin Islands
6 to 11	6 to 12	6 a 14	6 to 16	6 to 18		
Haiti Jamaica	Aruba	El Salvador Cuba	Trinidad and Tobago	Chile		

Note: As there is not available data for Saint Martin (French part), the French education system compulsory education age is reported in the table.  
Source: UNESCO, National Government data for each country.

## Annex 5.1. Flagship “remedial programs”: Characteristics and results

	Name of the program	Country	Characteristics	Promoter and implementation agency	Target population and coverage	Evidence
Catch-up Programs	Catch up Education Programme	Turkey	An integral program with students in groups, and 8 weeks of duration.	Turkish National Ministry of Education and UNICEF	Children and youth between 10 and 14 years.  Between years 2009-2010, the program covered 19,990 children in 61 provinces.	Study based on papers and interviews, with positive results on the program’s participants.
	Early Learners Programme	Members of the Organisation of Eastern and Caribbean States (OECS)	Catch up programs to improve language and lecture comprehension	USAID and OECS	Pre-school and school children until 8-9 years.  Between years 2015-2020, the program covered 73,000 children.	Impact evaluation based on control groups with results suggesting a 50% increase in reading.
Acceleration	Second Chance	Ethiopia	Program until 4th grade during 8 hours with an emphasis on reading, writing, and mathematics, in small groups.	Geneva Global Luminos Fund  Society alliances	Children and youth between 8 and 14 years.  Between years 2020-2021 the program covered 9,750 children and youth in the city of Addis Ababa.	Impact Evaluation, with positive evidence with respect to student’s transition to regular school.
	Acelera Brasil	Brazil	Program based on assessment diagnosis and in grouped students according to their learning level	Ayrton Senna Institute Ministry of Education	Children in 3rd to 5th grades in primary.  During years 2000-2020 the program covered more than 1 million children.	Results evaluation, with some indicators such as the number of read books, schooling attendance, and cooperation between teachers.
Tutoring	Llegim in parella	Spain	A program designed to improve reading comprehension based on tutoring between students and family support.	Education Sciences Institute in Universidad Autónoma de Barcelona	Children between 8 to 11 years  In 2011 the program covered 303 children.	Impact evaluation with ex-ante and ex-post data from the intervention, suggesting positive results for all students.
	Aula Global	Colombia	A program designed to improve reading and mathematics, through semi-personalized tutoring.	National Education Ministry Carvajal Foundation	Children from 2nd to 5th grades.  In the year 2020 the program covered 3,240 children in 36 educational institutions	Impact evaluation with ex-ante and ex-post data from the intervention, suggesting positive results for all students.

	Name of the program	Country	Characteristics	Promoter and implementation agency	Target population and coverage	Evidence
Teaching at the Right Level	TarL	India	Program based on developing basic mathematics and reading skills, by grouping students according to their learning level, tutoring, and follow-up.	Pratham ONG	Children in 3rd to 5th grades  Between years 2016-2017 the program covered 200,000 children.	Impact evaluation with positive results in reading.
	TarL	Mexico	Ludic- and community-based summer classes, designed to improve mathematics and reading, by grouping students according to their learning level.	MIA-CIESAS Universidad Veracruzana	Children and youth between 3 to 14 years.  Between years 2016-2020 the program covered 12,760 children and youth in Veracruz.	Impact evaluation with positive and statistically significant effects on learning for children who participated in the program.
Extended Pedagogical Schedule	Vacances apprenantes	France	School day extended program designed to improve learning, developed in summer camps.	National Education Ministry	Children and youth between 3 to 17 years.  In the year 2019 the program covered 60,000 children.	The evaluation shows positive outcomes in learning among participants.
	Jornada Extendida	Dominican Republic	Educational program of 8 hours daily designed to improve learning in different disciplines that are part of the curriculum with school-feeding and health services.	Ministry of Education	Children and youth from pre-primary, primary, and secondary.  In years 2017-2018 the program covered 1,162,849 children and youth.	The program evaluation does not show improvement in learning, but it does show improvement in socio-emotional skills.
Computer-assisted learning	Mindspark	India	A program based on a software that diagnoses wrong concepts and provides individualized content to help children in learning. It also supports teachers.	Mindspark	Children and youth in grades 1st to 10th (primary and secondary).  In 2018, the program covered 400,000 children.	Impact evaluation shows positive results in language and mathematics.
	Plataforma Adaptativa de Matemática (PAM)	Uruguay	A program based on individualized learning according to the skill level of each student.	Centro Ceibal	Children and youth in primary and secondary  Between years 2013-2016 PAM was used by half the children in 3rd to 6th grade in primary education.	A longitudinal study presented positive results in learning in mathematics for primary students.

Source: Mancebo and Vaillant (2022).

## Annex 5.2

### Box A.5.2. Digital competencies frameworks and assessments: A priority for post-pandemic times

A relevant lesson learned during the pandemic is related to the digital competencies' frameworks, crucial for assessing the abilities needed for an effective use of education digital platforms, for safe interactions in the digital world, and for selecting, curating, and producing digital contents for educational purposes. The *Working Group on Technology and Innovation in Education*, led by the Inter-American Dialogue, identified two main priorities in this area: (1), working for the consensus on a single, regional framework on competencies, on the basis of the current ones, to define what digital skills are needed by professional teachers, and train them accordingly; (2), developing a in-service teacher training plan, prioritizing strategies on the basis of the common regional competencies framework, including self-evaluation tools for teachers to identify their most relevant needs, tools for the creation of peer learning communities, and strategies for the certification of digital abilities.

There are several examples and models to follow for the elaboration of digital competencies framework. In Latin America, there are some good practices. Chile has developed, since 2011, the *Competencias para la Profesión Docente* (Competencies for the Teaching Profession), which defines the digital skills expected for teachers at the national level. It organizes the competencies in five dimensions (Pedagogical, Technical, Management, Social/Ethical/Legal, and Professional Development and Accountability). For each dimension, the framework includes specific competencies, descriptors associated to each competency, the required knowledge for the tasks included in the descriptors, and fields where the described knowledge applies. Colombia, in 2013, published the *Competencias TIC para el Desarrollo Profesional Docente* (ICT Competencies for Teacher Professional Development), that define competencies in five dimensions (technological, pedagogical, communicational, managerial and research), establishing for each dimension the performance profiles: explorer, integrator, and innovator.

Beyond the Latin American region, a comprehensive review of digital skills framework has been conducted by World Bank (Bashir and Miyamoto, 2020). The European Union DigComp identifies five areas (information and data literacy; communication and collaboration; digital content creation; safety; problem solving) and 21 competencies. For each competence, 8 proficiency levels are outlined, grouped in turn under four profiles: Foundational, Intermediate, Advanced and Highly Specialized. UNESCO's Institute of Statistics adapted this framework in 2018, adding device and career related competences. (Bashir and Miyamoto, 2020). UNESCO has also elaborated a set of recommendations on assessment tools for measuring digital skills, reviewing the advantages and disadvantages of different types of evaluation strategies: performance type assessments (in which individuals are monitored while performing digital tasks and solving problems in digital context), knowledge bases assessments (in which individuals respond test items) and self-assessments, where individual auto-administer questionnaires designed to self-diagnose areas for strengthening (UNESCO, 2019)

Other relevant efforts, particularly relevant to the education field, are the Digital Competence Framework for Educators (DigCompEdu), that describes a concept of “digitally competent teacher” (<https://ec.europa.eu/jrc/en/dig-compedu>); the ISTE Standards for Educators, promoted by the International Society for Technology in Education to guide students in the development of digital skills (<https://www.iste.org/standards/for-educators>); and ICILS, the International Computer and Information Literacy Study, designed to measure “students’ ability to use computers to investigate, create, and communicate in order to participate effectively at home, at school, and in their communities” (<https://www.iea.nl/icils>).







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The COVID-19 pandemic caused the LAC region to suffer a triple curse. It was the region with the largest number of COVID-19-related deaths per million people. It was also the region with the largest economic downturn and with the worst medium-term economic prospects. Last but not least, it was among the top regions with the longest spells of school closures to date.

The pandemic has had a sizeable impact on learning outcomes and skills development, eroding the already weak foundations of LAC's education systems. It is estimated that the average student in LAC lost, to date, between 1 and 1.8 years of schooling, adjusted by learning. Average primary education scores in reading and math could have fallen to levels of more than 10 years ago.

The main policy recommendation is simple: recovery must focus on two essential strategies, returning to schooling and recovering from learning losses. This dual agenda should focus on four key commitments: (a) placing the education recovery at the top of the public agenda; (b) reintegrating all the children that abandoned school and ensure they stay in it; (c) recovering lost learning and ensure the socio-emotional well-being of children; and (d) valuing, supporting, and training teachers.