

# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

April 2022

## Main Messages

- *The Latin America and the Caribbean (LAC) region was suffering from a deep learning crisis, before the COVID-19 outbreak, with most students being below minimum proficiency levels for critical foundational competencies in numeracy and literacy, according to the Fourth Regional Comparative and Explanatory Study (ERCE)<sup>1</sup>.*
- *The pandemic that hit the region in March 2020 led to a massive shutdown of educational systems, placing LAC as the region with the longest duration of school closures in the world.*
- *The impact of school closures on education service delivery was significant. The forced move to distance learning negatively impacted attendance in the education process, both when compared to enrollment rates (-10 percent) and with pre-pandemic attendance rates (-12 percent). Most worryingly, 1 in 4 students attending the education process during the pandemic confirmed being disengaged from learning activities while at home.*
- *The COVID-19 led to a crisis within a crisis, deepening pre-existing inequalities that characterize the LAC region, as the most vulnerable populations were disproportionately affected. A significant increase in drop-out rates and decrease in learning outcomes is expected, especially for these groups and countries which were already not doing well pre-pandemic.*
- *There is a sizeable schooling and learning recovery agenda ahead of LAC, where re-enrollment campaigns, standardized and in-classroom assessments, and programs to teach to the right level will be fundamental to determine the exact depth of educational losses and start recovering.*

\* This note was prepared by Juan Diego Alonso, Juliana Chen Peraza, María José Ramírez, Erika Schutt, María José Vargas Mancera, and Mónica Yáñez Pagans (Education Practice, World Bank). The authors are grateful for comments from Marcela Meléndez, Adriana Camacho, Pablo Hernández, and Laura Tenjo from the United Nations Development Programme's (UNDP).

<sup>1</sup> See UNESCO (2021); 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), available at [https://en.unesco.org/sites/default/files/resumen-ejecutivo-informe-regional-logros-factores-erce2019.pdf\\_o.pdf](https://en.unesco.org/sites/default/files/resumen-ejecutivo-informe-regional-logros-factores-erce2019.pdf_o.pdf).

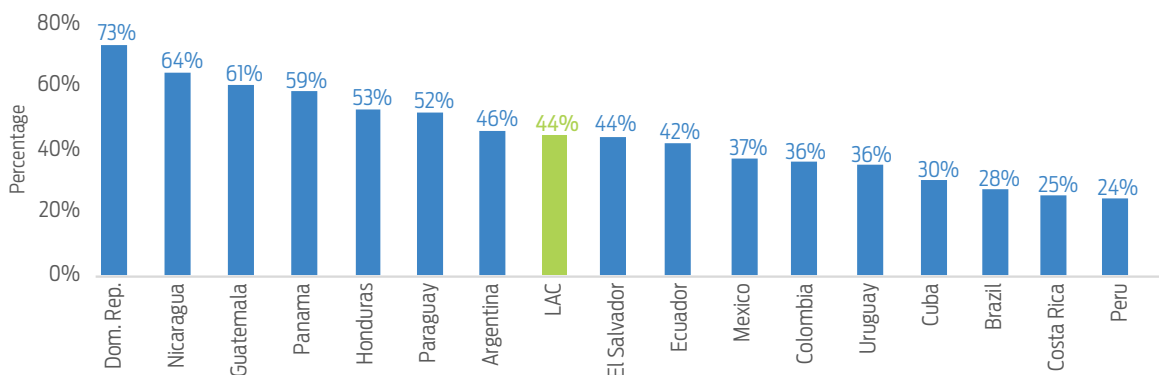
# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

April 2022

## A. The critical state of education systems in LAC before the pandemic

**The recent results from ERCE confirm the deep learning crisis that was taking place in the region before the outbreak of the pandemic.** ERCE measures standardized learning outcomes of students in 3rd and 6th grades covering three main disciplines – reading, mathematics, and natural sciences in 16 countries of the Latin America and the Caribbean region (LAC).<sup>2</sup> Results for 2019 show that almost half of 3rd graders do not reach the minimum proficiency level (MPL)<sup>3</sup> – 44 percent for reading and 48 percent for math (Figures 1 and 2) – and more than two-thirds do not reach it by 6th grade – 69 percent for reading and 83 percent for math (Figures 3 and 4). There are wide disparities among countries for both grades. For example, for 6th grade, 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.

**Figure 1: Percentage of students in grade 3 below MPL in reading, 2019**



Source: Own elaboration based on UNESCO (2021). MPL is the proportion of students who fall below Level 2 of the assessment in the case of 3rd grade.

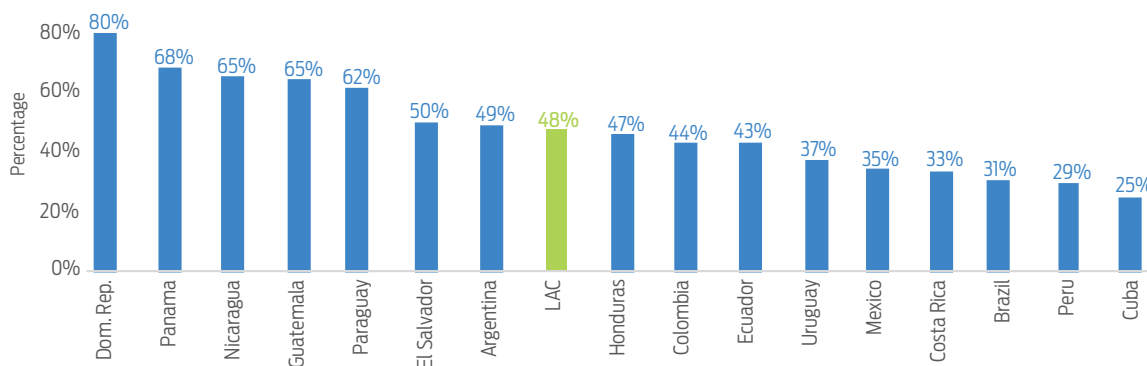
<sup>2</sup> Argentina, Brazil, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, and Uruguay.

<sup>3</sup> MPL in math for 6th grade means 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 (2021), pp. 14, 16-17.

# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

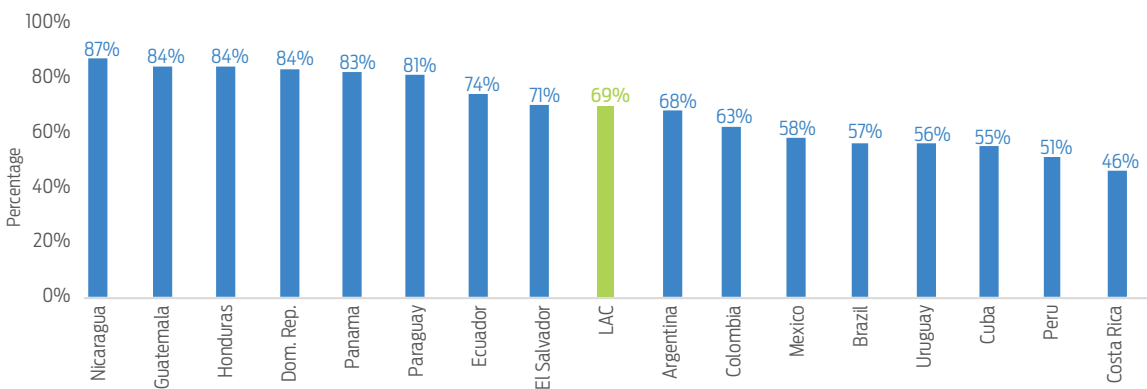
April 2022

**Figure 2: Percentage of students in grade 3 below MPL in math, 2019**



Source: Own elaboration based on UNESCO (2021). MPL is the proportion of students who fall below Level 2 of the assessment in the case of 3rd grade.

**Figure 3: Percentage of students in grade 6 below MPL in reading, 2019**

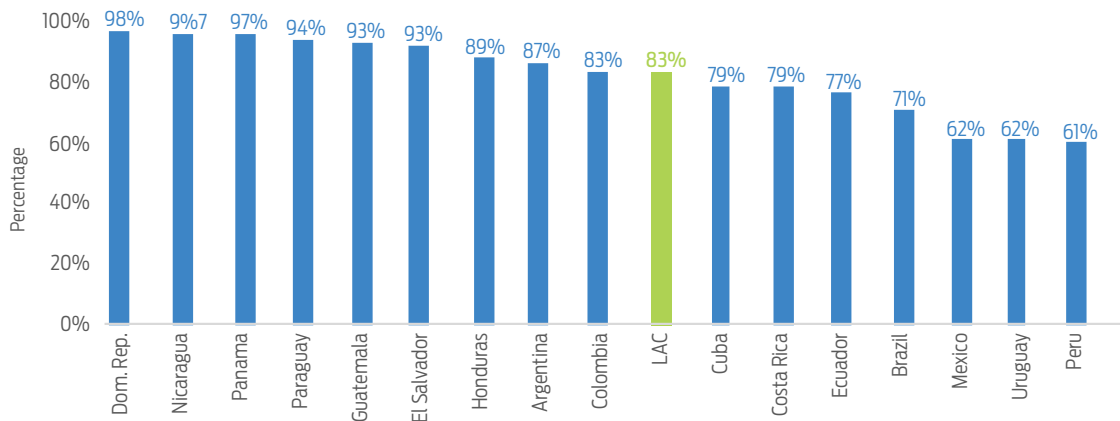


Source: Own elaboration based on UNESCO (2021). MPL is the proportion of students who fall below Level 3 of the assessment in the case of 6th grade.

# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

April 2022

**Figure 4: Percentage of students in grade 6 below MPL in math, 2019**



Source: Own elaboration based on UNESCO (2021). MPL is the proportion of students who fall below Level 3 of the assessment in the case of 6th grade.

**Between 2013 and 2019, the pool of countries participating in ERCE showed no gains in learning outcomes.**<sup>4</sup> Only four countries (Brazil, Dominican Republic, Paraguay, and Peru) improved their learning outcomes in 2019 in both reading and math for students in 3rd or 6th grades (Figures 5 and 6). On the other side, countries such as Argentina, Guatemala, Mexico, and Panama obtained significantly lower scores in both academic disciplines compared to 2013. Nicaragua was the only country improving in math but worsening in reading.

**From an equity perspective, the results show the persistence of socioeconomic learning gaps.** Students from poor schools and indigenous descent have the lowest learning outcomes. Differences in learning outcomes between schools are explained mainly by socioeconomic segregation within countries. Regarding gender, girls perform significantly better than boys in reading in 3rd and 6th grades in most countries, while there are no significant differences between boys and girls in math and science.

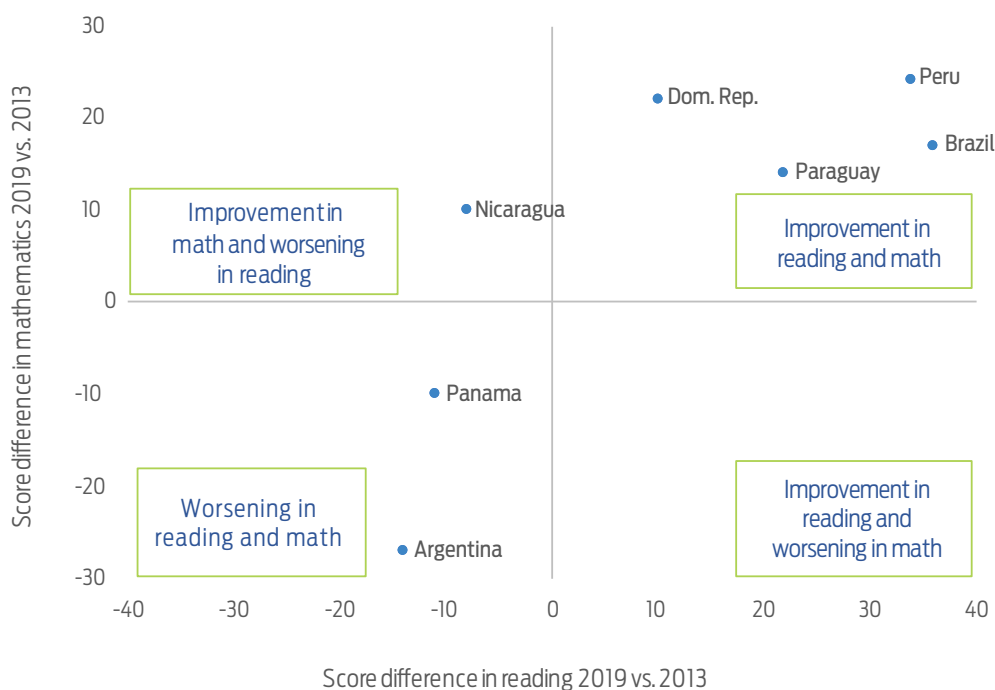
<sup>4</sup> In 2013, the Third Regional Comparative and Explanatory Study known as TERCE was implemented, which is fully comparable to ERCE 2019.

# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

April 2022

**Disparities in learning outcomes are also largely explained by differences within classrooms.** Across countries in LAC, it is common to see students inside a classroom struggling to recognize letters while others can perfectly read and understand a complete story. These large within-class learning differences bring up an enormous challenge for education systems, suggesting that a personalized approach to learning adapted to each student need is increasingly fundamental to narrowing learning gaps. This customized approach has been dramatically challenged by the massive school closures triggered by the pandemic across all countries in the region.

**Figure 5: Learning gains in reading and math for students in grade 3, 2013 and 2019**

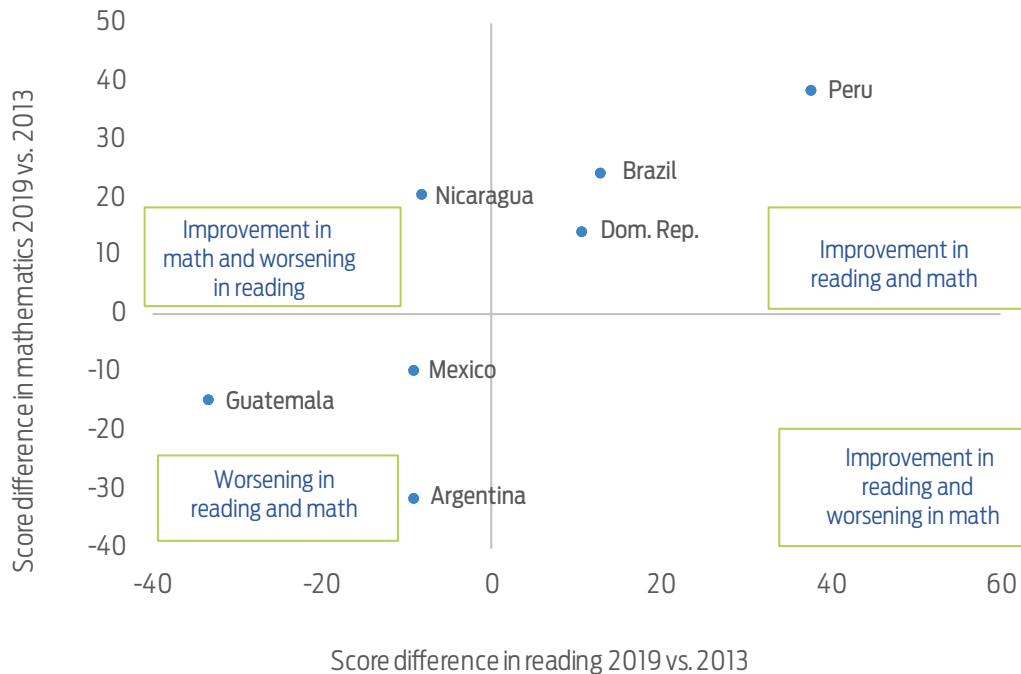


Source: Own elaboration based on UNESCO (2021). Countries appearing in the graphs are those that presented statistically significant differences between both assessments for both reading and math (at the 5 percent level).

# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

April 2022

**Figure 6: Learning gains in reading and math for students in grade 6, 2013 and 2019**



Source: Own elaboration based on UNESCO (2021). 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).

## B. How are students coping with the pandemic? First results from a regional survey

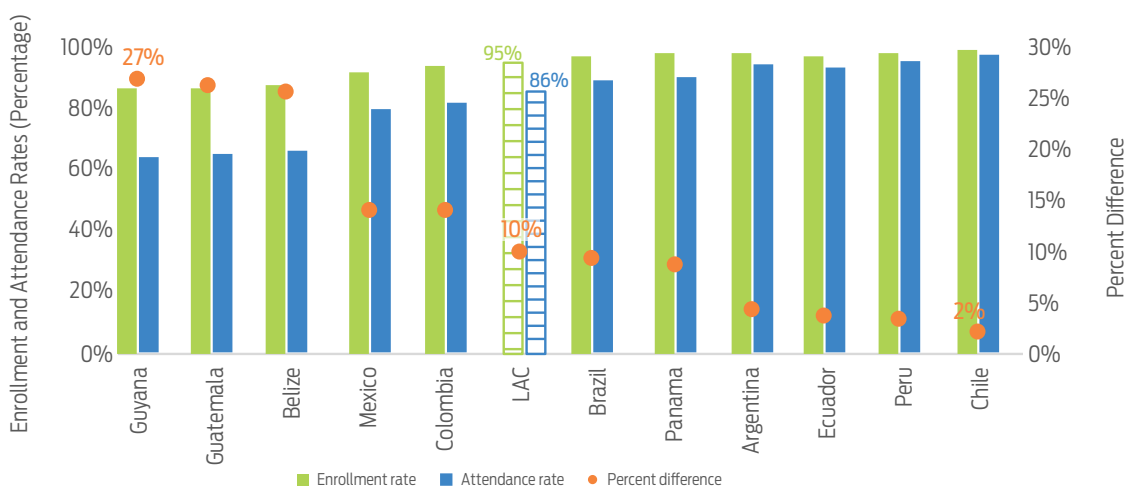
**In March 2020, the spread of COVID-19 led to the implementation of lockdowns and containment policies, including widespread school closures in the region.** A few months after ERCE 2019 was administered, the COVID-19 pandemic hit the region, leading to a massive lockdown of school systems. Although the timing of the pandemic was roughly similar in all parts of the world, the eventual duration of school closures disproportionately affected LAC countries, some of which (e.g., Panama) were atop of the world's ranking on the indicator "number of weeks with schools fully closed" at one point in time. Students were completely away from in-person education for longer than 15 months in several countries -such as Panama, Honduras or Paraguay-. In fact, almost all countries moved education service delivery to a distance/remote learning or, at the best, hybrid modality, throughout the March 2020-July 2021 period. Access to and quality of these education approaches worked in a very heterogeneous way across countries.

# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

April 2022

As a global effort to measure the impact of the pandemic on different sectors, the World Bank Group (WBG) and United Nations Development Program (UNDP) implemented the High-Frequency Phone Survey (HFPS).<sup>5</sup> The main results from the education module of the HFPS Phase II Wave 1 captured, through a series of qualitative questions, the degree and characteristics of participation and engagement in the education delivery process during the pandemic. Despite its limitations<sup>6</sup>, findings from the HFPS II Wave 1 allow us to better understand the actual effects of the pandemic on education systems across LAC, highlighting the enormous challenges stemming from school closures and less-than-optimal distance education means 15 months after the pandemic outbreak. The HFPS II Wave 2 data collection was finalized in January 2022 and will also provide a clearer outlook. Three key messages emerge for the region from the data collected in Wave 1.

**Figure 7: Enrollment rate, attendance rate and percent difference between both metrics for selected countries, May/July 2021**



Source: Own elaboration based on WB and UNDP LAC HFPS II (Wave 1), 2021 data.

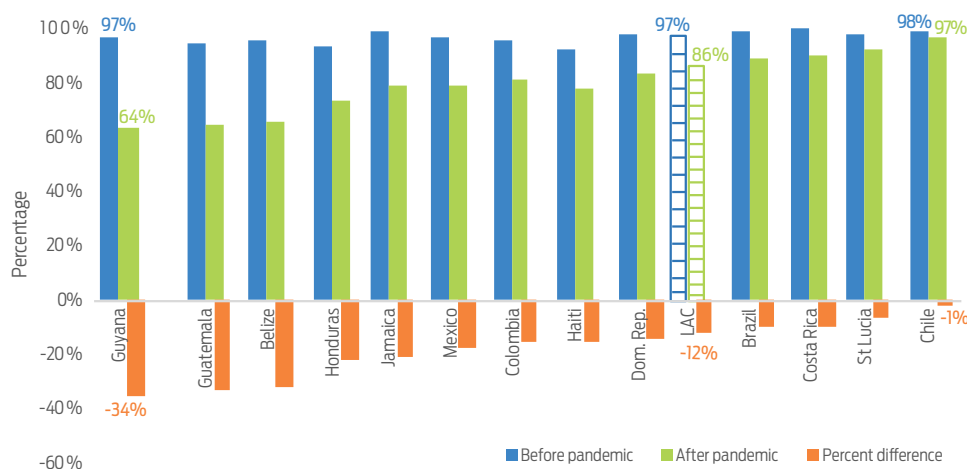
5 The HFPS are an initiative led by the World Bank Poverty and Equity Global Practice and collect data on the effects of and responses to COVID-19 across different dimensions of interest, such as labor markets, income, food security, education, and health. In the case of the LAC region, the first phase was collected in 2020 in 3 waves – May, June/July, and August, including 13 countries (Argentina, Bolivia, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Paraguay, and Peru). The second phase was collected in 2021-2022 in collaboration with UNDP in 2 waves – May/July 2021 and October 2021/January 2022 – and added 11 more countries – Antigua & Barbuda, Belize, Brazil, Dominica, Guyana, Haiti, Jamaica, Nicaragua, Panama, St. Lucia, and Uruguay. HFPS Phase II, Wave 1, covers an average of 1,150 individuals per country and is representative of all individuals aged 18 or above who have access to a phone in the given country.

6 The main two limitations are related to the representativeness of the sample. As explained in the footnote above, *country representativeness* was limited to the 18+-year-old population with access to a phone. There was an extra limitation: HFPS Education Module was not applied but to only one (randomly chosen) school-age person in the household.

# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

April 2022

**Figure 8: Attendance rate before and after the pandemic, and percent difference between both metrics for selected countries, Feb 2020 vs. May/July 2021**



Source: Own elaboration based on WB and UNDP LAC HFPS II (Wave 1), 2021 data.

**First, school closures across the region appear to have significantly impacted school attendance<sup>7</sup>, when compared to original enrollment.<sup>8</sup>** Following the sudden massive shutdown of school systems across LAC, attendance rates, or the share of students who attended some form of education - either in-person or remote - after getting enrolled, was, on average, 10 percent lower than enrollment rates for the given year (Figure 7). In some countries like Belize, Guatemala, or Guyana, attendance rates were roughly 27 percent lower than enrollment rates. In addition, attendance rates in May/July 2021 were, on average, 12 percent lower than in the pre-pandemic period, when schools were fully open (Figure 8). Once more, countries like Guatemala and the Dominican Republic showed far lower attendance rates in 2021 compared to the previous year (33 and 14 percent lower, respectively). This suggests that school closures continuously decreased participation in the education process (which will have to be confirmed with the results of Wave 2), despite efforts made in remote education. At the same time, in some countries, attendance appears to also be an issue in the context of the limited school re-openings, possibly due to challenges in the implementation of hybrid models (Figure 8)<sup>9</sup>.

7 "Attendance rate" was defined 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 (questions 5, 6, 8, and 10 in HFPS' Education module).

8 "Enrollment" was measured as the proportion of the school-age population who reported being enrolled at school in the given/ongoing school year (question 3, Education module).

9 It is important to note that surveys were implemented between May and July when conditions in terms of school closures were different for each country.

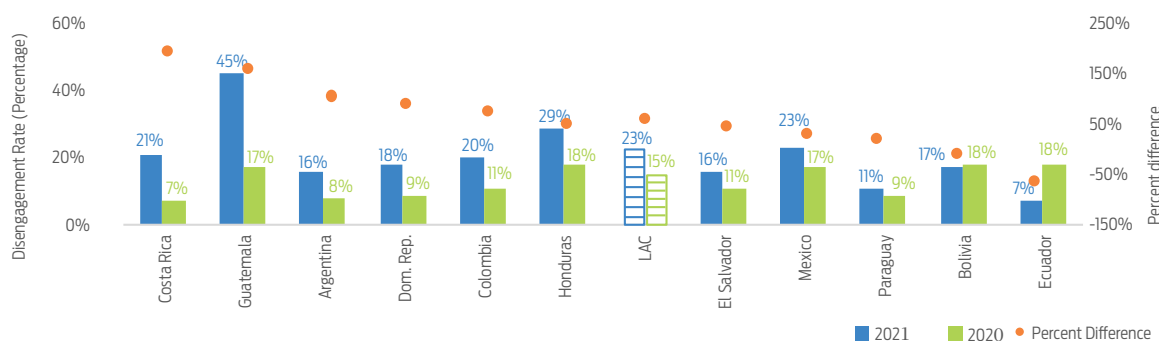


# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

April 2022

**Second, the need to work and study from home seems to have posed, for a large part of students still attending education, a significant disincentive for engagement.** The HFPS measured the extent to which students who attended school – either in-person or remotely – had been engaged in any learning activity at home<sup>10</sup> at the moment of the survey.<sup>11</sup> The average value for the region is revealing: roughly 1 in 4 students who had not fallen behind (i.e. who were still reportedly “attending”) during the pandemic was not engaged in any learning activity (Figure 9), increasing vis-à-vis the pre-pandemic period. As of May/July 2021, on average, only 35 percent of the students in LAC had access to face-to-face<sup>12</sup> education (Figure 10), which can contribute to explain the engagement gap, as remote education faces challenges to maintain engagement. In a couple of countries, engagement in learning activities at home appears to have in fact increased, possibly explained by better reach and quality of remote options in these countries. Overall, from the original pool of students enrolled for the given school year in LAC<sup>13</sup>, almost one-fourth of the students were not engaged in the education process. This finding is an indicative sign of two expected effects of the pandemic: (i) an increase in drop-out rates; and (ii) a decrease in learning outcomes.

**Figure 9: Disengagement rate, 2020 vs. 2021, and percent difference for selected countries**



Source: Own elaboration based on WB LAC HFPS I (Wave 1), 2020 data and WB and UNDP LAC HFPS II (Wave 1), 2021 data.

<sup>10</sup> The engagement and disengagement indicators come from question 8 of the Education Module, which asks if they participated in any learning activities at home during the previous week. Percentages (rates) are adjusted for academic break periods.

<sup>11</sup> 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.

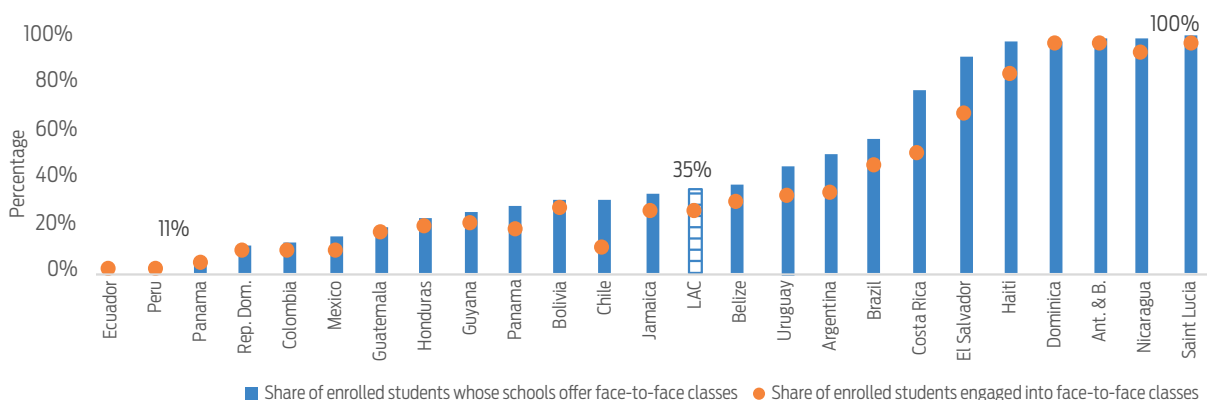
<sup>12</sup> This indicator comes from question 4 in HFPS's Education Module, which asks if the individual in the household is enrolled in a school offering face-to-face classes, i.e., in-person education.

<sup>13</sup> It is important to note that school calendars differ substantially across those LAC countries that use a split-year calendar (e.g., 2020/21) and those that use a full-year calendar (e.g., 2021). For the former, the timing of the wave coincided with the end of their school year, whereas for the latter, the timing of the wave occurred before or at the school year's mid-point.

# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

April 2022

**Figure 10: Share of students enrolled in schools offering face-to-face education and share of students attending classes in face-to-face modality, by country, May/July 2021**



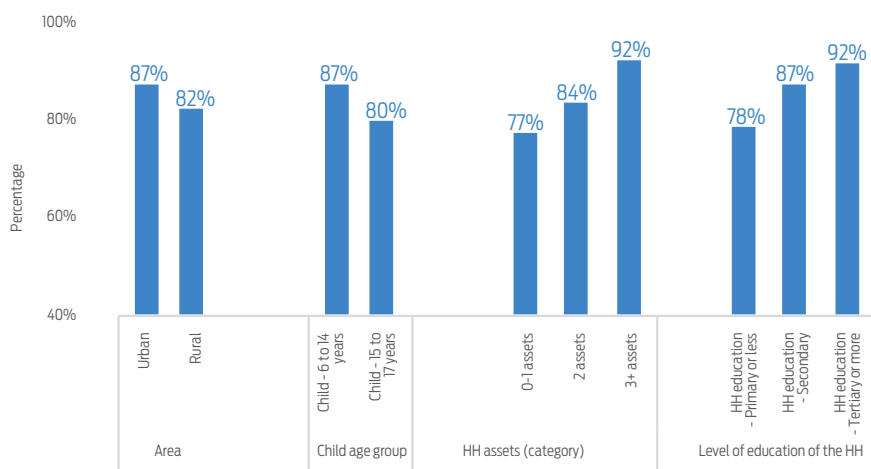
Source: Own elaboration based on WB and UNDP LAC HFPS II (Wave 1), 2021 data.

**Third, the pandemic has not only deepened the pre-existing learning crisis but has also increased the already high levels of inequality across the region.** When the results on school attendance and engagement are combined with low and/or declining pre-pandemic learning levels, especially in certain countries (e.g., the Dominican Republic, Panama, Guatemala, Argentina and Mexico), it is expected that inequities across countries will grow further. Additionally, the HFPS showed significant differences across different groups of students for specific metrics, which has likely widened inequities within countries and schools. *Attendance rates* for students living in wealthier households - i.e., those with three or more assets - were 17 percent or 15 percentage points (pp) higher for students living in poorer households - i.e., those with one or fewer assets. The same holds for students living in urban versus rural areas (Figure 11). The “*disengagement rate*” was also 61 percent (10 pp) higher for students living in households whose head had primary or less education, 22 percent (5pp) higher for students between 6 and 14 years old, and 53 (10 pp) percent higher for households with one or fewer assets (Figure 12).

# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

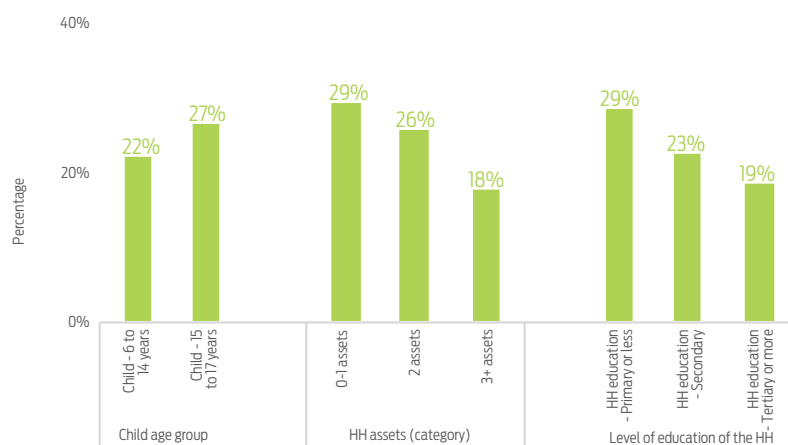
April 2022

**Figure 11: Attendance rate, by relevant breakdown groups, May/July 2021**



Source: Own elaboration based on WB and UNDP LAC HFPS II (Wave 1), 2021 data.

**Figure 12: Disengagement rate, by relevant breakdown groups, May/July 2021**



Source: Own elaboration based on WB and UNDP LAC HFPS II (Wave 1), 2021 data.

# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

April 2022

**In a nutshell, school closures in LAC during the pandemic have brought about important challenges for learning delivery in the region, with a potential significant decrease in learning outcomes and increase in disparities, both within and between countries.** On average for the LAC region: (i) school closures appear to have been associated with attendance rates 10 percent lower than enrollment rates for the given year, and 12 percent lower than pre-pandemic attendance rates; (ii) of those students attending educational activities of any kind (either in-person or remotely), about 1 in 4 students were not actually engaged in the educational process while at home; and (iii) inequities in both attendance and engagement rates disproportionately affected specific groups, usually the most vulnerable populations. It is worth noting that while some countries seem to have done better than others, it is expected that the region is inevitably moving in the direction of a worsening learning crisis, with the widening of inequalities in schooling and learning. This is also confirmed by initial evidence on actual learning losses, discussed below.

## C. Understanding learning losses: The post-pandemic education recovery agenda

**Throughout the pandemic, numerous studies started to reveal the characteristics and depth of learning losses resulting from school closures.**<sup>14</sup> As school systems begin to re-open, evidence from actual learning losses is also being collected in different countries in LAC, making heavy use of in-classroom learning assessments. Results are appalling. According to a study from Sao Paulo (Brazil), students learned on average only 27.5 percent of what they would have in face-to-face classes, and the risk of dropping out increased more than three-fold.<sup>15</sup> Also in Sao Paulo, state-wide exams showed that the 2021 cohorts scored lower than the 2019 cohorts in *every grade*, but with larger losses for younger students.<sup>16</sup> Similarly, a foundational skill assessment of 2nd-grade students in Brazil revealed that the share of students off-track to become fluent readers increased from 52 percent (in 2019) to 74 percent (in 2021).<sup>17</sup> In Mexico, an estimation of fundamental learning loss and learning poverty in two states showed significant losses in reading and math for students aged 10 to 15. Furthermore, the study found that estimated losses were more significant in math than reading and disproportionately affected younger learners, students from low-income backgrounds, and girls.<sup>18</sup>

<sup>14</sup> For a recent review of studies so far, see WBG, UNESCO, and UNICEF (2021). *The State of the Global Education Crisis: A Path to Recovery*. <https://www.worldbank.org/en/topic/education/publication/the-state-of-the-global-education-crisis-a-path-to-recovery>.

<sup>15</sup> Lichand, G.; Doria, A.; Leal Neto C.; Cossi Fernandes, J.P. (2021). "The Impacts of Remote Learning in Secondary Education during the Pandemic in Brazil" (October 14, 2021). Available at <http://dx.doi.org/10.2139/ssrn.3841775>.

<sup>16</sup> See WBG, UNESCO, and UNICEF (2021).

<sup>17</sup> Fundação Lemann, Instituto Natura, and Associação Bem Comum (2021). "O impacto da pandemia na alfabetização no Brasil (*The Impact of the Pandemic on Learning in Brazil*)". Fundação Lemman. <https://fundacaolemann.org.br/noticias/o-impacto-da-pandemia-na-alfabetizacao-no-brasil>.

<sup>18</sup> Hevia, F.; Vergara-Lope, S.; Velásquez-Durán, A.; and Calderón, D. (2021). "Estimation of the Fundamental Learning Loss and Learning Poverty Related to COVID-19 Pandemic in Mexico." *International Journal of Educational Development*, November, 102515. doi:10.1016/j.ijedudev.2021.102515.

# THE LEARNING CRISIS IN LATIN AMERICA AND THE CARIBBEAN AND THE COVID-19 PANDEMIC: SOBERING RESULTS OF A DEEPENING TREND\*

April 2022

**Learning assessments such as those documented in these studies and ERCE are needed to measure outcomes and guide the schooling and learning recovery agenda, especially among vulnerable populations.** In-classroom learning assessments, especially formative ones, could help diagnose the depth, breadth, and characteristics of learning losses.<sup>19</sup> Where these types of assessments may not be possible in the short-run, updated simulations based on actual data on school closures and effectiveness of mitigation strategies (i.e., distance learning), such as the information collected through the HFPS, will continue to be necessary.<sup>20</sup> The WBG has recently published a report updating its global simulations on learning losses, and a more granular regional level simulation is coming in the update of the Acting Now report.<sup>21</sup> This report will also aim to include more data on learning losses and dropouts, as they become available.

**The evidence shows that the pandemic reinforced the learning crisis already existing in the LAC region, and more importantly, that it requires immediate action.** The results from the latest regional learning assessments show little progress, if any, in the last half a decade. The COVID-19 outbreak and its massive shutdown of educational institutions across the region further reinforced the deficiencies of the education systems. The HFPS documents that the effects of the pandemic on student attendance and engagement have been significant. More tellingly, the impacts were heterogeneous, varying widely by socioeconomic status, education of the household head, and across countries, likely exacerbating pre-existing inequalities and widening learning gaps. The learning recovery agenda that is ahead of LAC is gigantic. Re-enrollment campaigns and early warning systems will be key to re-engage students to schools. Also, prioritizing core foundational subjects, supporting remedial programs, and individualized teaching will be critical to accelerate the learning recovery and fill learning gaps over the long run. *The time to act is now.*

<sup>19</sup> <https://blogs.worldbank.org/education/are-you-my-teacher-gradual-return-school-lac-time-heal-deep-wounds-and-urgently-recover>.

<sup>20</sup> For previous simulations, see WBG (2021). "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 Group, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/35276> License: CC BY 3.0 IGO) and Azevedo, J.P.; Hasan A.; Goldemberg D.; Geven K.; and Iqbal S. (2021). "Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates." The World Bank Research Observer 36 (1): 1–40. doi:10.1093/wbro/lkab003.

<sup>21</sup> Expected to be published in April 2022.