

# Reopening schools in Latin America and the Caribbean

## Key points, challenges, and dilemmas to plan a safe return to in-person classes



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This document was written by Alejandro Vera and Martín Scasso from OREALC/UNESCO and Alejandro Morduchowicz and Cecilia Berlanga Alessio Robles from the IDB. This document also counted with the contribution of Cora Steinberg from UNICEF Argentina in the elaboration of Box 4.

This document also benefited from the valuable contributions and comments from Yayoi Segi-Vltchek, Mary Guinn Delaney, Romina Kasman, Ramón Iriarte and Carlos Henriquez Calderón (OREALC/UNESCO Santiago) and Raquel Fernández Coto (IDB).

This document was developed under the leadership of Claudia Uribe, Director of OREALC/UNESCO Santiago and Sabine Rieble-Aubourg, Director (a.i.) of the Education Division at the IDB.

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# EXECUTIVE SUMMARY

The suspension of in-person classes as a consequence of the COVID-19 pandemic profoundly affected the education systems in Latin America and the Caribbean (LAC) and compromised the achievements reached around the goals established in the SDG4-Education 2030 Agenda. The most vulnerable people have been the most affected by this situation, which widened the preexisting gaps. The countries of the region have carried out great efforts to guarantee the continuity of learning. However, these have been limited by the challenges that this unprecedented crisis brought, aggravated by unequal conditions in access to infrastructure and other resources that affect broad sectors of the population.

Given this scenario, some international organizations issued a series of recommendations for the process of returning to schools, which comprise a broad set of dimensions. Through an analysis of the available information, this document maintains that the countries of the region have very unequal conditions related to the access of human and economic resources, infrastructure, and the required equipment to implement these recommendations. The profound gaps in every education system are a warning that these inequalities could be exacerbated if no urgent action is taken to prioritize the most vulnerable population.

This report analyzes the possibilities, restrictions and needs that the countries of the region will face during the process of returning to in-person classes, considering five dimensions: (i) safe schools (school infrastructure, access to water and sanitation); (ii) human resources (principals and teachers); (iii) access to ITC and connectivity; (iv) education financing and (v) information and planning.

Before the pandemic, the education systems of the region already faced important challenges such as access gaps, low learning outcomes and structural inequalities. In 2018, 10.5 million children in LAC did not attend school, including 16% out of primary school, 22% out of lower secondary school and 62% out of higher secondary school. Moreover, a large proportion of LAC students do not meet the basic learning competencies: less than half of the youth meet the basic competencies in Reading, according to the 2018 PISA results; and only 1 in 4 meet the basic competencies in Math. According to TERCE, 40 of every 100 students in third grade and 18 of every 100 students in sixth grade do not pass the first performance level in Language. In Math this ratio increases to 47 of every 100 students in both cases. These lags deepen according to the socioeconomic level of the families to which the students belong.

## **1 SAFE SCHOOLS (school infrastructure, access to water and sanitation)**

The COVID-19 pandemic has exposed the structural shortcomings in school infrastructure. Most of the schools in LAC countries do not have the classroom size conditions that allow for the enforcement of the physical distance protocols for a safe return to in-person classes for every student. Around 1.3 million students at the primary level do not have access to drinking water in their households nor in school. It is urgent that LAC countries invest in the improvement of the state of school infrastructure to offer basic sanitation and hygiene conditions.

## **2 HUMAN RESOURCES (principals and teachers)**

The constraints to return to in-person classes for some teachers and the implementation of hybrid models will require the need to hire new teachers. However, even before the pandemic, many countries already faced a shortage in trained staff to cover the education needs of the population. The region needs to carefully plan for the supply and demand of teachers for the return to in-person classes; the pandemic has brought to light the urgent need to improve the training, availability, allocation and working condition policies for teachers.

## **3 ACCESS TO ITC AND CONNECTIVITY**

The most used resource in the region for remote and hybrid education are online platforms (85% of the countries have used them). However, access to connectivity and technological resources in households and in schools are deficient: on one hand, 46% of children between 5 and 12 years of age live in households that lack an Internet connection; and on the other hand, 62% of primary schools and 75% of secondary schools have access to ICT equipment. This represents a huge challenge for pedagogical continuity, especially in rural areas. The pandemic has highlighted the disparities in teacher competencies regarding the use of ICT, which will require a sustained training policy that goes beyond the urgency of the current situation.

## **4 EDUCATION FINANCING**

The recovery of the sector will require additional financial resources and a better distribution of them. The large inequalities have highlighted the need to include criteria for equality and prioritization of vulnerable population in planning a return to in-person classes for students currently out of school. In this sense, education financing, as well as fair and efficient resource allocation, are key strategies to respond to this crisis to guarantee the right to quality education for everyone.

## 5 INFORMATION AND PLANNING

The ministries of education require strong education management information systems (EMIS) that allow for the planning, development, and management of these strategies. 42% of LAC countries still use physical formats (such as paper forms) completely or partially to gather data. The EMIS of the region need to be strengthened through the use of technologies to more efficiently collect and analyze the data, allowing ministries to build a more comprehensive picture of their education systems to deal better with crises such as this one.

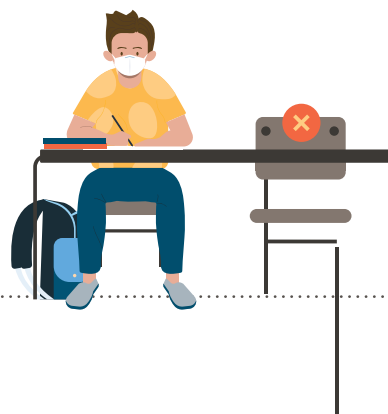
The LAC region urgently needs to plan and define priority actions to guarantee the security of school operations and prioritize education services for the most vulnerable population. All the education responses must be based on the fundamental principles of inclusion, equity, and non-discrimination. Today, more than ever, the commitments with the 2030 Agenda for sustainable development must be maintained along with its SDG 4. Timely and efficient investment can help to reduce the current and future impacts of the pandemic in education.



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# FOREWORD



Due to the COVID-19 pandemic and following recommended lockdown and social distancing measures put in place to prevent the transmission of the virus, most governments around the world have chosen to temporarily suspend physical class attendance in schools and other educational centers. This situation has led to the largest global and simultaneous disruption in educational services in recent history, reaching over 90% of students worldwide from pre-school to higher education (UNESCO et al., 2020a). The pandemic has brought about a spectrum of consequences and costs, especially to marginalized and vulnerable sectors of the population, in terms of access to the right to education, health, food, and social protection, among others. At the same time, suspending in-person classes has jeopardized the progress achieved towards the Sustainable Development Goal (SDG) 4: “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all,” as well as the fulfillment of goals to be met by 2030.

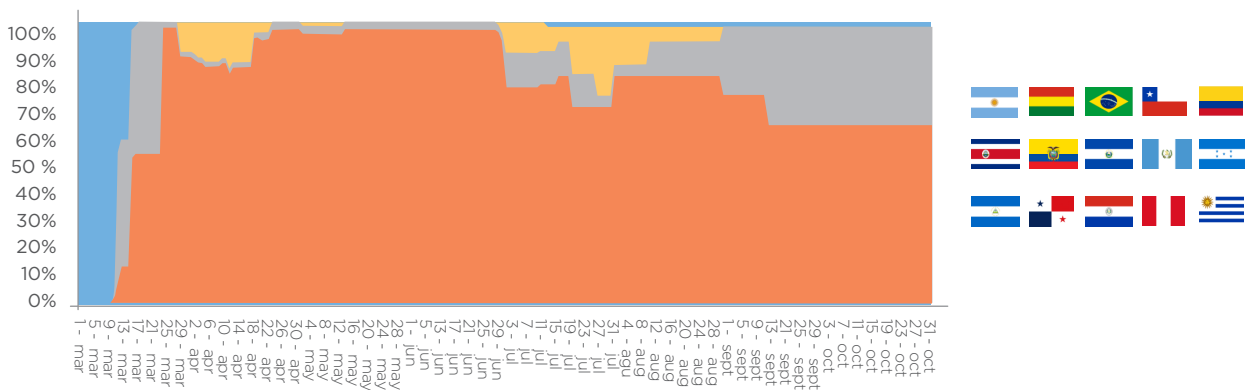
For most of the countries in Latin America and the Caribbean, classes were suspended the second week of March 2020 and the estimation is that it has reached over 165 million students at the peak in April of the same year (ECLAC-UNESCO, 2020). Of the 33 countries in the region that were monitored by IIEP-UNESCO’s Information System on Educational Trends in Latin America (SITEAL), 32 cancelled in-person classroom attendance. Nicaragua was the only country where schools remained open, except for 60% of the country’s private schools, which decided to suspend physical attendance voluntarily (SITEAL, 2020). The impact of interrupting in-person classes has varied among countries depending on where in the school year they were at (beginning, middle, or end of cycle) (see Figure 1.).



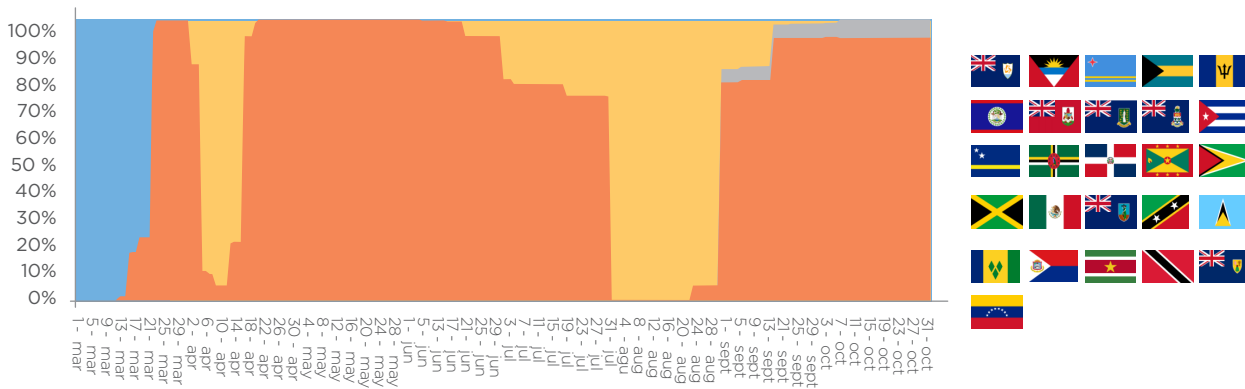
**FIGURE 1**

**Percentage of (pre-primary, primary, and secondary) students according to school 1st part and half-way since beginning of school year in countries in Latin America and the Caribbean countries, March - October 2020**

**School year beginning during the 1st part of the year (Jan-April)**



**School year beginning half-way through the year (July-Oct)**



▬ Open schools    
 ▬ School breaks    
 ▬ Partially open schools    
 ▬ Schools closed due to COVID-19

**Source** | Prepared by the authors on the basis of data supplied by UNESCO (2020), Global monitoring of school closures caused by COVID-19 & UIS Database.

Countries where classes start during the first months of the year have lost considerably more school days than those starting during the second half. A more recent survey by UNESCO, UNICEF and the World Bank (2020) carried out between July and October, reveals that the number of class days lost is 46 on average, in countries where the school year ends during that period. In these cases, the summer break took place in the middle of the pandemic. On the other hand, in countries where the summer break occurred before the pandemic started, the number of school days lost raised to 60 on average.<sup>1</sup>

Due to having interrupted face-to-face classes, education systems have had to rely on remote teaching, especially through technologies such as online platforms, e-mails, video calls, radio, and TV, as well as distributing teaching material like textbooks. Remote classes increased by an estimated 62% during the first two quarters of 2020 throughout the region (ECLAC, 2020d).

However, development and access to technological solutions depends on socio-economic restrictions and digital gaps — of devices, connectivity, and the digital know-how of both teachers and students, among others — that have marginalized some of the students.<sup>2</sup>

On August 4, 2020, the Secretary-General of the United Nations, António Guterres, called for governments to prioritize reopening schools once the local transmission of COVID-19 is controlled, in order to avoid a setback in progress achieved so far and to avoid deepening the inequality prevailing prior to the pandemic. The decision to reopen schools implies balancing the risks this poses to public health with the consequences of having children out of school: loss of knowledge, lack of access to nutritious meals, higher risk of becoming violence or abuse victims – especially for girls –, psychosocial and mental health effects due to the lockdown, and the additional risks associated with dropping out and staying away from school (UN, 2020a).

Despite the risks of gradually reopening schools, there is growing consensus that physical attendance must be reestablished as soon as possible to avoid even worse consequences in the long term. Distance education, although the most admissible solution in the context of a pandemic, may lead to a surge in exclusion because it fails to guarantee the continuity of learning for all (UNESCO, 2020c). Nevertheless, countries face meaningful challenges for schools to reopen safely and efficiently, and there are financial costs that depend on the health situation and the state of the education system before the pandemic

Since June 2020, after the outbreak had peaked, some countries in the region began gradually reopening schools. This phased resumption of physical attendance has come in hand with strict health protocols and logistics planning that include student alternation on days and schedules, as well as shifts to distribute staff flow throughout the day and abide by the recommended social distancing recommendations, as well as diversifying physical spaces.



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1. Prepared by the authors on the basis of data supplied by UNESCO, UNICEF, and the World Bank (2020).  
2. See section 3.3 of this document, Distance education: access to ICTs and connectivity.

The schools that have begun reopening have adopted hybrid or combined safety procedures<sup>3</sup>which, in order to meet safe health protocols, combine remote education with in-person classes. The plans to reopen schools have had to remain flexible and adapt to the health circumstances given that individuals are subject to the detection of positive COVID-19 cases in the facilities, which could in turn lead to the suspension of in-person classes once again.

Some international agencies have set out a series of recommendations to reopen schools. These recommendations focus on physical infrastructure to ensure basic health conditions, access to ICTs (information and communication technologies) and connectivity, human resource availability, education funding, school community resilience, and consultation and communication mechanisms, among other aspects. These needs stemming from the current circumstances have shone light on some immense disadvantages and inequalities of the structural conditions under which the education systems were already operating in Latin America and the Caribbean.

The goal of this document is to combine the recommendations with certain objective characteristics of the region's countries in terms of available infrastructure, and human and financial resources. By doing so, this report seeks to reflect on the possibilities, obstacles, and needs that countries will face during the process of reopening schools.

This document is organized as follows: the first chapter describes the context for reopening schools and describes the scenario education systems found themselves in throughout the region prior to the pandemic, especially regarding inequality in access and learning. The second chapter compiles international agencies' main recommendations to reopen schools. These are divided into: (i) safe schools: school infrastructure, access to water and health; (ii) human resources: school authorities and teachers; (iii) distance education: access to ICTs and connectivity; and (iv) funding education.

Chapter three revolves around the objective conditions needed to reopen schools in countries in Latin America and the Caribbean based on available comparable information based on dimensions 1, 2, and 3 laid out in the previous chapter.

Chapter four analyzes current conditions and future perspectives regarding the fourth dimension - funding education - and delves further into the availability of economic resources to alleviate the gaps and deficits mentioned in the previous chapter.

Lastly, chapter five explores education information systems as a key tool to reinforce planning decisions. Their potential applications to respond to crises such as COVID-19 are analyzed, as are the field's specific tensions and dilemmas in this context. The document concludes with considerations for the future.

This analysis aims at contributing to reflect on the need for governments to make larger efforts in planning and allocating sufficient resources to the education sector so they can meet their most pressing needs and move forward to reopening schools where no one is left behind.

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3. Hybrid learning models involve an alternated combination of in-person and remote education and they can assume various forms. E.g.: a recent IDB document (Arias et al., 2020) defines a hybrid model as a learning model mediated by technology that alternates between face-to-face and remote education, and suggests intentionally creating experiences that revolve around the student: personalized, relevant, and attractive. It is based on four pillars: new pedagogies, competences, and teacher profiles; equipment and connectivity; platforms and content; and data and computerized student monitoring.

# 1. ACCESS GAPS AND LEARNING UNDERACHIEVEMENT BEFORE THE PANDEMIC



The situation the region's education systems found themselves in before the pandemic was bad enough: access gaps, learning underachievement, and structural inequalities were common challenges for countries in Latin America and the Caribbean. Despite meaningful progress in recent years, the crisis brought about by COVID-19 has proved that the education systems still have major deficits to guaranteeing inclusive, equal, quality education.

The region has made huge efforts for everyone to have access to primary education, a goal most countries have managed to meet. Over the past two decades, access to Pre-primary education has also risen, its gross enrollment rate increasing from 55% in the year 2000 to 78% by 2019.<sup>4</sup>

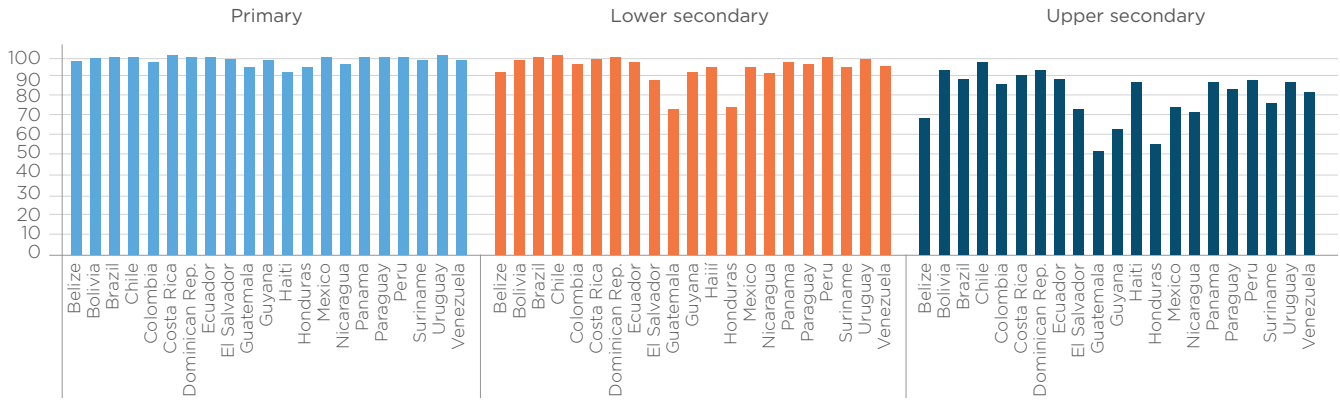
The coverage of secondary education also grew, although it has slowed down in recent years. Lower secondary stopped growing altogether - its net enrollment rate for all of Latin America and the Caribbean went from 90% in 1999 to 92.9% in 2007, and 93.3% in 2018. On the other hand, high secondary education gained traction, its gross enrollment rate rising from 68.4% in 1999 to 71.7% in 2007, and bumping up to 79.0% in 2018.

Primary and secondary education constitute the minimum level of knowledge the entire population should reach to be able to fully exercise their rights, which is why many countries have made them mandatory over the past decade. Nevertheless, analyzed data show that access to secondary education is still far from reaching the entire adolescent and youth population (see Chart 1).

4. UIS Database

**CHART 1**

**Total net attendance rate by education level (primary, lower secondary, upper secondary) in Latin America and the Caribbean countries, circa 2018**

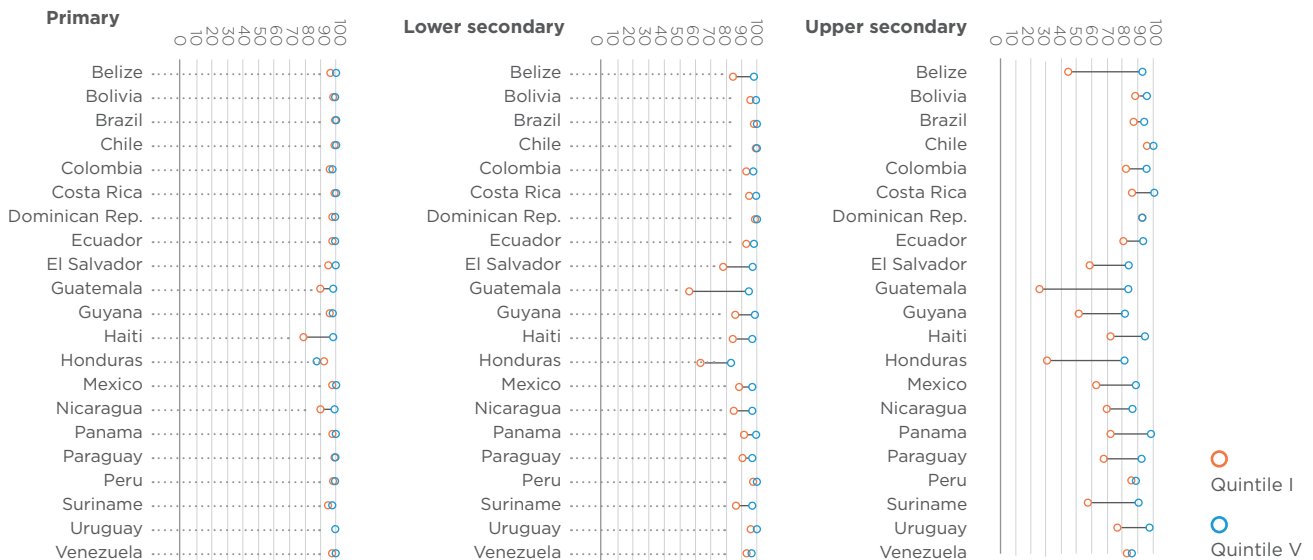


Source | UIS Database.

An estimated 10.5 million children, adolescents and youth didn't attend school in Latin America and the Caribbean in 2018: 16% were not attending primary school, 22% were not attending lower secondary, and 62% were not attending upper secondary education.<sup>5</sup> Most of these people are youngsters who should be attending secondary school (12 to 17 years old) and among them, those who are older and those who come from more impoverished households are more prone to exclusion (see Chart 2).

**CHART 2**

**Total net attendance rate by education level (primary, lower secondary, upper secondary), and income quintiles I and V in Latin America and the Caribbean countries, circa 2018**

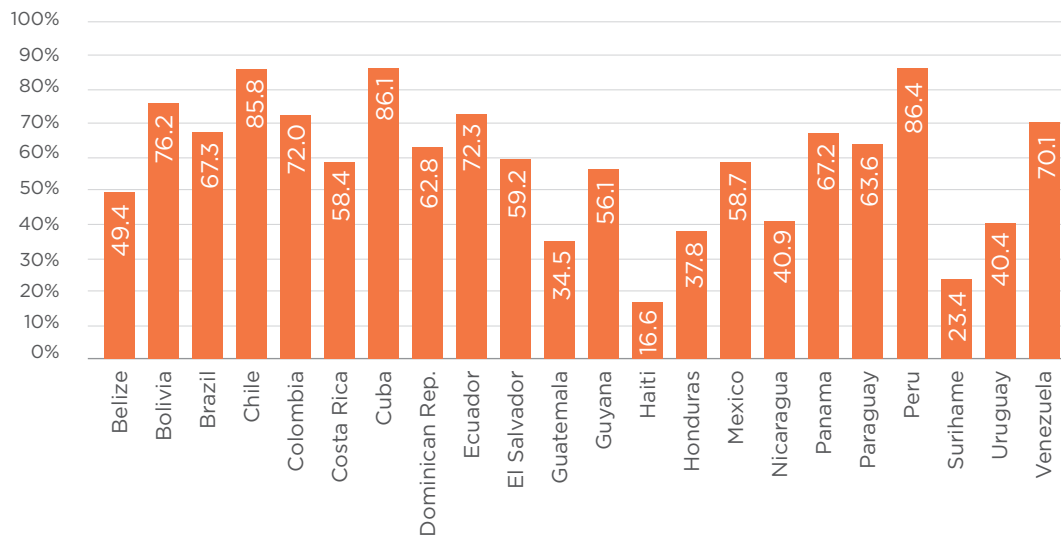


Source | UIS Database.

5. UIS Database.

Setting aside Haiti and Nicaragua, primary education reaches almost universal levels from children in the most vulnerable quintile. This figure drops in secondary education, where access inequality becomes more obvious, especially in some countries in the region. Among the age group of upper secondary education, the impact of exclusion materializes: adolescents who come from lower-income households have much lower attendance rates in every country than those in the quintile of highest income. In 13 of the 21 countries that were analyzed, over 20% of the population in the first quintile is out of school.

Due to the significant repetition and drop-out rates, just a percentage of students complete their secondary education. On average, 6 out of every 10 teens can certify this level of studies. Chile, Cuba, and Peru have gone the furthest in increasing opportunities for students to complete secondary education (see Chart 3).

**CHART 3**
**Rate of secondary education completion in Latin American and the Caribbean countries, circa 2018**


Source | UIS Database.

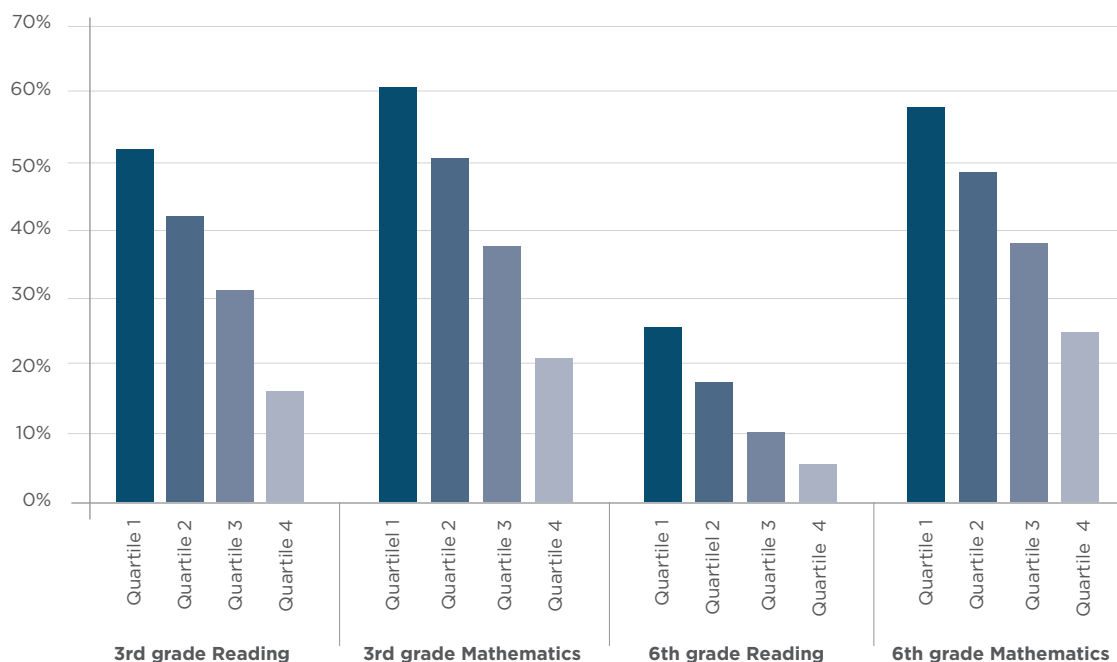
Although nearly the entire population is able to attend and finish primary school, that doesn't necessarily involve the expected learnings. Many students in Latin America and the Caribbean don't possess core knowledge: 18 out of every 100 sixth graders in primary school fail to pass the first level of performance in the TERCE<sup>6</sup> evaluation of Language, and in Math this figure rises to 47 out of every 100 students.

6. TERCE evaluations divide students' performance in four increasingly difficult levels (1 to 4). For further information, please refer to UNESCO (2014).

Students' knowledge deficits become more acute depending on their family's socio-economic level. There are clear gaps between the first and fourth quartile of socio-economic level. They are higher in the third grade in primary school as compared to the sixth grade, and more critical in Math as compared to Language (see Chart 4).

**CHART 4**

**Percentage of students in performance level 1 of the TERCE evaluations in each income quartile, in countries in Latin America, 2013**



**Source** | Prepared by the authors on the basis of the 2013 TERCE (Third Comparative and Explanatory Regional Study) evaluations (UNESCO, 2014).

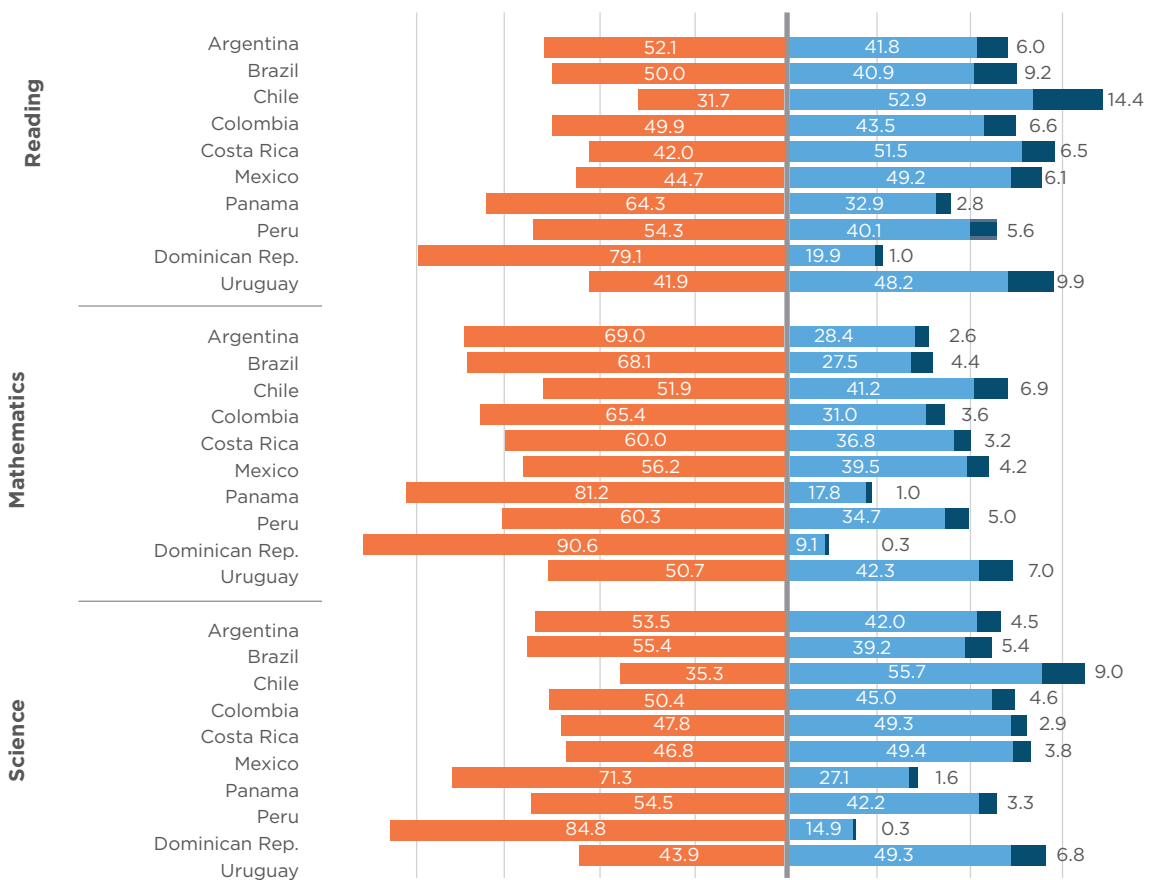
The poor performance of lower-income students in the third grade of primary school reveals failed initial literacy in Language and Math, and underscores the challenges primary schools face early on to guarantee basic learning for all. At the same time, in the sixth grade of primary school, there is a smaller gap in Language which, nonetheless, persists in Math.

These challenges continue throughout secondary school, as the results of the OECD's 2018 Programme of International Student Assessment (PISA) reveal. Among the 10 participating countries in the region, on average only 6.8% of students achieved the three highest performance levels in reading, while 23.4% were among the lowest three levels.<sup>7</sup>

7. PISA's evaluation scale goes from level 1 (lowest) to level 6 (highest) in Reading, Math, and Science.

Out of all OECD countries that participated in PISA 2018, 23% had a low performance in Reading, while in the region this amounted to 51%. In other words, over half of the young people fail to have basic reading skills (Bos, Viteri & Zoido, 2019).

In most participating countries in the region, over 40% of assessed students were placed below PISA level 2, which is associated with basic knowledge according to the evaluation's standards. This varies between countries; in some, over half the students are under this threshold. These low performances are even more acute in Math: the percentage of students under level 2 increases significantly between countries.

**CHART 5**
**Percentage of students by PISA performance level in Reading, Mathematics, and Science in Latin America and the Caribbean countries, 2018**


Source | PISA 2018 (OECD).

■ Below level 2      ■ Levels 2 to 3      ■ Levels 4 to 6



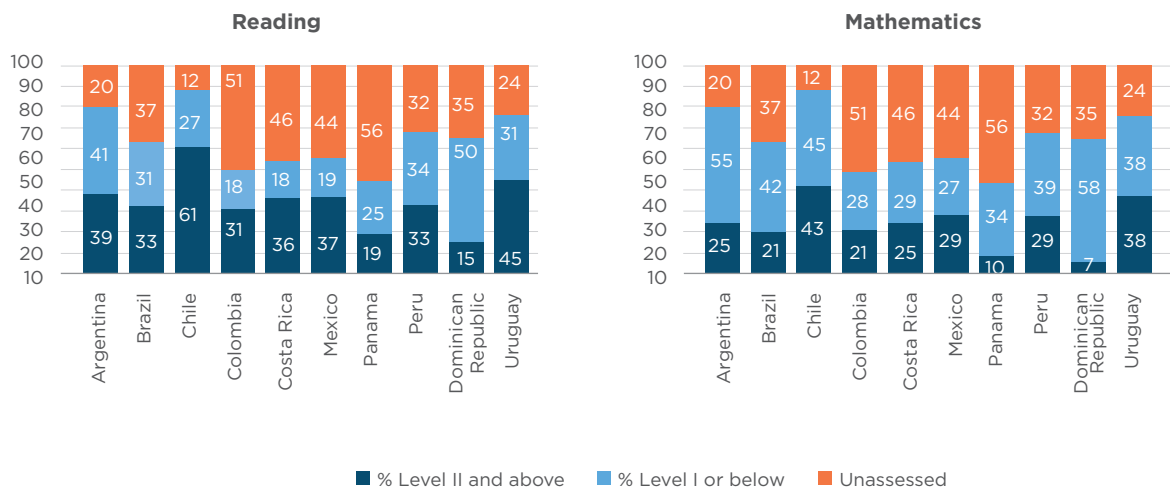
The data analyzed in Charts 1 to 5 underscores two distinctive elements of the education systems: a combination of dropouts and low performance that together curtail opportunities to fully access the right to education.

Learning and fulfilling all educational levels is a critical element for a quality education. That's why some experiences seek to link them<sup>8</sup> in a single indicator to approach different forms of exclusion at the same time. This assessment puts forward a preliminary approach to combining these two sets of data by analyzing 15-year-old – those who are still studying as well as those who have dropped out.

In PISA-participating countries, only 1 out of every 3 students (35%) was able to stay in school and meet the basic Reading performance qualifications. In Math, this dropped to 1 out of every 4 students (25%). The performance of the rest was below basic in some cases, while others had dropped out of school altogether. Chart 6 establishes a relationship between school attendance and the country's performance in the evaluation.

### CHART 6

**Percentage of 15-year-olds by performance level in PISA for Reading and Mathematics, and unassessed percentage in Latin America and the Caribbean countries, 2018**



Source | PISA 2018 (OECD).

As these figures reveal, structural inequality in access and coverage were already affecting the region before the crisis, especially in high-school education. Learning underachievement was already an issue at every level of education, even more so among those in vulnerable socio-economic situations. The COVID-19 pandemic and suspension of physical attendance to schools threatens to worsen these inequalities

8. Such is the case of "Prepared for the future", an indicator developed by The UNESCO Institute for Statistics and the Education for All Global Monitoring Report, which combines students who reach a basic level of learning with completion rates (Montoya & Antoninis, 2020). There is no available information segregated by country to date of the report's elaboration.

## 2. SUMMARY OF RECOMMENDATIONS FOR SCHOOL REOPENING



On March 11, 2020, shortly after the global pandemic was declared and a generalized suspension of in-person classes took place worldwide, different international agencies began to publish recommendations for safe school reopening, both internationally and regionally. There is a general consensus among these recommendations on which dimensions should be addressed and how.

In April the same year, UNESCO, UNICEF, the World Bank, and the World Food Programme launched guidelines for school reopening (UNESCO et al., 2020). The document offers suggestions for the decision-making process on the most convenient timing to reopen schools, as part of the general public health and education plan. This framework acknowledges six key dimensions: policies, funding, safe operations<sup>9</sup>, learning, attention to marginalized students, and wellbeing/protection.<sup>10</sup> The report offers recommendations for each of these dimensions during three stages of the process: prior to reopening, while reopening, and once schools are open.

As more countries reopen schools progressively to bring back in-person education, UNESCO, UNICEF, the World Bank, the World Food Programme, and the Office of the United Nations High Commissioner for Refugees (UNHCR) published a document in September that compiles lessons emerging from these countries' experiences. This document divides lessons learned into four main categories: (i) safe operations, (ii) focus on learning, (iii) wellbeing and protection, and (iv) reaching marginalized children (UNESCO et al., 2020b).

Also in September, UNICEF, UNESCO, and the World Health Organization published a document (UNESCO, UNICEF & WHO 2020) that analyzes the considerations to operate schools: opening, closing, and reopening, and the measures needed to minimize the risks for both students and staff in the face of COVID-19. This report introduces an approach based on risks and a criterion to reopen schools that takes into account transmission levels, considerations regarding students' ages for physical distancing, and the use of face masks in schools.

Before publishing the joint framework, UNESCO had released an article about schools reopening as part of its response to COVID-19 (UNESCO, 2020f). This document begins by acknowledging that the situation varies among location, socio-cultural, and economic

9. The safe operations dimension covers several topics such as physical distancing; water, health, and hygiene; policies regarding staff and attendance; and the health of students and staff, including protocols for the treatment of illnesses; among others.

10. The aspects connected to remote education are covered among the recommendations in the learning dimension.

contexts. Therefore, the strategies to reopen schools have been grouped into three main areas: preparing the education system (assessing staff availability, infrastructure, resources, and ability to resume functions), continuity of student learning, and education system resilience. Including all three dimensions in its framework, the article recommends designing short-, medium-, and long-term policy interventions when it comes to the system's resilience – in other words, the need to create and strengthen the education system's readiness to anticipate, respond to, and mitigate the effects of current and future crises.<sup>11</sup>

UNESCO has published a series of articles based on the aforementioned publications, based on the most updated information.<sup>12</sup> These articles recommend measures to guarantee the continuity of learning once schools have reopened, cover key topics of the education response to COVID-19, and offer evidence of best practices through exploring nine areas.<sup>13</sup> In addition, they suggest four key strategies for education ministries to follow: (i) protect from infection, (ii) protect mental and psycho-social wellbeing, (iii) support inclusive quality education, and (iv) be prepared for future crises (UNESCO, 2020e).

On a regional level, in May, the Inter-American Development Bank (IDB) published a strategy document for schools to reopen focused on health concerns (Bos, Minoja & Dalaison, 2020). The report delves into four key aspects for students and staff to safely return to schools: guaranteeing physical distancing; keeping schools clean and disinfected; making sure students and staff arrive and stay healthy inside the school premises; and guaranteeing access to washbasins. The document lists a group of strategies and provides statistical information as a reference for each of these areas.

At the same time, and specifically aimed at Latin America and the Caribbean, with the support of UNESCO and the World Food Programme, UNICEF launched two documents: one directed at education ministers (UNICEF, 2020b), and another at school administrators and authorities (UNICEF, 2020a). Based on the existing international framework and lessons learned from past experiences, these documents aim at providing a regional framework and offering recommendations and technical inputs for planning, preparing, and executing a safe reopening of schools. The regional framework aimed at education ministers includes the same dimensions of the joint global framework, and focuses on two phases: the first, before and during the process of reopening schools, and the second, once schools have reopened.<sup>14</sup>

The Caribbean Community (CARICOM)'s Education Program, together with the Caribbean Development Bank, and the International Institute for Educational Planning (IIEP) published The Framework for the Reopening of Schools in the Caribbean in

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11. To find out more about education planning in emergency contexts, visit UNESCO's website <https://en.unesco.org/themes/education-emergencies>. To learn about education for safety, resilience, and social cohesion, visit the website of UNESCO's International Institute of Educational Planning <http://education4resilience.iiep.unesco.org/en/planning>.
  12. See UNESCO's COVID-19 Education Issue Notes, <https://en.unesco.org/covid19/educationresponse/issuenotes>.
  13. The areas are: health and wellbeing; continuity of learning; gender equality and equity; teaching and learning; higher, technical, and professional education; education and culture; education policy and planning; vulnerable people and education for global citizenship and sustainable development; and adult teaching and education.
  14. The document just proposes one of many ways to organize the dimensions of the regional framework, and suggests five dimensions – (i) school safety operations; (ii) learning; (iii) wellbeing; (iv) protection; and (v) measures to reach the most vulnerable students – as well as two cross-cutting categories: (a) policies, procedures, and funding; and (b) planning, coordination, outreach, communication, and surveillance. These two documents are part of a series of publications on reopening schools put together by UNICEF along with protocols and guidelines to reopen schools in Latin America and the Caribbean.

July, which includes guidelines for schools where students with disabilities attend. This framework provides actions to guarantee the education community's health and safety during this process. It also provides guidelines to identify gaps and strengths in educational responses (CARICOM, 2020).

Additionally, different international agencies have published recommendations focused on specific topics. For example: along with other agencies, UNESCO has published a *Girls Back to School Guide*, based on the framework of the United Nations for reopening schools and other suggestions oriented at providing guidance for education ministers and education communities. It also contains specific actions to strengthen equality, guarantee that girls go back to classes once schools reopen, and attract those who were out of the school system before the pandemic began. This guide provides recommendations for before schools reopen divided in four dimensions: (i) learning, (ii) health, nutrition, and access to water, sanitation, and hygiene, (iii) protection, and (iv) teachers.

At the same time, in May, UNESCO, the International Labor Organization, and the International Task Force on Teachers for Education 2030 launched a document that offers guidelines to support teachers and school staff before, during, and after schools reopen (UNESCO, TTF & ILO, 2020). The document provides seven priorities that policies should focus on in regards to teachers: safety and health; psychological and socio-economic wellbeing; training and preparation; distribution, rights, and work conditions; financial resources and investments; monitoring and evaluation; and social dialogue and communication.

As part of their publications, in March, UNICEF (2020a) recommended infection prevention and control measures in schools paying special attention to water, sanitation, and hygiene (WASH); as well as key actions for schools to offer more access to these resources.

Table 1 summarizes the main recommendations for the four dimensions included in this report: safe schools (school infrastructure, access to water and sanitation), access to ICTs and connectivity, human resources, and funding.

TABLE 1

Summary of the main international recommendations made on school infrastructure, access to ICTs and connectivity, availability of human resources, and education funding

DIMENSION	MAIN RECOMMENDATIONS
<b>1. Safe schools (school infrastructure, access to water and sanitation)</b>	<b>1.1. Physical distancing in schools</b> - <b>Keep physical distancing:</b> The World Health Organization (WHO) suggests keeping a physical distance of at least 1 sq. m. between people who attend schools, and a minimum of 1 meter between student school desks (WHO, 2020).
	- <b>Carry out a staggered or phased reopening to reduce the number of students in schools.</b> E.g., divide them in different days of the week by grade or level; prioritize children from vulnerable households, those who lack access to remote education, and those at higher risk of dropping out (Bos, Minoja & Dalaison, 2020). Begin with areas where the local transmission rate is lowest and take into consideration children's ability to transfer to school safely (UNESCO et al., 2020). Phase and establish shifts for lunch breaks and recesses to avoid students clustering in halls and common spaces (UNICEF, 2020a).
	<b>1.2. Availability of alternative spaces for classes</b> - <b>Modify the spatial set-up of school infrastructure and the use of alternative facilities:</b> prepare other areas within schools such as gyms or multi-purpose rooms to teach in so as to extend the natural airflow and ventilation in closed areas, or teach outdoors when possible (UNESCO et al., 2020).
	<b>1.3. Hygiene practices and biosafety measures</b> - <b>Implement frequent hand washing routines, and constant hygiene and cleaning practices:</b> renew, improve, or install the necessary infrastructure to guarantee basic health conditions that allow sufficient and frequent access to water supplies with a 0.5% chlorine solution (UNICEF, 2020c) as well as the appropriate supply of soap, cleaning products and disinfectants, gloves, masks, thermometers, and other hand-cleaning products such as antibacterial gel, keeping in mind that it is not a substitute for water and soap (UNESCO-IIIEP, 2020).

DIMENSION	MAIN RECOMMENDATIONS
	<p>Adopt the Three Star Model, that encourages schools to adopt three simple measures: (i) have every student wash their hands with water and soap, (ii) guarantee access to drinking water; (iii) provide access to clean gender-segregated bathrooms every day. Special attention should be given to handwashing for at least 20 seconds making sure it's periodic, supervised, and in groups (UNICEF, 2020c).</p> <hr/> <p><b>- Provide sufficient cleaning and protective materials and resources to cleaning staff</b> to increase disinfection frequency at the premises.</p> <p>Have cleaning kits in classrooms and train teachers and students in cleaning, paying special attention to highly-manipulated surfaces and objects so they are disinfected with ethyl alcohol 70% (UNICEF, 2020c).</p> <hr/> <p><b>- Implement biosafety measures in schools</b> including protocols with staggered entrance and exit schedules for students. Anyone entering or leaving the premises must go through health filters that include checking body temperature, and stopping by a hand-washing station where there is water and soap, before heading to the corresponding classroom.</p> <p>Have clear detailed protocols in place regarding hygiene and communication measures for the education community to know how to mitigate the risk of transmission (Bos, Minoja &amp; Dalaison, 2020).</p> <hr/> <p><b>- Establish and monitor health protocols for school premises before reopening</b>(CARICOM, 2020). Take official and local health authorities' dispositions as guidelines to reopen schools and boost confidence among parents, tutors, teachers, and students to go back to school safely (UNICEF, 2020c).</p> <hr/> <p><b>-Develop a decision-making model to close and reopen schools again in case there is another outbreak in the community</b> (UNESCO et al., 2020).</p>
<p><b>2. Human resources (school principals and teachers)</b></p>	<p><b>2.1. High-risk groups</b></p> <p><b>- Assess the risks teachers are exposed to and set up a logistics plan to cover their absences</b> in face-to-face classes, and allow them to continue to teach remotely when possible (UNICEF &amp; WFP, 2020). The staggered back-to-school plan should prioritize protecting teachers, school staff, and high-risk students - whether it be due to their age or preexisting conditions (UNESCO, TTF &amp; ILO, 2020).</p> <hr/> <p><b>2.2. Planning for teacher availability</b></p> <p><b>- Adequately planning and relaxing the education staff's policies:</b> revise staff policies regarding attendance to relax the absentee criterion due to health-related issues. This requires planning for the deployment and mobilization of additional teachers and substitutes. Systems should be developed and implemented to monitor teachers' working conditions, their mobilization, and their rights (UNESCO, TTF &amp; ILO, 2020).</p>

DIMENSION	MAIN RECOMMENDATIONS
	<b>2.3. Other recommendations</b>
	<ul style="list-style-type: none"> <li>- <b>Guarantee the timely and continuous payment of teachers' salaries and benefits before and after schools reopen:</b> increase funding for their continuous training, developing their capabilities, and supporting them as a strategy to retain teachers (Bos, Minoja &amp; Dalaison, 2020).</li> </ul> <p>Avoid practices such as extending school hours or recruiting teachers with no experience given that this can be detrimental to teaching and education quality (UNESCO, TTF &amp; ILO, 2020).</p>
	<ul style="list-style-type: none"> <li>- <b>Postpone and adapt teachers' performance evaluations and take into account the innovative changes they implemented in their practices:</b> establish and encourage support networks and practice communities for teachers, in order to promote their cooperation and share best practices to go back to in-person classes in schools, and with other schools (UNESCO, TTF &amp; ILO, 2020).</li> </ul>
	<ul style="list-style-type: none"> <li>- <b>Offer teachers, school principals, and school staff training in remote learning, health, and precautionary practices:</b> train and provide teachers and school staff with tools to monitor, identify, and assist students who are facing specific hardships while schools are closed and reopen (UNICEF &amp; WFP, 2020). Offer all school staff training on implementing physical distancing and school hygiene practices (UNESCO et al., 2020). Make sure all education staff is familiar with clear protocols and procedures in case any member of the community gets ill. Provide all staff with individual protective gear and make sure healthcare workers are available and qualified to actively monitor health indicators at the premises (WHO-EPI-WIN, 2020).</li> </ul>
<b>3. Remote education (access to ICTs and connectivity)</b>	<ul style="list-style-type: none"> <li>- <b>Provide teachers and education staff with constant psychosocial support so that they can in turn support their students</b> (UNICEF et al., 2020).</li> </ul>
	<b>3.1. Recursos tecnológicos en los hogares</b>
	<ul style="list-style-type: none"> <li>- <b>Make sure every household has power and an internet connection in order to carry out virtual classes</b> (CARICOM, 2020).</li> <li>- <b>Reduce connectivity costs, and invest in digital infrastructure and digital literacy for marginalized populations</b> (CARICOM, 2020).</li> </ul>
	<b>3.2. Competency standards for teachers</b>
	<ul style="list-style-type: none"> <li>- <b>Invest on teachers training and innovative and affordable technology that adapts to every school's context</b> (UNICEF et al., 2020; Arias et al., 2020).</li> <li>- <b>Reinforce support systems and train teachers, facilitators, parents, and tutors on the appropriate use of technologies for learning</b> (UNICEF et al., 2020).</li> </ul>
<b>3.3. Technological Resources at schools</b>	
<ul style="list-style-type: none"> <li>- <b>Guarantee power and an internet connection at schools in order to conduct online classes</b> (CARICOM, 2020).</li> </ul>	
<ul style="list-style-type: none"> <li>- <b>Boost the use of ICTs and other alternatives that guarantee the continuity of learning and remote education:</b> make sure the use of ICTs is not causing further inequalities among students (UN, 2020; Arias et al., 2020).</li> </ul>	

DIMENSION	MAIN RECOMMENDATIONS
<b>4. Financing of education</b>	<p>- <b>Prioritizing, preserving, and extending the national budget allocated to education must be a key priority during the process of reopening schools.</b> Education funding must prioritize the most marginalized schools and students, as well as those affected by the pandemic, apart from considering whether grants and direct transfers would be useful to help them mitigate long-term consequences such as preventing those in the most vulnerable conditions from dropping out (UNESCO, TTF e ILO, 2020)</p>
	<p>- <b>Analyze potential actions to reduce repercussions in private education; e.g.: offering more options for public education (UN, 2020).</b> (ONU, 2020).</p>
	<p>- <b>Budget and funding adjustments to respond and support recuperation efforts must focus on investing in clean water, health, and hygiene at schools, as well as to increase investment in remote education.</b> Prioritize spending on individual protective equipment and cleaning supplies as well as school disinfection, and extend or build gender-segregated restrooms and infrastructure that allows for physical distancing (UNESCO et al., 2020).</p>
	<p>- <b>It's paramount to invest in training teachers, increasing qualified teaching staff, as well as in innovative and affordable technologies, and reduce as much as possible additional costs to families</b> such as exam fees and school uniforms (UNESCO et al., 2020).</p>





# 3. CONDITIONS TO REOPEN SCHOOLS



This chapter analyzes the conditions that are needed for schools to reopen focused on three dimensions: (i) safe schools (school infrastructure, access to water and sanitation), (ii) human resources (school principals and teachers), and (iii) remote education (access to ICTs and connectivity.) On the other hand, the measures that other countries have adopted are analyzed to prepare and carry out a staggered reopening of schools, as well as the structural conditions of the region's national education systems, using available data to assess the situation. The goal is to encourage the analysis of existing factual conditions and potential action plans to go back to in-person classes that best adapt to the recommendations included in the previous chapter.

## 3.1. SAFE SCHOOLS (SCHOOL INFRASTRUCTURE, ACCESS TO WATER AND SANITATION)

As part of the school reopening process and to follow physical distancing recommendations, countries that have gone back to in-person classes have done so progressively, in turns, and in small groups. Areas where there haven't been any COVID-19 cases reopened schools first. Also, the most vulnerable parts of society – those who lack or have limited access to the internet and other means of communication, people with disabilities, and early childhood – were prioritized (UNICEF-LACRO, 2020a). Going back to physical attendance has come paired with biosafety measures and rigorous health protocols, including implementing health filters before entering the premises, using face masks, cleaning and disinfecting all facilities, and keeping students' desks apart from one another.

A periodic survey set up by UNICEF (2020) between April and June 2020, tracks the measures countries have taken to close and reopen schools. Out of 11 countries in the region that responded about their reopening plans, 4 said to be teaching in temporary spaces, and 5 reported having implemented shifts to reduce the number of people at a same place and time.

According to the second round of surveys carried out by UNESCO, UNICEF and the World Bank (2020) between July and October, regarding how countries responded in terms of education, 16 out of 25 countries in the region are planning strategies that include student rotation and spatial adjustments in schools and classrooms to reduce group sizes; 20% of the countries have reopened at least some schools; and 40% have implemented a hybrid back-to-school strategy.

At the same time, out of 20 countries that responded questions on steps taken as part of the early responses to the pandemic, 4 revealed to have carried out some type of WASH-related intervention in schools. Colombia, Costa Rica, and the Dominican Republic paid special attention to improving infrastructure such as adapting facilities and improving health resources to guarantee clean water supply and improve the hydro-sanitary conditions, as well as repairing classrooms in rural schools – mainly to adapt the premises to a staggered reopening of schools (SITEAL, 2020). Grenada also carried out an important investment on renovation, improvement, and construction of new school infrastructure (UNESCO, 2020d). Most countries also implemented biosafety measures such as monitoring the health status of staff and students. Out of 20 respondent countries, 13 reported to have implemented physical distancing measures and health training for the education community (UNICEF, 2020).

### 3.1.1. PHYSICAL DISTANCING IN SCHOOLS

As research on COVID-19 has proven, the virus is easily transmitted through physical contact from one person to another. That's why the international agencies' main recommendation is to put strategies in place to minimize contact between people (See Table 1, recommendation 1.1). In the school context, physical distancing mainly implies reorganizing classrooms to keep students' desks at least a meter apart. This requires analyzing how much space is available in classrooms and how big student groups are.

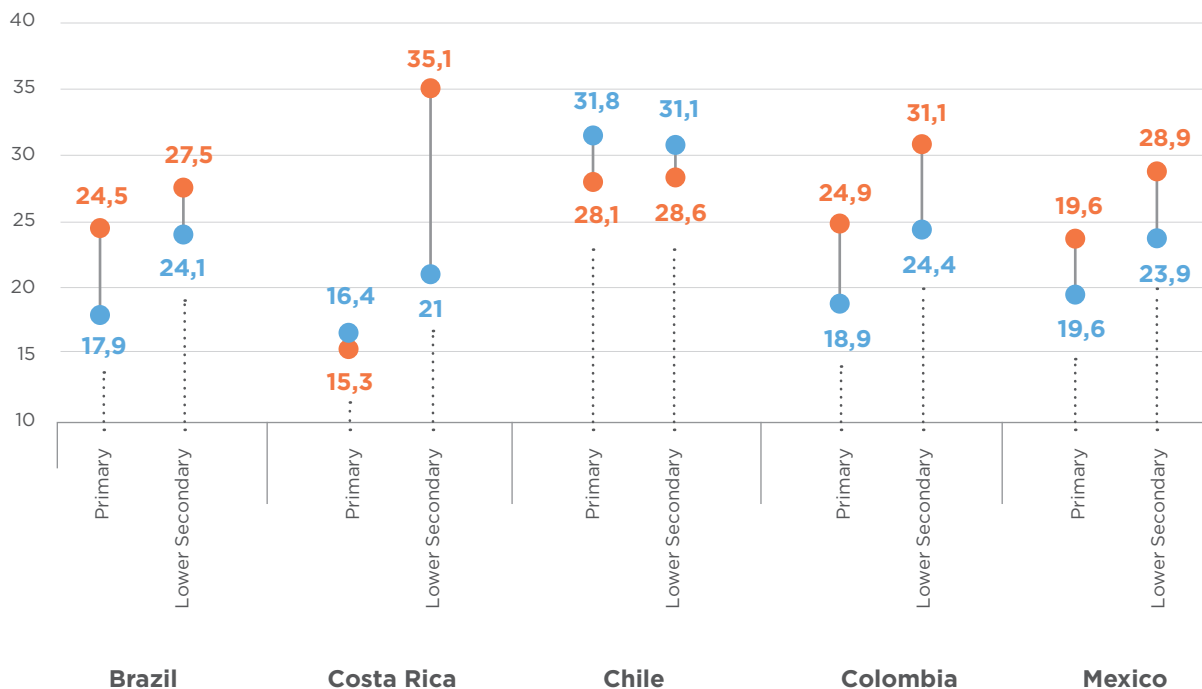
There is little comparable evidence in the region about average classroom dimensions and the variations that can be found among those values. A recent IDB report (Bos, Minoja & Dalaison, 2020) shows size estimates of classrooms in 11 countries in the region both in terms of area and of number of students. This study has estimated that, in order to follow physical distancing protocols, countries should reduce between 27% and 40% the size of the current groups of students. To do so, education systems must plan a deep reorganization of school dynamics through hybrid systems in which alternate groups of students physically attend classes, alternative spaces are used as classrooms, and even facilities outside the school are utilized.

Another tool that can be helpful is information on the average number of students per class. Although this is a shaky indicator given the fact that there is no information on the actual size of classrooms, it can provide a general idea on how big this problem is, as well as the challenges posed by large groups of students. The systematic surveys carried out by the OECD<sup>15</sup>, in which a group of countries in the region participate, include information on the average number of children and adolescents that take classes at each education level. This information provides further evidence of the daunting challenge of implementing physical distancing protocols, especially in high-schools.

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15. These surveys –comprising countries in the region that are members of the OECD and some associated states– systematize educational data in order to produce comparable statistics.

Available data on the size of class groups in primary education reveals that they tend to be smaller. E.g.: in Costa Rica, the average number of students drops 53% compared with lower secondary (33 to 16 students per group); in Colombia, it's 23% smaller (30 to 23 students per group); and in Brazil, 16% less (27 to 23 students per group). The exception is Chile, with groups of about 30 students both in primary and lower secondary schools (see Chart 7).

**CHART 7**
**Average number of students by class group according to level of education and management type, in Latin America and the Caribbean countries, 2018**


Source | PISA 2018 (OECD)

● Public ● Private

While at the time of reopening the number of students should range between 20-25, as the IDB report suggests (Bos, Minoja & Dalaison, 2020), even average values are higher than these parameters, which means that classrooms need to be massively reorganized. Another important factor is the difference between public and private schools. In some cases, such as Chile, there are more students per classroom in private schools than in public schools (see Chart 7). In most countries, reorganizing class schedules and spaces affects both public and private schools alike, and in others, the latter will require greater efforts to guarantee physical distancing.

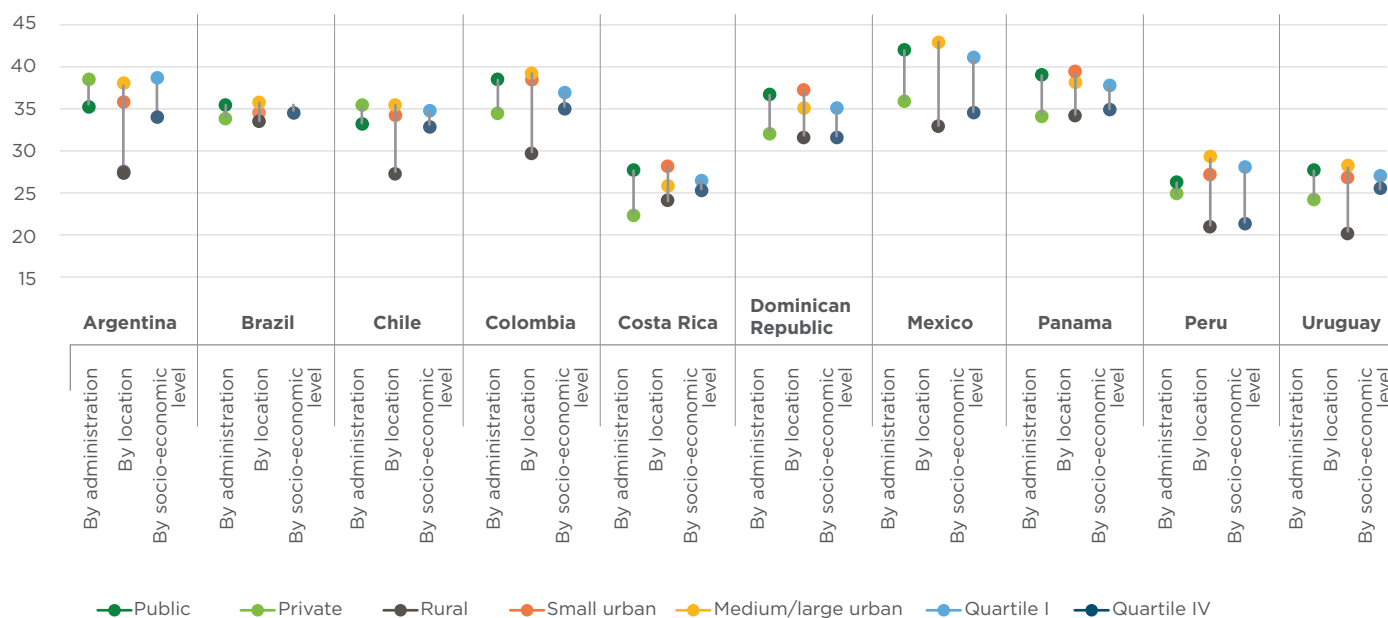
Data collected by PISA assessments through their accompanying survey to school authorities, sheds further light on disparities, focusing on average classroom size for students age 15. According to the data shown in Chart 8 regarding the average number of students, there are significant differences between private and public schools, rural and urban schools, and also along the lines of socio-economic levels. First, in terms of management, the data confirms that the challenge of meeting physical distancing protocols is similarly difficult in public and private schools. In Chile and Argentina, there are more students attending private schools than the alternative.

Secondly, when it comes to location, students tend to concentrate in large urban areas, where groups are usually bigger. However, rural schools also have large numbers of students. This is probably due to the way high-schools are organized in most countries given that they need a relatively high level of enrollment.

Lastly, when it comes to socio-economic levels, the classrooms that the most vulnerable students attend are usually overpopulated. In countries such as Peru, Mexico, and Argentina, the gaps are very significant. Pedagogical support for these students should be given sustained, protected priority due to the enormous risk of inequality gaps growing in contexts such as the one we are currently experiencing.

### CHART 8

**Average number of students by group according to type of administration, location, and socio-economic background in the modal grade for children age 15, in Latin America and the Caribbean countries, 2018**



Source | Prepared by the authors on the basis of PISA 2018 (OECD).

### 3.1.2. AVAILABILITY OF ALTERNATIVE FACILITIES TO CLASSROOMS

To respond to the challenge of physical distancing, if classrooms are not big enough, it is essential that schools have other facilities – such as multiple purpose areas, auditoriums, gyms, or sports fields.

One of the recommendations put forth by international agencies (Table 1, recommendation 1.2) is directly linked to the management of school facilities: accommodating other areas in schools to teach classes in person while reducing the number of people in a single room at a time.

Using data from TERCE (UNESCO, 2014), the number of primary schools that have the necessary infrastructure – counting pedagogical and academic spaces as well as multiple purpose rooms – can be estimated.<sup>16</sup> Some 70% of primary-level students in the region attend schools equipped with multiple purpose rooms, especially private institutions (84% vs. 68% for public schools) and those located in urban areas (75% in public urban schools vs. 62% in rural schools<sup>17</sup>).

The availability of academic spaces (which are usually smaller) is more common although there are also significant gaps (see Chart 9).

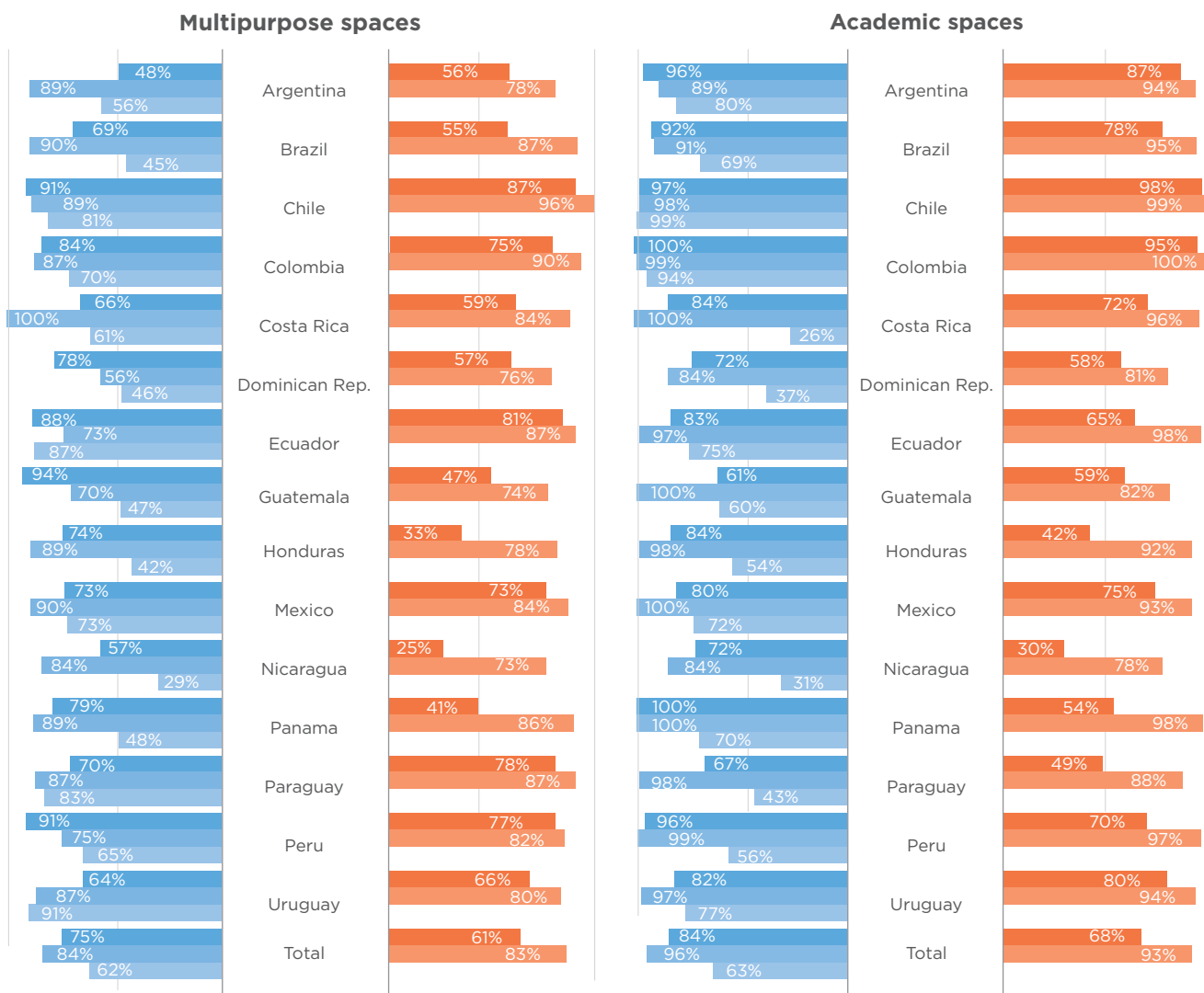
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16. According to the categories laid out by Duarte, Jaureguiberry & Racimo (2017), pedagogical or academic spaces include art or music rooms, science labs, computer rooms, and libraries; multiple-purpose facilities include sports fields, gyms, and auditoriums.

17. Rural schools are compared to public urban schools since most of them are public. Only 2% of rural schools in our sample are private.

**CHART 9**

**Percentage of students in primary schools with multipurpose spaces and academic spaces, divided by type of administration, location, and income level, in Latin America and the Caribbean countries, 2013**



**Source** Prepared by the authors on the basis of the 2013 TERCE (Third Comparative and Explanatory Regional Study) assessment (UNESCO, 2014).

**Note** The calculation of student percentages is based on the students evaluated in TERCE (Third Comparative and Explanatory Regional Study).

■ Public urban    ■ Quintile I  
 ■ Private urban    ■ Quintile V  
 ■ Rural

In Latin America, approximately 3 out of every 4 primary school students attend schools where there are large physical spaces that could be reassigned to meet physical distancing requirements. Additionally, 4 out of every 5 schools have smaller facilities that could take up new roles. This percentage is even higher for students in private schools, and students in the top income quintiles.

This information fails to reflect the complexity and diversity of available infrastructure. The number of spaces and the conditions they are in change dramatically between countries, regions, and even schools. The aggregated data is a first step in planning, but it needs to be complemented with more contextualized diagnostics in order to identify the choices schools have at their disposal. This information also helps to highlight that schools do not have any additional resources in terms of physical space to redistribute a third of primary school students.

To summarize, most school classrooms in the region are not big enough to follow physical distancing standards if schools reopened and all students went back to in-person classes at the same time. Because this is such a broad problem, it is not feasible to consider modifying the infrastructure to create more adequate spaces in the short term. Apart from the lack of time, financial resources are insufficient, especially in the context of a global crisis (which will be further covered in the following chapter.) In addition, there are operational and administrative difficulties.

### **3.1.3. HYGIENE PRACTICES AND BIOSAFETY MEASURES**

International agencies' recommendations on safe school reopening (Table 1, recommendation 1.3) pay special attention to the schools' promotion of good hygiene and handwashing habits, as well as to the adoption of disinfection protocols and provision of cleaning materials and supplies.

Effectively implementing these recommendations, protocols, and practices requires basic school infrastructure conditions. In this sense, assessing the access to clean water and basic infrastructure to offer health and hygiene in schools is a key tool to plan and manage the reopening of schools.

The COVID-19 pandemic has revealed structural deficiencies in school buildings and enormous levels of inequality throughout the region. UNICEF estimates that 16% of teaching institutions in Latin America and the Caribbean lack access to clean water. This percentage is higher in rural areas, where it reaches up to 28% of schools. Regarding access to basic health services, 75% of the schools have adequate conditions. Sixty percent of the schools have hygiene services that include access to water and soap, and 28% offer limited services without access to soap (UNICEF, 2020d).

Table 2 shows the situation of countries in the region in terms of clean water and basic handwashing services availability at schools. Overall, the situation is positive in terms of handwashing services. Only upper secondary schools in Mexico, lower secondary schools in Anguilla, primary schools in Ecuador, and schools in Paraguay and Costa Rica show deficiencies in their ability to offer adequate facilities' access to teachers, staff, and students.

At the same time, access to basic clean water services<sup>18</sup> is still lacking in a larger group of countries. In many cases, every or nearly every school has access to the service; in others, the situation is critical. Mexico, Ecuador, Paraguay, Peru, El Salvador, and the British Virgin Islands are just a few examples of countries where less than 90% of schools have access to drinking water. At some education levels, this number drops down to or even exceeds half the schools (e.g.: Anguilla in lower secondary, Ecuador in primary and lower secondary, and Peru in primary.)

**TABLE 2**

**Percentage of schools that have access to basic drinking water and handwashing services by education level in Latin America and the Caribbean countries, circa 2019**

COUNTRY	BASIC HANDWASHING SERVICES			BASIC DRINKING WATER SERVICES		
	Primary	Lower secondary	Upper secondary	Primary	Lower secondary	Upper secondary
Anguilla	100.0	50.0	100.0	100.0	50.0	100.0
Antigua and Barbuda	100.0	100.0	100.0	100.0	100.0	100.0
Barbados	100.0	100.0	100.0	100.0	100.0	100.0
Bermuda	100.0	100.0	100.0			
Brazil	95.3	98.0	99.6			
British Virgin Islands	91.3	100.0	100.0	100.0	83.3	85.7
Cayman Islands	100.0	100.0	100.0	100.0	100.0	100.0
Costa Rica	84.8	76.1	75.1	91.3	91.9	91.0
Cuba	100.0	100.0	100.0	100.0	100.0	100.0
Dominica	100.0	100.0	100.0	100.0	100.0	100.0
Ecuador	82.6	93.2	96.5	40.3	56.7	62.2
El Salvador				81.8	82.1	84.5

18. The definition refers to the availability of clean water with the source located at the facilities, capable of supplying sufficient water to drink, for personal hygiene, and if applicable, to food preparation, cleaning, and washing at all times. This water must be free of microbiological and chemical contamination and accessible to all users – including those with disabilities – during school hours (UNICEF, WHO & JMP, 2015).



COUNTRY	BASIC HANDWASHING SERVICES			BASIC DRINKING WATER SERVICES		
	Primary	Lower secondary	Upper secondary	Primary	Lower secondary	Upper secondary
Grenada	100.0	100.0	100.0	100.0	95.8	95.8
Honduras				87.9	100.0	77.4
Jamaica	100.0	92.9	100.0	90.3	92.9	100.0
Mexico			76.9			49.0
Montserrat	100.0	100.0	100.0	100.0	100.0	100.0
Paraguay	61.9	75.5	80.0	66.7	79.7	83.9
Peru				54.5	73.9	73.9
Saint Kitts and Nevis	78.8	100.0	100.0	78.8	100.0	100.0
Saint Lucia	98.8	100.0	100.0	98.8	100.0	100.0
Saint Vincent and the Grenadines	100.0	96.3	96.3	100.0	96.3	96.3
Turks and Caicos Islands	100.0	100.0	100.0	100.0	100.0	100.0
Uruguay				100.0	100.0	100.0
Venezuela				97.5		

Source | UIS Database.

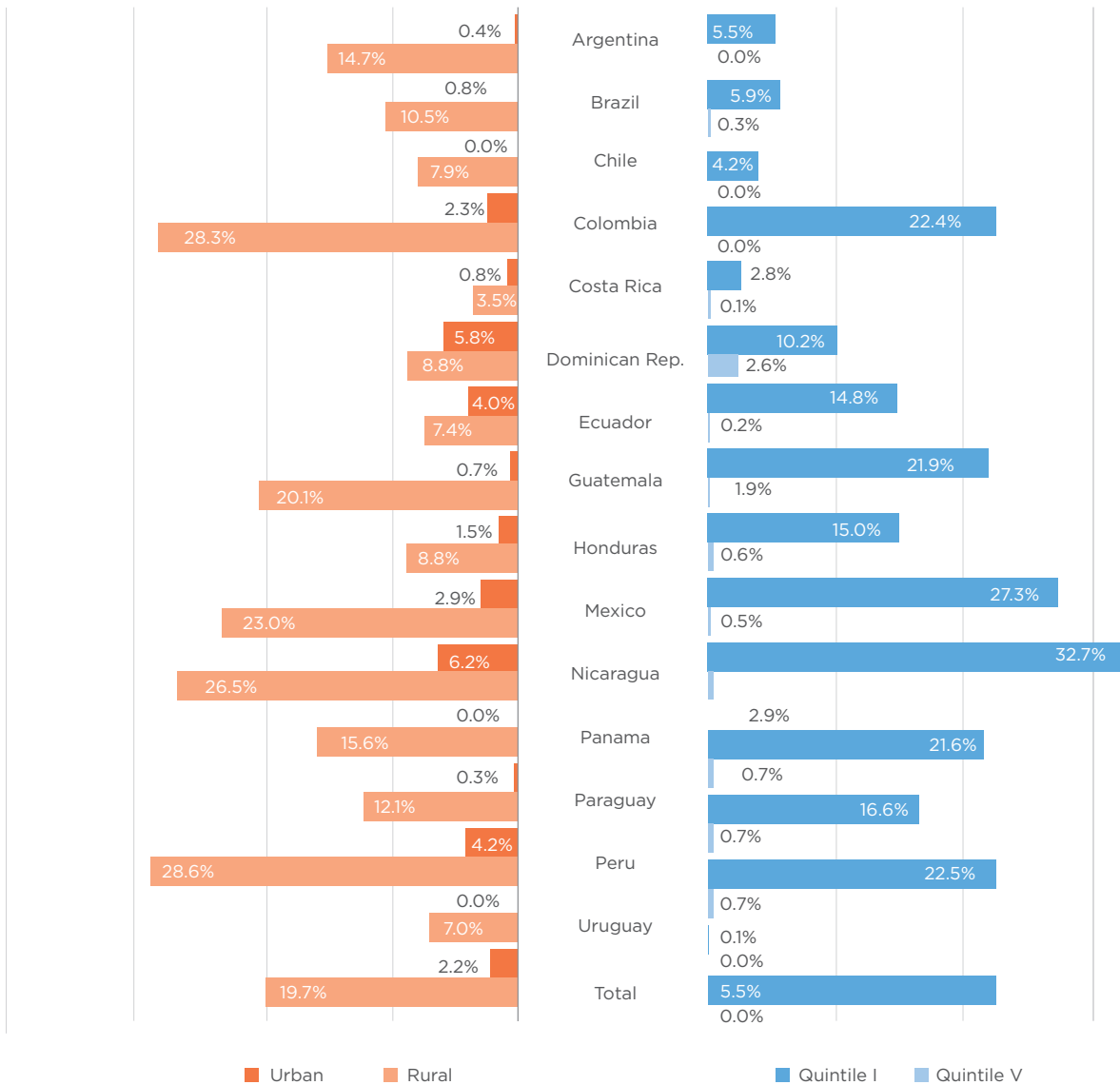
The coverage of access to drinking water for the general population is very unequal outside of capital cities: in urban areas it reaches an estimated 82.3%, while in rural areas it drops to 41.7% (CEPALSTAT, 2020). In some countries, barely one fourth of the people living in rural areas –or even less– have access to this service.

This data exposes some of the region’s toughest challenges. Guatemala, Nicaragua, Peru, Mexico, and Colombia face more complex scenarios in terms of access to drinking water. At the same time, in many countries the gap between rural and urban areas is very broad; this also occurs between income quintiles.

A significant number of children lack access to safe drinking water both at home and at school. This problem is analyzed based on the information obtained by TERCE in 2013 for primary schools (see Chart 10). The percentage of boys and girls in this situation is extremely high in Mexico, Guatemala, Nicaragua, and Peru.

CHART 10

**Percentage of 3rd and 6th grade students who lack access to drinking water both at home and at school, in countries in Latin America, 2013**



**Source** | Prepared by the authors on the basis of data supplied by TERCE 2013 (UNESCO, 2014).

If we extrapolated this information to all primary schools, the estimated number of students in the region with no access to drinking water would be 3.1 million.

The other key dimension in international agencies' recommendations on hygiene practices is linked to biosafety and health monitoring measures. Identifying which of these aspects are more common in school reopening plans may be possible (see Table 3). This information was obtained by combining data from regional surveys on countries'

responses to the COVID-19 crisis<sup>19</sup> and regional systematizations of information published on each country's website.<sup>20</sup>

**TABLE 3****Inclusion of biosafety and health monitoring measures in school reopening plans, 2020**

Country	Monitor the health of teachers and students	Procedures to respond to the appearance of symptoms	Decision models to close or reopen schools	Hygiene protocols for schools	Protocols to disinfect and clean schools	Availability of cleaning supplies
Antigua and Barbuda						
Belize						
Brazil						
Chile						
Colombia						
Costa Rica						
Cuba						
Dominican Republic						
Ecuador						
Haiti						
Honduras						
Jamaica						
Mexico						
Montserrat						
Nicaragua						
Panama						
Paraguay						
Peru						
Suriname						
Trinidad and Tobago						
Uruguay						

**Source** | Prepared by the authors on the basis of data supplied by UNICEF Global Tracker of National Education Responses to COVID-19, UNICEF LAC COVID-19 Education Response Updates; SITEAL (2020); and World Bank, UNESCO & UNICEF (2020).

19. Two regional UNICEF surveys were taken into consideration: Global Tracker of National Education Responses to COVID-19, and LAC COVID-19 Education Response Updates, along with UNESCO, UNICEF & the World Bank's survey, 2020.
20. Referring to the Sistematización de respuestas de los sistemas educativos de América Latina a la crisis de la COVID-19 ("Systematization of the Responses of Latin American Education Systems to the COVID-19 Crisis"), conducted by SITEAL, 2020.

Available information reveals that countries are including these measures in their agendas with different coverage levels. Therefore, school reopening plans' execution and specificity may vary greatly in a short period of time.

The most commonly seen biosafety measures in countries surveyed were those obtained by incorporating certain behaviors such as health protocols, health monitoring, disinfection, and cleaning. The two latter also depend on the availability of supplies.

It is highly likely that measures that gain more traction and get implemented on a higher scale are those that represent relatively lower economic costs to governments. At the same time, these are harder to execute as long as structural services are not guaranteed for the entire population.

## 3.2. HUMAN RESOURCES (SCHOOL PRINCIPALS AND TEACHERS)<sup>21</sup>

Teachers as a whole are a critical piece in any school reopening plan. The characteristics and availability of staff members capable of teaching when schools reopen will be a key factor in determining whether going back to classrooms is possible as well as the most feasible ways to do so.

This scenario involves important planning efforts on behalf of education systems to guarantee there are enough teachers to reopen schools. Additionally, the necessary tools to provide students pedagogical support must be taken into consideration.

The availability of teachers in a school reopening scenario may be a crucial factor: some are part of the high-risk population and therefore could not resume teaching in-person while the pandemic continues; others will be affected by the transmission of the disease. At the same time, every school reopening model requires a different number of teachers. According to the survey on countries' responses to the closing of schools due to the COVID-19 crisis carried out by UNESCO, UNICEF, and the World Bank (2020) in 25 countries in the region between August and October, 34% of the countries said they would not hire new teachers to reopen schools, and 39% remains unsure.

At the same time, 72% of respondent countries have provided teachers with training on remote education, including online, TV, and radio teaching. Additionally, 56% reported to have offered teachers content adapted to remote education. Seventy-four percent of the countries said they did not alter teachers' salaries or benefits while schools were closed (UNESCO, UNICEF, and the World Bank, 2020).

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21. Over the following sections, the only recommendations that will be considered are those regarding high-risk groups, and teacher availability planning because there is not enough information on topics included in section "2.3. Other recommendations" in Table 1.

It is worth mentioning that countries in the region have implemented different interventions and initiatives to strengthen teachers' wellbeing. Peru, for example, has offered teachers socio-emotional support resources and therapy. As part of its school reopening plans, Chile has also trained teachers in the socio-emotional sphere, and Paraguay has developed virtual seminars to create spaces that contribute to teachers' socio-emotional wellbeing. And others, like Mexico, have included medical assistance to teachers in their school reopening plans (SITEAL, 2020).

Planning the reopening of schools in terms of teachers is undoubtedly complex throughout the region because it requires a careful estimate of demand and supply, while exposing an urgent need to improve policies for teachers' training, availability, placement, and working conditions.

### 3.2.1. HIGH-RISK GROUPS

As the international recommendations note (Table 1, recommendation 2.1), some teachers and school authorities are unlikely to be able to resume in-person classes for health reasons, be it because they are part of a high-risk group, or have a preexisting medical condition or advanced age. Others might get infected with COVID-19 and will need to be isolated and treated. Still others may have health issues caused or worsened by pandemic-related stress.

Teachers and professors over 60 years old should not be exposed to potential infection risks, and the same can be said of many aged between 50 and 60.

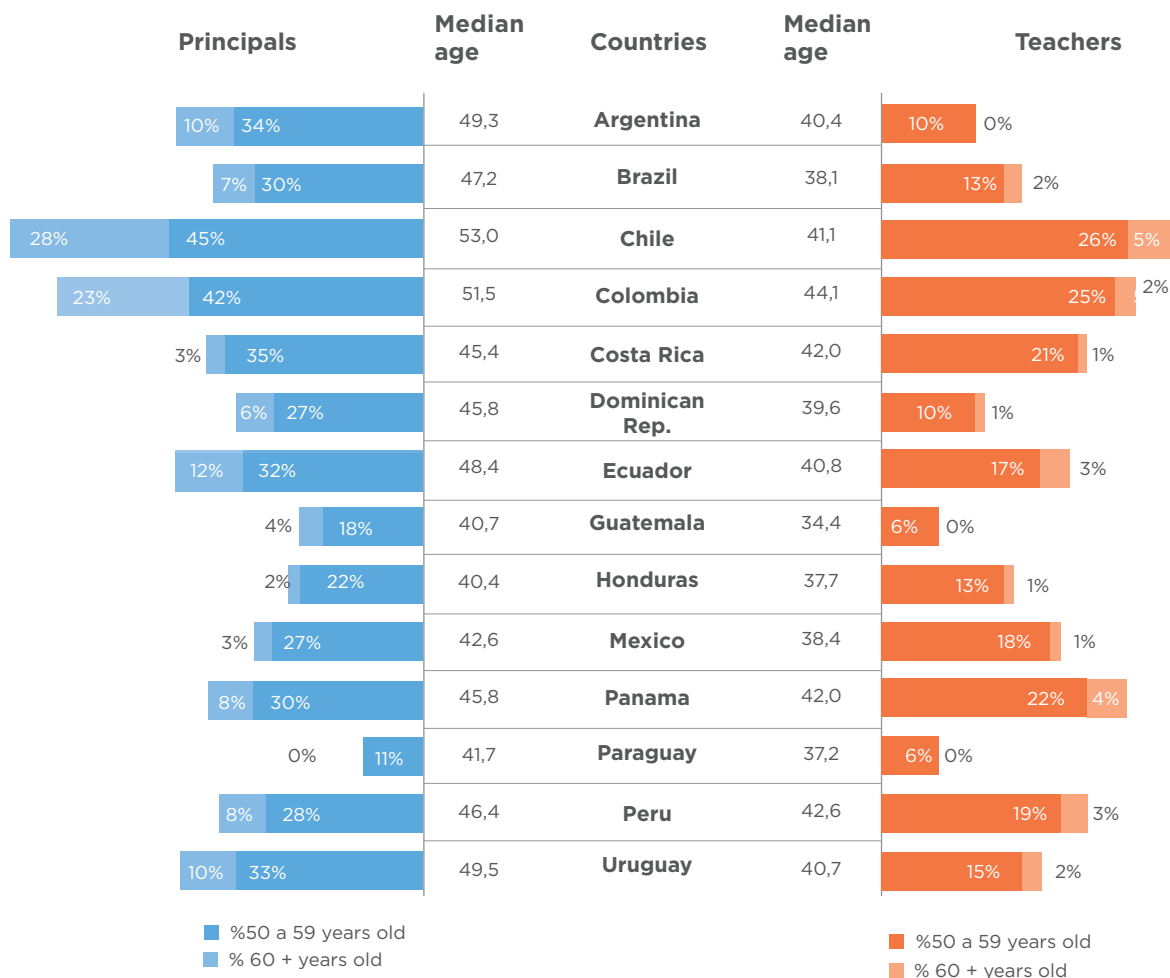
As Chart 11 shows, a relatively low percentage of teachers—around 1.5% in total— is within the highest risk age group (60+.) Countries like Chile or Panama must pay special attention to this factor because it will possibly have a larger impact on the number of available teachers.

Among school principals, this issue can be worse. Over 6% of them are in age groups considered to be at risk, and in some countries, the rate rises up to one-fourth. In many cases, upon returning to school some may find limitations in their ability to participate in management meetings and other activities, which can in turn cause difficulties in terms of team organization and leadership.

Although this information is based on data about primary schools, evidence about some countries in the region suggests that age structure and distribution does not vary significantly in secondary education (OECD, 2020), so the issues are likely to remain the same.

CHART 11

**Median age of teachers and school principals of 6th grade in primary schools, and percentage of teachers over 50 years old, in Latin America and the Caribbean countries, 2013**



Source | Prepared by the authors on the basis of data supplied by TERCE 2013 (UNESCO, 2014).

In summary, it is quite clear that not all teachers and school authorities will be able to go back to school once in-person classes resume.

That's why international recommendations focus on the need to include strategies that make up for these vacancies by mobilizing additional teachers and substitutes in school reopening plans (Table 1, recommendation 2.2).

In the face of the pressure to hire new teachers, the possibility of covering this demand will be conditioned by two structural factors: on the one hand, countries' financial ability to face the higher personnel costs; as discussed in Chapter 4 on education funding, the conditions for this course of action are far from favorable.

The second structural challenge in this scenario is the scarce availability of staff trained to teach, capable of attending schools, and covering the vacancies and school hours from teachers on sick leave. The information available on this area is discouraging (see Table 4).

**TABLE 4**

**Percentage of teachers with basic required qualifications by education level in Latin America and the Caribbean countries, circa 2019**

Country	Pre-primary	Primary	Lower secondary	Upper secondary
Antigua and Barbuda	64.7	52.8		
Bahamas	63.2	89.8	81.0	85.1
Barbados	71.6	75.1	51.9	51.9
Belize	52.1	17.7	32.6	34.9
Bermuda	100.0	100.0	100.0	100.0
Bolivia	82.6	90.4		
British Virgin Islands		95.1		
Cayman Islands		100.0	100.0	100.0
Colombia	97.0	94.7	98.2	98.7
Costa Rica	90.3	94.5	97.0	97.0
Cuba		100.0	100.0	100.0
Dominica	43.4	62.9	48.4	48.7
Dominican Republic	90.0	94.9	88.1	79.4
El Salvador	95.1	95.5	93.2	91.5
Grenada	38.5	62.9	46.1	46.5
Jamaica	100.0	100.0		
Mexico	85.1	95.3		
Montserrat	68.8	75.9		
Panama	100.0	99.2	94.0	
Peru		14.4		
Puerto Rico	84.1	92.6	84.0	84.0
Saint Kitts and Nevis		72.0		
Saint Lucia	70.1	88.1	73.3	70.8
Saint Vincent and the Grenadines		61.1		
Suriname	100.0	99.0	86.6	50.2
Trinidad and Tobago	75.5			
Turks and Caicos Islands		42.8		
Uruguay		100.0		

The information in Table 4 shows that in a pre-pandemic scenario there were trained staff vacancies to cover several countries' education needs.

In certain cases, these vacancies are striking: in many countries in the Caribbean, the percentage of teachers that meet the minimum requirements barely exceeds half of the working teachers in primary and pre-primary; in some cases, it doesn't even reach half.

The data on teachers that meet the minimum required criteria responds to the number of people, not of positions. That's why the scenario may vary according to the number of hours each teacher covers. Data collected by TALIS<sup>22</sup> allows the association of the two in some countries in the region that partook in the survey. This data indicates that every lower-secondary school teacher works, on average, 36 hours a week, 25 of which they devote to teaching. This figure can range from 30 hours (Brazil) to 40 (Colombia) (OECD, 2018).

A third element to take into consideration is the work and income situation while physical attendance to schools was suspended, as well as potential future scenarios: a large number of teachers in the region lack a fixed contract, work at more than one place, or work by the hour or subject. According to TALIS, in Brazil, Colombia, Mexico, and the City of Buenos Aires, between 72% and 79% of teachers have fixed contracts, while in Chile it's only 62% (OECD, 2018).

Many of these teachers may have been relieved from their duties during the pandemic, especially in the private sector where financial pressures derived from the pandemic have had a huge impact. On the one hand, this could imply the availability of people with expertise to cover some of the previously mentioned vacancies. On the other hand, it constitutes a red flag in terms of more job precariousness in a scenario in which governments could decide to adjust their spending based on the multiple demands and loss of revenue.

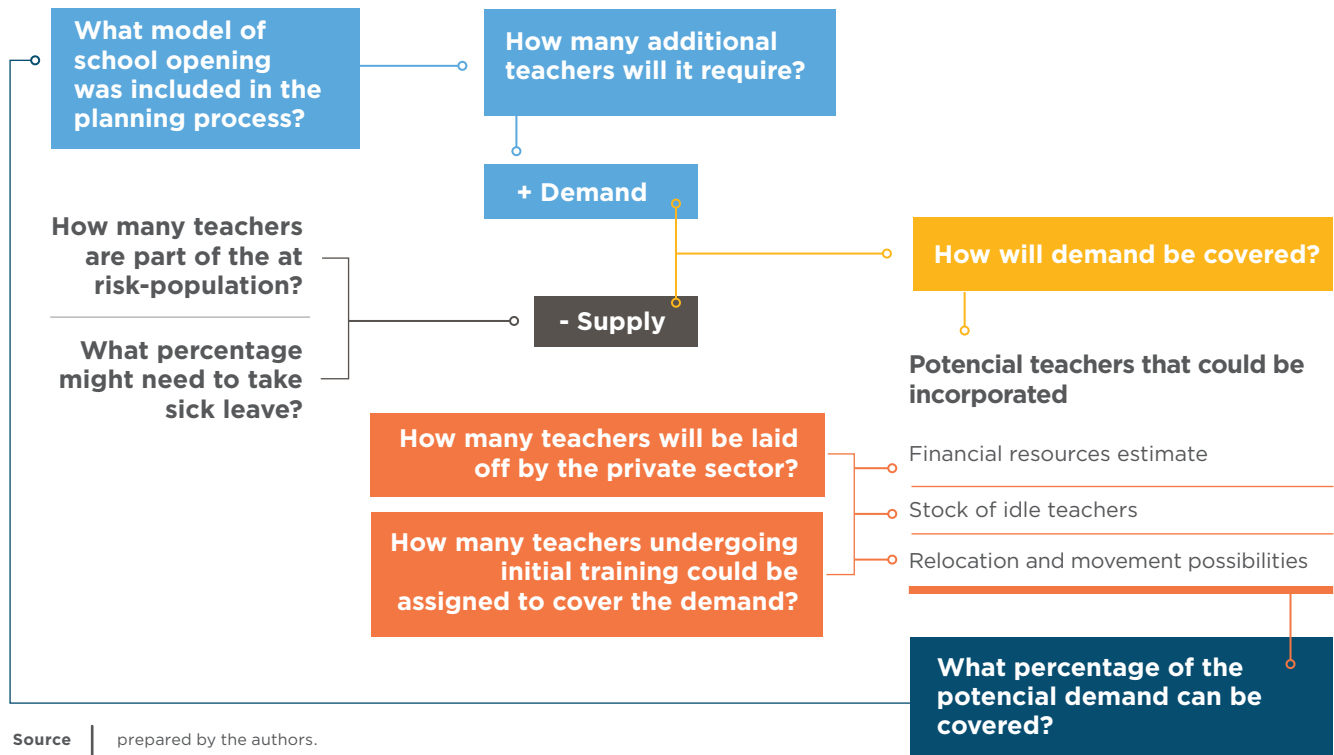
Lastly, to temporarily cover the demand, one possible strategy could be to include those teachers that are finalizing their initial studies and still need to do internships.

To summarize, planning teacher availability for the return of in-person classes is a complex task that governments in the region have to face, considering multiple factors to cover all positions. Graphic 1 summarizes the main questions linking the model to reopen schools – considering possible strategies present in the context of a pandemic, from a staggered reopening to the combination of in-person and remote education – and planning for teacher availability.

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22. OECD Teaching and Learning International Survey carried out in Brazil, Chile, Colombia, Mexico, and the City of Buenos Aires, Argentina.



**GRAPHIC 1****Model of teacher availability and demand plan**

### 3.3. REMOTE EDUCATION: ACCESS TO ICTS AND CONNECTIVITY

Remote education has been the main alternative to provide learning continuity while schools remained closed. The most popular resources have been technological, particularly the use of online platforms. This has been the national strategy in over 85% of the countries (UNESCO, UNICEF & World Bank, 2020a). However, this is taking place in the context of a growing digital gap and deficiencies regarding access to the internet, technological devices, connectivity, and technical skills. This is true both for homes as well as education centers.

Introducing or developing distance learning through digital platforms poses an unprecedented challenge for most of these countries. This transition has been more efficient in countries that already had digital inclusion policies in place and certain installed capacity in terms of technological infrastructure.

Besides the use of platforms, 37% of the countries have used radio as a remote education strategy for primary education, 23% for lower secondary, and 27% for upper secondary. Countries like Mexico and Peru have implemented radio education programs in indigenous languages. The use of TV for these purposes has been even more popular than radio (UNESCO, UNICEF & World Bank, 2020a).

Home access to the internet is low throughout the region, posing an important challenge for hybrid education systems. To foster students' access to online learning infrastructure, some countries have given out free or subsidized mobile devices (21%) and internet access (21%) (UNESCO, UNICEF & the World Bank, 2020a). Argentina has offered students and teachers licenses to use computer software and Jamaica has provided teachers with mobile devices in 25,000 public schools (UNESCO, 2020d).

Governments also extended internet access and broadband in some schools, and trained teachers to strengthen their virtual teaching skills (SITEAL, 2020). However, according to UNICEF's survey (2020), only 3 of the 22 respondent countries between May and June, reported to have adopted concrete measure to improve access to electric and internet equipment and connectivity to students in very impoverished areas.

Some countries also disseminated printed guides, student books, and self-learning notepads for people who lack access to digital and audiovisual media. In primary education, 67% of the countries implemented this strategy, while 53% did so for secondary education (UNESCO, UNICEF & the World Bank, 2020a). These were also available in different indigenous languages and in audio format for children who are visually impaired (SITEAL, 2020). Social networks such as WhatsApp and SMS messages have also been important means of communication among the school community: 12 out of the 22 surveyed countries reported to have used them (UNICEF, 2020).

In some countries, learning continuity has prevailed through mobile phones, especially in rural areas.<sup>23</sup> In this sense, many nationwide initiatives oriented at expanding learning continuity through digital education have made sure that these contents can be accessed through phones with an active internet connection. It is worth noting that in most cases, there have been no explicit references of these strategies having considered mobile-friendly content and formats.

23. This fact is backed up by a recent survey held by OREALC UNESCO, responded by over 10,000 teachers throughout the region (90% of whom are from Costa Rica or Paraguay). The results highlight these gaps and reflect the inequality in access to technology, depending on the area where these teaching practices take place. According to the teachers' answers, the most commonly applied learning continuity strategy was the use of instant messages, which amounts to 85% of the cases both in rural and urban areas. Conversely, the use of printed material was more common in rural areas than in urban areas (84% vs 64%), whereas urban schools had better chances of holding remote classes than rural schools (59% as opposed to 39%) (OREALC/UNESCO-LLECE, 2020).

## BOX 1

### Hybrid reopening of schools in Jamaica and Trinidad & Tobago

Jamaica planned a staggered return to in-person classes starting on October 5. This plan includes a hybrid scheme of face-to-face and remote classes. The criterion to determine which communities go back to schools first depends on a vulnerability index that takes into consideration communities' infection risks, the state of schools' physical infrastructure,

connectivity quality, and teacher suitability. Additionally, the government has allocated a budget to schools since June to plan the phased return to classes.

Trinidad & Tobago resumed the school cycle on September 1, but students will not be going back to school until further notice. The government has split students into two categories: those who are capable of participating in distance education, and those who are not. The second group of students receives printed learning material as well as feedback from their teachers on a weekly basis. Additionally, the government has offered studying material through radio and TV. Schools are open for teachers who need internet access to teach their classes. These measures are accompanied with a detailed guide to reopen schools, published by the Ministry of Education in July 2020.

**Source** | Prepared by the authors on the basis of data supplied by UNESCO, 2020d.



### 3.3.1. TECHNOLOGICAL RESOURCES AT HOUSEHOLDS

The context for reopening schools appears to be extremely challenging. The previous section has shown that the most feasible way to continue with instruction is through a hybrid system that combines in-person education with remote learning, rotating the days and schedules student groups attend classes so as to allow for physical distancing measures.

Within this framework, international school reopening recommendations (Table 1, recommendations 3.1 and 3.3) stress the need to reinforce and boost the use of ICTs for continuous learning by reducing the costs of connectivity and investment on digital infrastructure.

The first aspect that needs to be assessed is the availability of technological resources at homes. In 2019, only 66.7% of the people in the region had access to the internet. An estimated 46% of the girls and boys between ages 5 and 12 live in households that lack access to the internet; this amounts to 31 million children in the region. The countries that suffer the lowest rates of connectivity in the bottom quintile are Bolivia, El Salvador, Paraguay, and Peru (with 3%), where over 90% of girls and boys living in the most impoverished households lack internet access (ECLAC, 2020d).

**TABLE 5**

Percentage of households with access to technological resources in Latin America and the Caribbean countries, circa 2019.

Country	Percentage of households that have access to				
	Internet	Computer	Mobile phone	Radio	TV
Antigua and Barbuda		62.4			
Argentina	81.3	69.0			
Aruba		76.6			
Bahamas		75.0			
Barbados		72.5			
Belize		36.7	93.6	58.7	78.7
Bolivia	32.2	36.3		43.9	81.2
Brazil	60.8	46.3	92.8	62.4	95.6
Chile	87.5	60.2			
Colombia	49.9	44.3	95.2	69.7	90.7
Costa Rica	68.5	51.0	94.0	62.1	95.7
Cuba			47.0	52.0	94.9
Dominican Republic	28.3	34.1	90.9	55.3	85.4
Ecuador	37.2	40.7	90.7	25.9	71.8
El Salvador	18.0	21.5	92.6	28.6	87.1
Guatemala	23.6	24.8			
Honduras	26.5	17.1			
Jamaica			94.3	73.2	89.9
Mexico	50.9	45.4	89.7	56.2	92.9
Nicaragua	18.6	13.5			
Panama	60.7	46.7	70.6	71.7	87.5
Paraguay	20.4	25.9	96.7	76.4	91.0
Peru	28.2	32.9	90.9	71.9	80.2
Uruguay	64.0	70.9	94.8	79.5	96.6
Venezuela	33.5	45.7			

Home internet access is far from being available to everyone. In many cases, access is limited due to connection instability and costs. In many countries in Central America, less than a third of all households have an internet connection. TV is the mass communication technology that has the highest coverage, present in nearly every household.<sup>24</sup> Radio also prevails as a resource for communication present in every household in some countries.

Computer availability also varies greatly. Many people have an internet connection via their mobile phones, a technology available in most households, but they may not have computers. This is a very important point because the type of school activity that can be carried out remotely varies according to the access device, and it explains why some countries and areas have chosen to follow on digital proposals through mobile phones.

Data shows that in some countries personal computers predominate although internet access coverage may be low. However, in Argentina, Chile, Brazil, and Colombia the opposite is true: there is more access to the internet than personal computers, which accounts for more connectivity services used for cellphones or TVs.

The strategies that countries have adopted to guarantee learning continuity depend directly on the availability of these resources in dwellings; their absence can be a true stumbling block when it comes to opportunities to access education.

Having a computer at home does not guarantee that it will be available to students for their schoolwork, especially when so many work activities have also migrated to digital formats. Underprivileged people live more crowded together, which implies having to share available computers among more members, hampering their use for educational purposes.

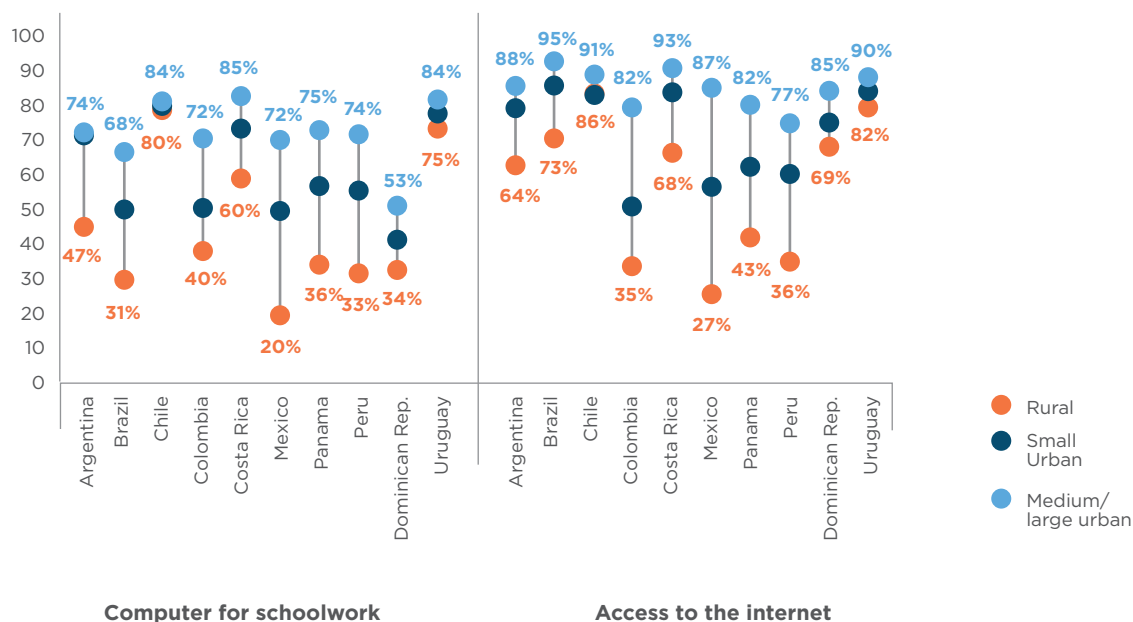
On this particular issue, it can be helpful to assess the degree to which pupils count on available electronic devices for their school activities. Sixty-one percent of 15-year-olds have access to a computer at home for educational use, 79% have access to the internet, and 30% have access to educational software (see Chart 12).

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24. It should be said that radio and TV are considered limited strategies because they are not two-way, i.e., they don't allow for direct interaction between students and the teachers. The survey led by UNESCO, UNICEF, and the World Bank (2020) on how countries responded to the crisis in terms of education, in its second round between July and October, explores countries' perceptions in light of the effectiveness of remote education systems based on these technologies. Eighty percent reported that online platforms are very or sufficiently effective, 79% indicated TV, and 50% radio. In the case of handing printed material to take home, 82% of respondents considered it to be a very or sufficiently effective strategy. Analyzed by the authors on the basis of data supplied by UNESCO, UNICEF, and the World Bank (2020).

## CHART 12

Percentage of 15-year-old students with access to a computer and/or an internet connection for educational purposes by location, in Latin America and the Caribbean countries, 2018



Source | Prepared by the authors on the basis of data supplied by PISA 2018 (OECD).

These gaps also become highly visible when comparing urban with rural areas. Additionally, there is a much higher chance that students in rural areas lack access to technological devices than to the internet.

Home internet connectivity is scarcer in rural areas than in urban areas, falling to alarming levels in Colombia, Mexico, and Peru. In the case of the 15-year-old students evaluated by PISA, the largest gaps are in terms of devices: with the exception of Chile and Costa Rica, less than half the students in rural areas have a personal computer for their schoolwork.

Crossing this information with that of socio-economic conditions, some important differences stand out. E.g.: among the highest quartile, between 70% and 80% of the students have a laptop at home, while in the lower quartile, only between 10% and 20% of the students have one. These differences are less dramatic in Chile and Uruguay thanks to mobile device distribution programs launched by the government (ECLAC-UNESCO, 2020).

**BOX 2****Learning continuity during the closing and reopening of schools in Uruguay****The CEIBAL Plan and learning continuity in Uruguay**

Migrating towards digital education in Uruguay to respond to the COVID-19 pandemic was simplified thanks to the traction led by the CEIBAL Plan (Basic Computer Connectivity for Online Learning), launched in 2007 as a digital inclusion and education policy aimed at reducing inequalities in access and use of ICTs for learning and teaching children and youngsters (Trucco & Palma, 2020). Since it was launched, it has granted universal access to teachers and students ages 4 to 15 to devices, content platforms, and learning management systems. It has also trained teachers in the use of digital platforms and novel pedagogic practices, and equipped every education center with internet access (Pérez-Alfaro, 2020).

After physical attendance to schools was suspended on March 14, the CEIBAL Plan at Home was implemented. It included a videoconference program so students could synchronize classes with their teachers. While schools were closed, which went on until June 1st, 85% of primary students and 90% of secondary students logged into the CREA platform, the national learning management system. Meanwhile, 95% of the teachers worked remotely. With the CEIBAL Plan at Home, the use of digital resources increased over two-fold in March 2020 as compared to the previous year (Zucchetti & Montaldo, 2020). The main advantages of the CEIBAL Plan during the pandemic was that it offered a single channel for teachers and students to communicate, and teachers and parents were already familiar with the platform since it had been in place for a few years (Ripani, 2020).

**Reopening schools in Uruguay**

Uruguay was one of the first countries in the region to gradually go back to physical attendance in public and private schools, prioritizing people in vulnerable situations, and taking into account each location's health status. The first stage began on June 1st, 2020, with rural schools, schools where children from vulnerable social and educational backgrounds attended, and special needs schools. The second stage set off on June 15, when early childhood, pre-primary, and the final year of secondary schools opened their doors throughout the country. Primary schools, vocational secondary schools, and tertiary education also reopened in all the country except in Montevideo and its metropolitan area. The third stage, launched on June 29, involved reopening the rest of the education centers in the country, both public and private. Student attendance is not compulsory at any educational level, and school hours have been cut to four hours while the health emergency continues (SITEAL, 2020).



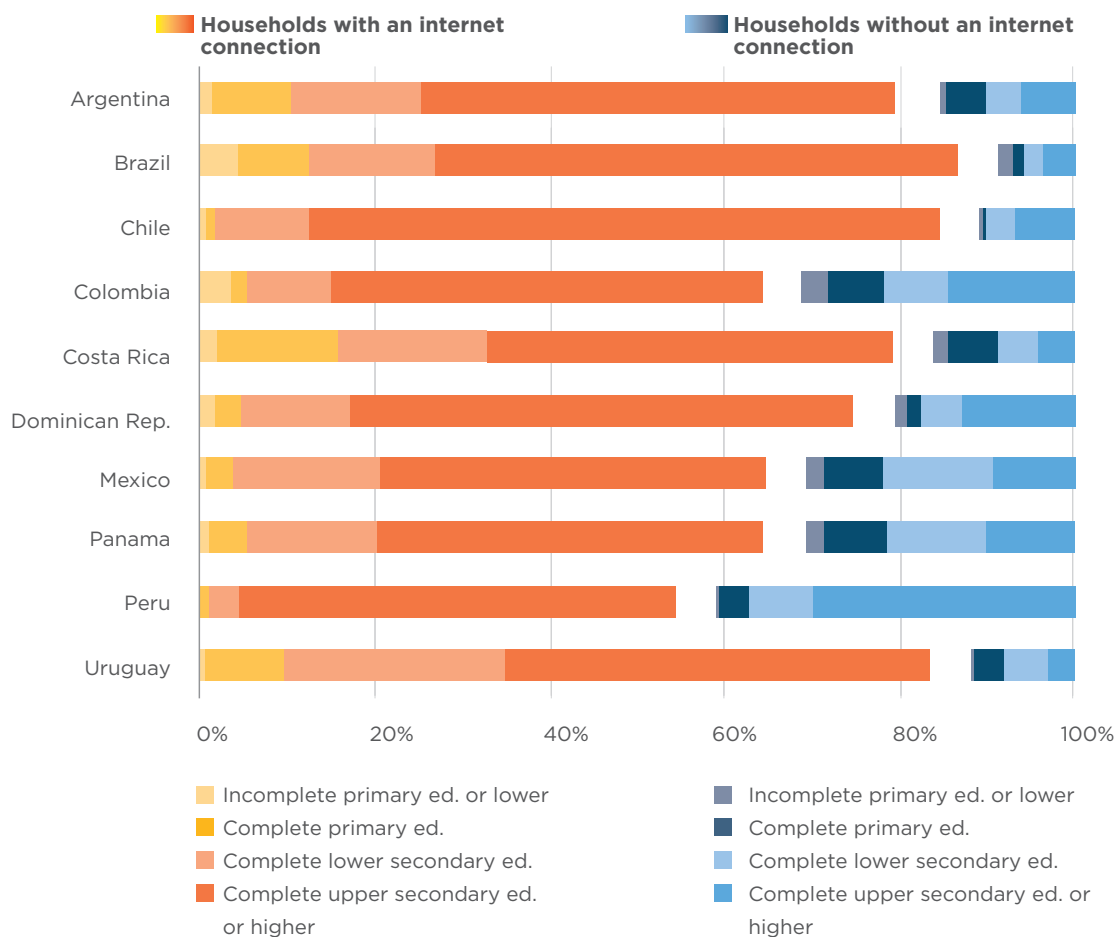
The scenario of hybrid models also takes into consideration that a larger load of school work at home puts more pressure on adults being available to support children in completing their tasks.

The educational capital at home is strongly associated to scholastic achievements in students from different socio-economic backgrounds. In this scenario, it becomes even more important because it reflects the objective conditions at stake for adults at home to be able to join and support remote learning activities.

Although this is a complex dimension to approach from a quantitative perspective, analyzing the highest educational level of mothers and fathers is a relevant variable to take into consideration.

**CHART 13**

**Percentage of 15-year-old students with home access to internet and highest educational level achieved by parents, in Latin America and the Caribbean countries, 2018**





As we have shown, in the current context there is a significant group of students whose learning continuity has hit a snag for lack of access to the internet at home. Within this group, those who live in households with low educational capital or major digital gaps are particularly vulnerable because of the lack of adult support. This group must be particularly taken into consideration since they are at a higher risk of being left behind.

According to complementary PISA questionnaires data, approximately 13% of evaluated students constitute the first generation to have reached secondary education. A little under half of the children in this group (6%) live in households where there is no internet access. In some countries such as Colombia or Panama, about 10% of 15-year-old students are in this situation. In other cases, like Chile or Brazil, this percentage is under 4%.

Hybrid school reopening models should prioritize supporting students so that the education proposals can adapt to the factual conditions of learning continuity.

### **3.3.2. COMPETENCIES OF TEACHERS**

Another element that has come into the limelight during the forced remote modality is the capabilities teachers have to face these challenges. In an abnormal situation like the one we are facing, there are new needs and skills that require broad training programs. There is even a list of international recommendations for countries to respond to the COVID-19 emergency, underscoring the need to endow teachers with remote teaching skills (Table 1. recommendation 3.2).

Following the international framework put together by UNESCO (2019) for the effective use of ICTs in teaching, the necessary skills are divided into six dimensions and three stages of incorporation. This model offers a frame of reference for the challenges the current scenario poses.

The six dimensions of teachers' professional practice point to a vast group of characteristics that range from understanding the role of ICTs in educational policies to applying digital skills, managing schools' digital assets, and protecting users, among others.

In terms of the stages of incorporation, the progression of teacher training considers learning focused on integrating technological resources while maintaining class structure at a first level. Further training includes the pedagogical use of these resources to offer specialized and inclusive learning proposals. The third step focuses on developing knowledge.

The pandemic has revealed that developing these skills requires policy to be sustained over time and takes longer than the emergency will allow. Despite the broad presence of digital learning in the region's education agenda, teachers' skills to integrate digital devices in teaching are dissimilar and vary between countries, types of school, and socio-economic backgrounds (Trucco & Palma, 2020). Aside from Uruguay, which stands out in the region, few countries have moved forward with a more comprehensive digital education policy and are in favorable conditions to face the challenges brought about by this type of education in the context of COVID-19 (Pérez-Alfaro, 2020).

### 3.3.3. TECHNOLOGICAL RESOURCES IN SCHOOLS

To go back to in-person classes under hybrid modalities, the ability to make the best of the digital resources that schools have to offer –both in terms of equipment and in terms of teaching material produced and distributed digitally– will be crucial, especially in countries or areas that find themselves forced to re-interrupt physical attendance due to new outbreaks. Experience from other regions suggests that this is likely to occur, and they even recommend having decision-making models in place to close and reopen schools in case people in the education community get infected (Table 1, recommendation 1.3).

As long as schools have computers for educational purposes, internet access, and tools so teachers can provide support when physical attendance is suspended, there are more possibilities for hybrid models.

Another key aspect is the deficit in digital teaching resources, especially in certain fields of knowledge and education modalities. In this context, many educational resources have been produced or systematized very fast –both by teachers and by ministries of education– but few have been reviewed to ensure they meet quality standards.

In Latin America and the Caribbean, approximately 62% of primary schools and 75% of secondary schools possess computer equipment. Internet access is less common: 44% in primary schools and 66% in secondary schools. The differences between countries are compelling (see Table 6).

**TABLE 6**

**Percentage of schools with computers available for educational purposes and internet connection by education level, in Latin America and the Caribbean countries, circa 2019**

COUNTRY	COMPUTER AVAILABILITY FOR EDUCATIONAL USE			INTERNET CONNECTION		
	Primary	Lower secondary	Upper secondary	Primary	Lower secondary	Upper secondary
Anguilla	100.0	50.0	100.0	100.0	50.0	100.0
Antigua and Barbuda	90.0	100.0	100.0	90.0	100.0	100.0
Argentina	64.5	63.4	66.5	40.0	53.1	56.8
Bermuda	100.0	100.0	100.0	100.0	100.0	100.0
Brazil	53.5	72.6	85.5	62.0	79.5	91.3
British Virgin Islands	100.0	100.0	100.0	100.0	100.0	100.0
Cayman Islands	100.0	100.0	100.0	100.0	100.0	100.0
Colombia	93.4	96.3	96.7	39.4	67.5	72.9
Costa Rica	95.1	87.6	86.9	83.9	70.5	69.5
Cuba	100.0	100.0	100.0	15.8	60.1	52.9
Dominica	100.0	100.0	100.0	100.0	100.0	100.0
Dominican Republic				23.2		
Ecuador	74.9	92.3	96.6	39.3	67.3	76.9
El Salvador	61.0	79.4	96.1	23.2	35.8	64.4
Grenada	72.2	100.0	100.0	72.2	100.0	100.0
Guatemala	12.5	44.0	66.4	9.1	35.7	59.3
Honduras	15.7			16.1		
Jamaica	85.2	46.8	100.0	78.8	46.8	91.2
Mexico			66.5	38.9	54.8	50.8
Montserrat	100.0	100.0	100.0	100.0	100.0	100.0
Paraguay	5.4	18.4	27.7	5.4	18.4	27.7
Peru	76.0	84.5	84.5	49.8	77.1	77.1
Saint Kitts and Nevis					100.0	100.0
Saint Lucia	98.8	100.0	100.0	98.8	100.0	100.0
Saint Vincent and the Grenadines	96.6	84.6	84.6	93.1	84.6	84.6
Turks and Caicos Islands	100.0	96.3	96.3	100.0	96.3	96.3
Uruguay	100.0	100.0	100.0	100.0	100.0	100.0

Access gaps to digital resources are overwhelming. Some countries display clear progress towards universalizing schools' access to digital resources – mainly Uruguay and several countries and territories in the Caribbean such as Saint Lucia, Antigua and Barbuda, and Bermuda. In other cases, like Jamaica or Grenada, access is concentrated in certain levels.

Most continental countries show major gaps in terms of school connectivity; Bolivia, Paraguay, and Honduras are the most critical cases. Although the availability of computers for educational use is extended, in many countries, between one-third and one-fourth of schools lack this resource.

Managing continuous learning under a hybrid modality must take into consideration that many teachers lack digital tools to follow-up on students' learning process when they are not physically in the classroom.

### **3.4. ASYMMETRICAL CONDITIONS FOR REOPENING**

Countries face the challenges of going back to in-person classes with different levels of development in terms of infrastructure and human resources, which leads to restrictions of different nature and intensity.

The data analyzed in this chapter reveals highly unequal conditions to deal with a global educational crisis like the one the COVID-19 pandemic has brought about. The massive pause in-person classes for a long period of time has worsened preexisting inequalities.

Although there is no systematic information on how countries have performed in the area of remote education, the data that is available indicates that for many, learning continuity has been beyond their reach. The crisis has especially affected those who come from more vulnerable sectors, as well as people living in rural areas.

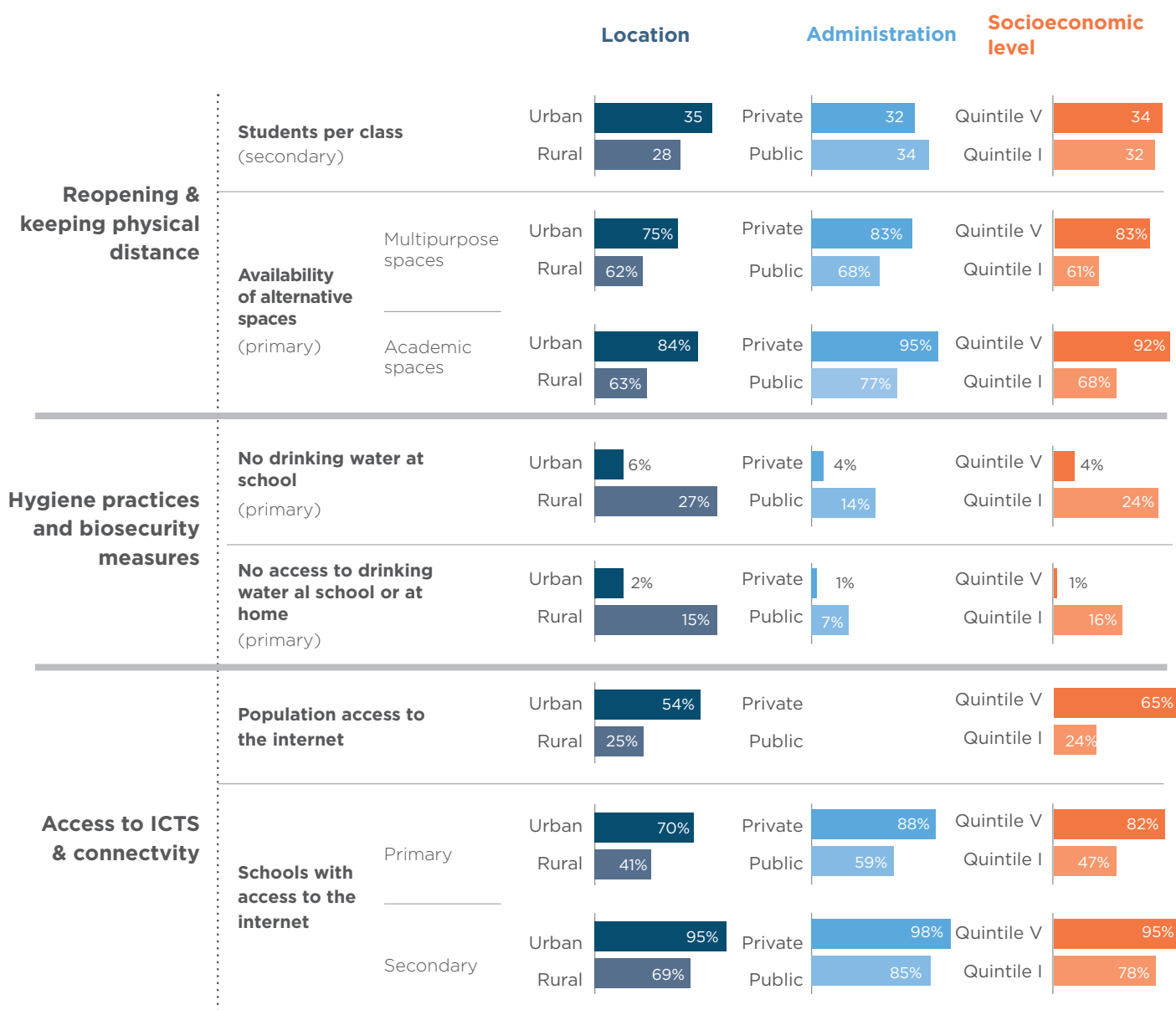
The prospects of going back to in-person classes, possibly in a hybrid format, don't look too encouraging. The challenges of developing an educational proposal that integrates this year's asymmetrical educational experiences and attracts those who haven't returned to school are colossal. The massive disparities stress the need to incorporate a criterion of equality, and prioritize students in vulnerable situations.

Graphic 2 offers a summary of the magnitude of the main disparities faced by educational systems depending on their administration, location, and students' socio-economic background.

The graphic sheds light on the worst inequalities and, therefore, on the people who should be prioritized when schools reopen.

## GRAPHIC 2

Gap size in indicators linked to key dimensions for school reopening by location, school administration, and poverty (average) in Latin America and the Caribbean countries, circa 2019



**Source** | Prepared by the authors on the basis of data supplied by PISA 2018 (OECD), TERCE 2013 (UNESCO, 2014), and CEPALSTAT.

**NOTE** | These levels are based on simple indicator averages, taking into consideration the total number of countries with information available for each indicator.



# 4. FINANCING FOR EDUCATION



The COVID-19 pandemic has had a strong impact on national education systems. Even after the health emergency is over, its consequences on society and the economy will continue to affect education. Additional financial resources will be necessary to tackle these impacts, but resources will probably be scarcer and conditions for an increase in education financing more unfavorable. That's why we think a call for reflection is needed on the importance of maintaining and even increasing the education financing effort.

Governments around the world have reacted to the emergency with a wide array of measures aimed mostly at strengthening healthcare systems, ensuring access to basic services, and protecting households' income through social protection and job incentive programs. As the IIEP-UNESCO (2020) has pointed out, education was not a priority in these responses. Overall, very few specific education programs have been included, although some social protection measures were closely related to this sector.<sup>25</sup>

A first batch of education-related measures aims to maintain and even on occasions strengthen school meal services. These programs have ample coverage in the region, reaching 85 million children, and represent the second largest social protection intervention in Latin America and the Caribbean (Rubio et al., 2020). According to the social development measurements developed by ECLAC, 26 countries in the region have included school meal actions as part of their response to the COVID crisis (ECLAC, 2020).

Another major step that has been taken was the creation and/or enhancement of cash transfer programs to make up for the loss of family income during the emergency. Many of these programs originally had some type of conditionality attached to education, but transfers in general had no strings attached in this context, which is not unusual when this kind of measures are taken in emergency situations. Some national protection initiatives had a stronger education component. For example, in Bolivia the Family Bond was created to help feed low-income household's children who would miss their school breakfast during the quarantine. Meanwhile, Colombia increased payments to the Jóvenes en Acción (Youth in Action) program, which provides support to young people living in poverty or in vulnerable situation so they can continue with their technical, technological, or other professional studies. Jamaica has implemented specific transfers to help students who participate in the Programme of Advancement Through Health and Education (PATH) return to school (ECLAC, 2020), while the

25. According to the Devex systematization on the financial response to the COVID-19 crisis, between January 1 and October 18, only 1.6% of the resources invested in Latin America and the Caribbean went to educational programs. <https://public.tableau.com/profile/devexdevdata#!/vizhome/COVIDFundingvisualisation/COVID-19funding>

Dominican Republic handed out food to students through weekly kits distributed at educational centers (UNESCO, 2020d).

Some specific measures taken in this regard include financial assistance or flexible conditions for the repayment of student loans. Colombia has relaxed repayment terms and included grace periods on education loans extended by the Colombian Institute for Overseas Educational Credit and Technical Studies (ICETEX); Chile has expanded the coverage of its Credit with State Guarantee (CAE, after its Spanish initials) for higher education; in addition, capital and interest payments were relaxed or rolled over by Jamaica's Students' Loan Bureau, and in the U.S. Virgin Islands (both on direct loans and those of the Federal Family Education Loan program) (ECLAC, 2020).

Furthermore, some initiatives were launched in the region, including subsidies and exemptions to boost connectivity access so students can attend classes online. Several countries have implemented mobile phone and internet payment deferrals, and have frozen plans and rates. In Uruguay, all families received data coupons and all learning platforms' access was made free. Argentina created an emergency program to provide ICT services access to low-income communities. And Colombia has temporarily suspended VAT on mobile internet and voice services (Rubio et al., 2020a).

Many of these initiatives are being financed by the multilateral lending agencies, which have a longstanding presence in the region's education sector. However, no major education-related lending operations have been launched with a specific focus on providing answers to and promoting recovery from the situation created by the COVID-19 pandemic. All detected activity was related to minor, although more flexible, operations, such as technical cooperations. For example, the Inter-American Development Bank has managed to leverage resources towards several regional countries since the beginning of the pandemic by way of these cooperations oriented to support continuity of the education process, provide strategies to reduce school dropout rates as well as educational and socio-emotional support for students, and promote the use of technologies in education (IDB, 2020).

Another major player in the field of international cooperation for education –although with limited presence in the region– is the Global Partnership for Education. As part of its response to the COVID-19 crisis, it has launched a project to support learning continuity and the return to school of children from the most vulnerable sectors who have been affected by the pandemic in Haiti. Another project is helping Guyana foster remote learning, including the development of material and content for students and their parents; providing social and economic support to students, teachers and parents; and promoting safe school environments. Lastly, it is also financing the regional recovery and response strategy for the education sector in four members of the Organization of Eastern Caribbean States: Dominica, Grenada, Saint Lucia, and Saint Vincent and the Grenadines.<sup>26</sup>

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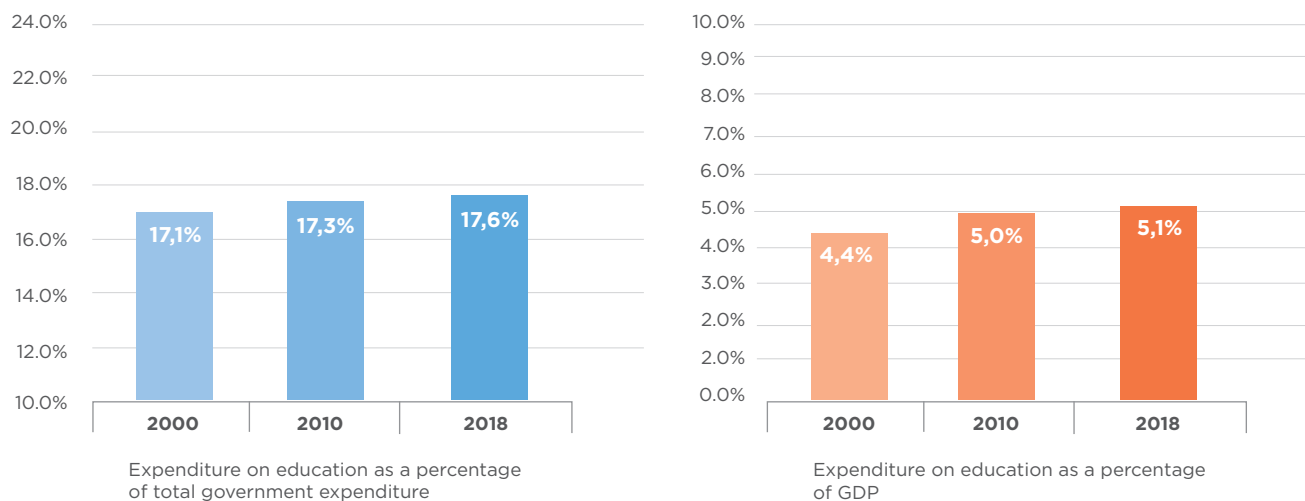
26. Minor efforts have also been made to support crisis response planning in Honduras and Nicaragua. See <https://www.globalpartnership.org/where-we-work/partner-countries>

## 4.1. THE PRE-PANDEMIC SITUATION

Resources assigned to education as a percentage of GDP have been growing steadily in the region since the year 2000.<sup>27</sup> In 2018, the last year for which data is available, the financial effort to support education in the region was on average 4.7% of GDP, and 16.1% of total public spending; these numbers are higher than those included in the 2030 Education Agenda, which asks countries to commit to education at least 4% of GDP or 15% of total public spending (UNESCO et al., 2016) (See Chart 14).

**CHART 14**

**Expenditure on education as a percentage of public expenditure and as percentage of GDP (average) in Latin America and the Caribbean countries, 2000, 2010 and 2018**



Source | UIS Database.

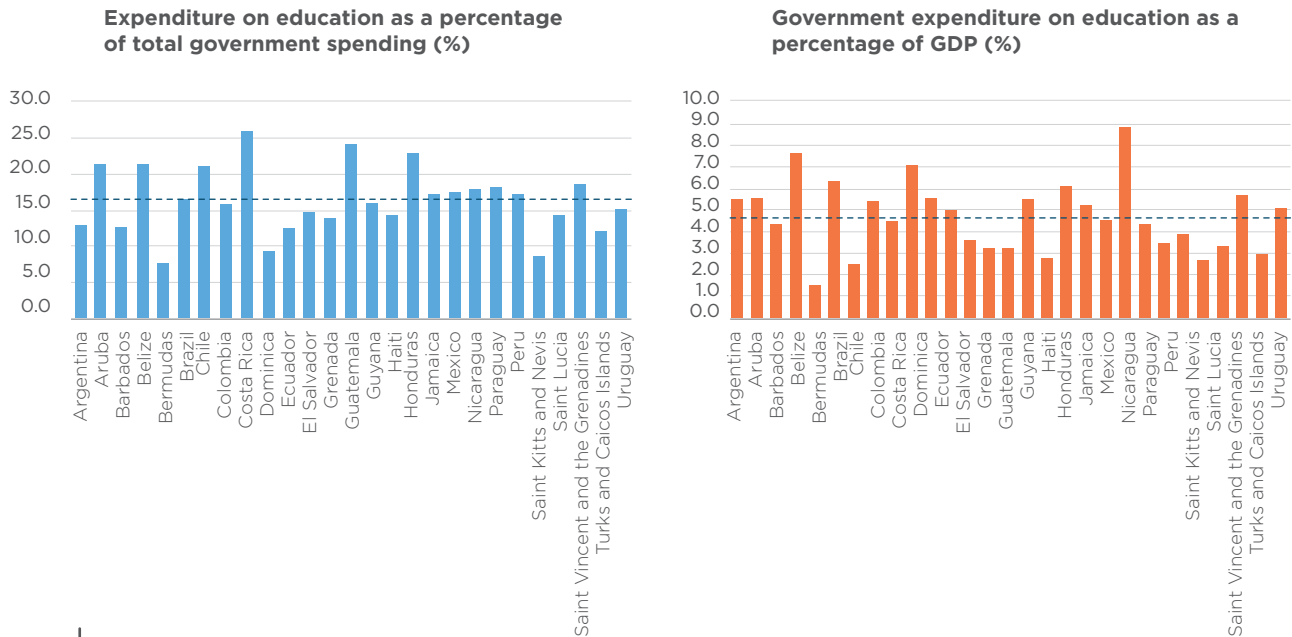
But although the trend is positive, there still remain unsolved issues that demand an improvement in financing, either in terms of volume or of investment efficiency. As we have already seen, the crisis has exposed structural deficiencies in national education systems, such as unequal access to technologies and to drinking water in schools, and even in the ability of teachers to handle a remote teaching modality. These shortcomings are directly related to educational systems' planning, management, and, most of all, to resource allocation. On the other hand, some countries are in a precarious situation as far as education financing efforts are concerned. These countries were surely also in a more unstable position than others to face the long-term challenges that the pandemic has brought to the forefront in the first place. (See Chart 15).

27. This period also coincides with economic expansion in the region, therefore the rise in the financial effort for education in terms of GDP has resulted in resource growth in nominal terms, even when the ratio between education spending and total spending has remained fairly stable.



CHART 15

### Expenditure on education as a percentage of public expenditure and as a percentage of GDP in Latin America and the Caribbean countries, circa 2018



Source | UIS Database.

## 4.2. A FINANCING CRISIS

Educational systems are facing an unprecedented financing crisis. At a time when the pandemic is exposing structural liabilities and demanding concrete action for recovery –which translates into a greater need for resources–, public budgets are under strain by the decline in economic activity and the need to meet urgent needs in sectors such as healthcare, employment and social protection. The way this political dilemma is solved will have a direct impact on people’s educational opportunities and on the degree to which the goals agreed by countries in 2015 are met.

Education’s Investment comes from a number of different sources, usually falling within one of the following categories: government funding (all levels of government); private sector investment (including families); and foreign source resources (UIS et al., 2016).

Government spending is influenced by a series of variables, although there are two that stand out: the level of the country’s economic activity (measured by GDP), and government financial resources (expressed as total annual public spending). When the pandemic arrived, it found Latin American and Caribbean countries in a flimsy fiscal position: the region was coming from a decade of low economic growth, which caused fiscal revenue stagnation. This, combined with growing public spending, caused the fiscal deficit and public debt to rise (ECLAC, 2020c).

Since the pandemic has brought global economic activity to a standstill, the 2020 scenario may show an even sharper decline. The economic recession is now expected to be even worse than the 2008 global financial crisis, with an expected drop in activity of 9.1% in the region (ECLAC, 2020b). Therefore, the countries are facing a difficult fiscal scenario due to the combination of limited fiscal space, lower revenues as a result of the economic activity fall, immediate public spending requirements to tackle the pandemic, and tougher borrowing conditions (ECLAC, 2020c).

This challenging scenario is likely to have a direct impact on governments' spending on education. UNESCO (2020f) has identified two forms of transmission: first, a short-term loss of resources during the crisis, coupled with new spending needs; and second, an expected decline in financial resources that had previously been available for education. The two phenomena may be influenced both by the aforementioned drop in government fiscal resources and by the reallocation of resources to other areas such as health and social protection (IIEP-UNESCO, 2020).

The first of these transmission lines could be somewhat tamed by certain structural characteristics of educational financing prevalent in Latin America and the Caribbean. Investment consists primarily of current spending, of which teachers' and other education staff's wages take the lion's share: 73%.<sup>28</sup> This gives sectoral investment little flexibility for any short-term reduction, at least in nominal terms.

However, given the depth of the crisis' economic impact and the feeble fiscal situation of countries in the region, spending in education could be expected to be affected in the medium term. Other experiences point in that direction. For example, after the 2008 world financial crisis, the OECD (2013) found out that one-third of the group's member countries had reduced their spending on education between 2009 and 2010, while 12 of the 25 nations for which data was available had frozen or reduced teachers' wages between 2009 and 2011.

At the same time, households' investment in education may be affected mainly by a drop in family income due to the crisis. ECLAC (2020a) has estimated that the pandemic will affect income in all layers of the population in Latin America and the Caribbean, although the impact will be proportionally bigger in the lower layers than in the middle- and high-income sectors. The latest projections indicate that the number of people living in poverty will grow by 45.4 million in 2020, totaling 230.9 million people, or 37.3% of the region's population (ECLAC, 2020b).

A recent survey on the COVID-19 impact in Chile, where households' investment in education represents 1.6% of GDP, shows that 18.2% of household that include persons aged 0 to 24 years have reduced spending on education (for example, discontinuing schooling or halting tuition fee payments). On the other hand, 12.4% of the household with children from all income quintiles are planning to make changes in the children's education if the pandemic lingers on, such as taking them out of educational institutions, or moving them to less expensive or free establishments (MDS, INE and PNUD, 2020).

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28. UIS Database, simple average for countries where information is available. The data represents the share of the education budget assigned to institutions to pay for teachers and non-teachers wages.

**BOX 3****Switching from private to public schools**

Just like elsewhere in the world, countries in the region are expected to see a migration from private to public school systems. In fact, this is already taking place in some countries, particularly those where a new school cycle has begun. This rise in the demand for state-run schools is primarily caused by the inability of users to pay private school fees as a consequence of the decline in economic activity due to the healthcare emergency. In this scenario, several governments in the area have taken steps to support private schools that are suffering from the loss of enrollment, and also to help public schools cope with the increased demand they are experiencing.

**Argentina**

The government has extended the Progresar program of scholarships to include private-sector institutions and students. The scholarships are granted to youth between 18 and 24 years of age to help them begin or complete their studies and also to support their labor market insertion efforts (SITEAL, 2020).

**Ecuador**

In June 2020, when the school cycle resumed in Ecuador's coastal area, there was a 6.5% spike in public school enrollment. This transition from private to state-run schooling is expected to grow even more sharply when schools reopen in big cities. Given this situation, the government of Ecuador produced a bill called Ley Orgánica de Apoyo Humanitario (Organic Law for Humanitarian Assistance) to help parents who have lost their jobs and have children in private schools with a subsidy of up to 25% of the monthly tuition fee. In those cases where parents decide to take their children out of private institutions, the students will be guaranteed admission to public schools (Olsen, 2020).

**Peru**

The COVID-19 pandemic triggered a growing migration of children from private to state-run schools. In response to this situation, the Education Ministry opened more than 100,000 new vacancies in public institutions. It has estimated that it will need to invest some 71.4 million sols (US\$19 million-plus) to hire 1,700 school authorities, 1,500 teachers, 2,000 teaching assistants, and 900 administrative employees. The increased offer by public schools was made possible, in part, by adding extra school shifts. In addition, the Executive branch has approved a legislative decree that makes it mandatory for private teaching institutions to provide information on their costs structure, specifying the services they provide and identifying which of those they cannot continue to provide in a face-to-face manner (SITEAL, 2020).

### Paraguay

The Education Ministry has laid down procedures for the transfer of students from private institutions to state-run centers. This move seeks to guarantee the right to education for all students and ensure the school cycle's continuity (SITEAL, 2020).

### Mexico

Mexico City is expecting a dramatic drop in private school enrollment. In face of this problem, the Mexico City government in September 2020 launched the program “Mi beca para empezar” (My scholarship to begin), which consists of a direct monthly transfer for basic education students in public schools. The program seeks to focus specifically on those students who migrated from a private to a public school when in-person classes were suspended (Mexico City Government, 2020).

**Source** | Prepared by the authors based on mentioned references.



Foreign resources for education do not have a significant presence in Latin America and the Caribbean taken as a region, since they are mostly funneled to low or medium-low income countries. And yet, this inflow of resources can be relevant for some educational systems that depend on them to meet the expected investment threshold.<sup>29</sup> The 2015 GEM Report (UNESCO, 2015) had estimated that low and medium-low income countries would not be able to finance with their own domestic resources the main goals of the SDG 4-Education 2030 Agenda. The latest update of this deficit indicated that these countries would require international assistance to the tune of \$148 billion a year in order to meet the goal of supplying universal pre-primary, primary, and secondary quality education by 2030. This figure represents 29% of the total investment needed (UNESCO, 2020a).

A recent GEM Report (UNESCO, 2020b) analysis warns that the COVID-19 crisis can stop or even revert the trend of growing international assistance for education, which by 2018 had reached a record \$15.6 billion. The main donor countries will suffer the impact of the crisis on their own economies, which can affect their ability to assign resources for international cooperation. In addition, the needs of other sectors such as health and social protection may be prioritized by the financial cooperation flows. Estimates point to a likely drop in international assistance in the next two years, with recovery beginning in 2023.

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29. Under the current World Bank classification for Latin American and the Caribbean countries, Haiti is in the low-income category, while Bolivia, El Salvador, Honduras, and Nicaragua rank as low-medium income countries.

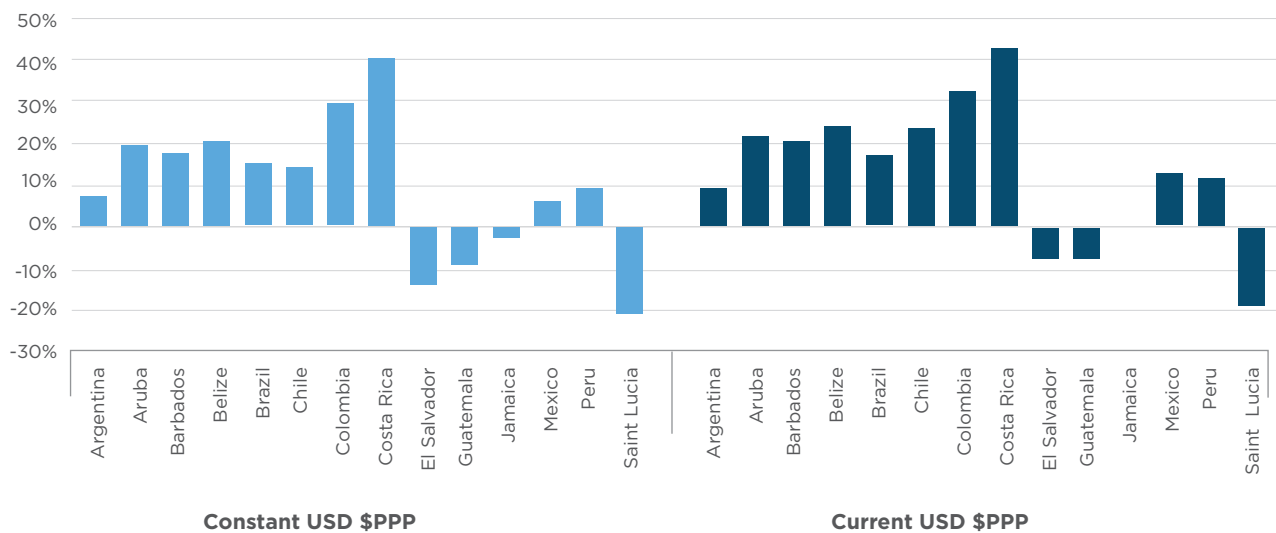
### 4.3. EDUCATION AS A RECOVERY STRATEGY

Uncertainty over how long the pandemic may last and how deep its impacts will be, make future investment in education hard to predict in the region. While this expected negative impact on investment is a likely scenario, it is by no means conclusive. The 2008 crisis experience had a variety of different impacts on the countries' educational spending. While El Salvador, Guatemala, and Honduras reduced per capita education spending following the crisis, other countries, like Paraguay and Peru, increased it (Al-Samarrai et al., 2020).

UIS data for this period, which is available for some Latin American and Caribbean countries, confirm this trend (See Chart 16).

**CHART 16**

**Percentage change of public expenditure on education as current and constant values (\$PPP), 2008-2010**



Source | UIS Database.

Besides, according to Al-Samarrai et al. (2020), in spite of the expected fiscal revenue drops, low- and middle-income countries are expected to raise their spending in 2020 in order to finance the COVID-19 crisis assistance packages. However, by 2021 this increase could slow down as countries start to feel the immediate impact of the crisis and begin to prioritize fiscal balances.

This is why it is vital to insist that education should be made part of the crisis response strategy and, most of all, a key element for recovery. An initial conclusion is that there is a need to analyze the gap between current investment and the necessities that may emerge as a result of what could be defined as a double demand: (a) a demand for resources that were needed before the health crisis, and (b) those that will be needed as a consequence of the effect of the crisis upon educational systems.

New resource allocation problems come on top of the traditional financing deficits. Focusing only on total volume without looking into how it is distributed could hinder the attainment of the right to quality education for all. The way in which resources are allocated is not neutral as far as equity is concerned, and the same can be said about quality. As long as investment does not reach those who need it the most –and, quite the contrary end up flowing to the most favored sectors– inequalities will increase. The pandemic could aggravate the situation prevalent before the crisis set in (Elacqua et al., 2020).

To be efficient, resource allocation needs to consider the analysis and recommendations. In contexts of scarce resources, dramatic needs, and high inequality, it is paramount to bear in mind that squandered resources mean fewer opportunities for the disadvantaged. Therefore, these considerations are not an end, as they have sometimes been described, but a means to reach equality goals.

Lastly, both the urgency and the relevance of the financing should be recognized. The effects of low investments may not be felt in the short term, but their consequences will eventually manifest themselves and will have an impact on the quality of life of future generations. Any amount of insistence on the costs of not providing education will be insufficient. The consequences of inaction or inertia will not be a status quo situation, but one marked by a rise in exclusion and corrosion of the social and productive fabric.



# 5. INFORMATION SYSTEMS



The massive closure of schools after the coronavirus infection was declared a global pandemic forced educational systems –and in particular the public institutions in charge of education– to react quickly so that the learning process could continue to function. This set in motion unprecedented plans and programs to put in place remote learning strategies, provide equipment and material, ensure connectivity, and train teachers, among other issues. These days, when the educational systems are beginning to work on a return to in-person classes, planning challenges multiply.

This whole process has increased the demand for information on education. Decision makers not only need to access the traditional set of data on the educational system – now they demand detailed information to help them meet every challenge: How many schools remain closed? Do students have adequate computing equipment? Do they have connectivity at home? Do they live in an environment exposed to COVID-19 risks? Are teachers prepared for sustained distance learning? How much are schoolchildren learning?

This chapter tackles some of the main tensions, dilemmas and challenges related to the educational information systems in an environment of suspended in-person classes (UIS, 2020c).

## 5.1. TENSIONS WITHIN THE INFORMATION SYSTEMS TO PROVIDE ANSWERS TO THE CONTEXT'S NEEDS

Although all countries and territories in Latin America and the Caribbean have some sort of Education Management Information System (EMIS) in place, these systems were not prepared to meet the demands caused by an emergency of the magnitude and characteristics of the COVID- 19 pandemic. The new scenario has modified the education system's basic organization parameters on which statistics concepts are based, generating different types of tensions within the EMIS.

One such tension is directly related to the EMIS's own definitions and categories: some of the traditional data and indicators are no longer valid now; basic data such as coverage or enrollment are in crisis, not only because of the difficulty to gauge them, but also because the situation they reflect is different. For example: what does “coverage” mean in a context of distance learning? How do you determine if a boy or girl is schooled in an asynchronous class environment? What does the concept “student” mean in this context?

On the other hand, the multiplicity of shapes and forms that the continuity of the relationship of teaching and learning between countries, schools, and even within each teaching institution has taken, challenges assumptions that in the past were answered by mere school attendance: how do you map school trajectories during 2020? What parameters should be used to determine the continuity of the relationship with each boy, girl, or adolescent with their school?

A second tension has to do with the EMIS's range, more specifically with the need to produce new indicators for the schooling environment and to improve integration and/or relations between different information systems.

An EMIS can be defined as a group of operative processes enabling the collection, aggregation, analysis, and use of data and information in education for management, administration and planning purposes, as well as for policy formulation, monitoring, and evaluation (UNESCO, 2018).<sup>30</sup> But the EMIS are not tracking some key elements of education. This was already detected before the COVID-19 pandemic struck, when the global and thematic framework for monitoring the SDG 4-Education 2030 goals was drawn.<sup>31</sup> The diagnostics for national production of information on the 43 agreed-upon indicators revealed that, in Latin America and the Caribbean, 49% of the global indicators and 33% of the thematic indicators could not be reported (UIS, 2016).

The current emergency has now turned into a priority the availability of a set of data and indicators that are crucial for a proper diagnosis and that was probably not contemplated in the EMIS, or at least not in the manner that is now required. The International Institute for Educational Planning warns that, in general, education ministries do not compile data that is relevant for disaster and conflict management and that even in those cases when such data is gathered by other players, it typically is not compatible with that of EMIS (IIEP et al., 2015).

The EMIS is also expected to include a wide array of information on different aspects of the educational systems that typically are produced by different departments of the Ministry of Education and by other sources<sup>32</sup>; however, this integration is not frequently observed. Arias et al. (2019) point out that the region's education systems have displayed a tendency to develop institutionally in "silos" where each department generates its own management tools; this has resulted in fragmented information systems where multiple digital platforms coexist. Even in those cases where some type of integration exists, the coverage of certain levels of modalities can be limited.<sup>33</sup>

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30. The EMIS have evolved over time, and there are different definitions, depending on what functions are assigned to these systems and on their scope. For example, Arias et al. (2019) propose a wider definition that goes beyond information systematization for planning purposes. This concept focuses on the set of processes that are vital for education management and that helps design, register, exploit, generate and disseminate strategic information online in an integral manner. It includes aspects that are essential for the interoperability of information based on unique identifiers of students, teachers, schools, and courses; the automation of administrative and teaching/learning processes; and the availability of an integral platform of education management.
  31. These are defined in the Framework for Action for the implementation of Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (UNESCO et al., 2016).
  32. Abdul-Hamid, Saraogi and Mintz (2017) propose three phases for developing an EMIS: (1) accountability, (2) instruction and management, and (3) smart and integrated. In this last phase the EMIS is expected to cover all levels of education (beyond basic education) and include outside information..
  33. For example, in Latin America and the Caribbean school data collection by way of a unique identification code is high in public primary and general secondary schools (upwards of 85%), but much lower in pre-primary and technical secondary schools (below 65%). Likewise, private sector coverage is lower in all cases. As a consequence, it is sometimes difficult to combine different elements within one single institution, like for example linking teachers' characteristics with information on students. See UIS, 2020a.



To the coverage and integration problems, the COVID-19 emergency added the need to link EMIS with new data that usually comes from outside the education system. Key elements, such as connectivity, the availability of computing equipment at homes, or the participation of household or families in social protection programs have become relevant and require being linked to education information in order to produce better sectoral responses.

The third tension is associated with the opportunity of information, given the fact that within the emergency framework, a lag that in the past was tolerable can now turn the information totally obsolete. Historically, EMIS have had a natural lag as a result of the information collection, processing, and diffusion procedures. While the technological advances of recent years have brought improvements and innovation to these processes, 42% of the countries in Latin America and the Caribbean still use some sort of physical support (such as paper forms) either totally or partially in the course of information collection (UIS, 2020a). This lag, coupled with a need for update information to face the COVID-19 crisis and its direct effects on the education sector, have led to the adoption of specific information collection methods in some countries in the region, mostly related to sampling and the use of new information modalities, such as telephone polls.<sup>34</sup>

#### BOX 4

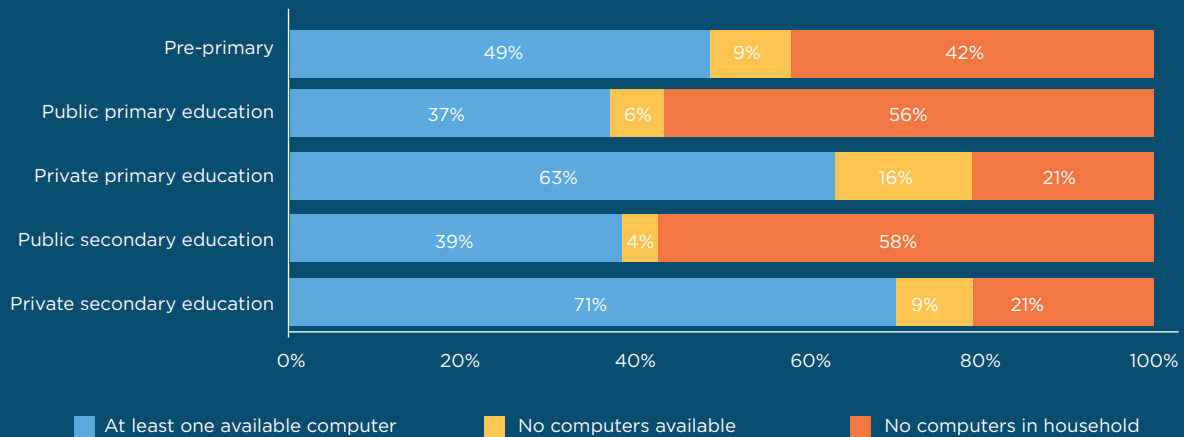
##### **Production of information on the conditions at households during the pandemic and impact of the pandemic on student's learning continuity: the case of Argentina**

Five months after in-person classes were suspended in Argentina, 95% of the households with children, adolescents and youth between 4 and 19 years of age who had been attending school managed to sustain their connection to the institution and to continue with their learning activities. This data is evidence of the high value families place on the work of schools and their teachers in this period (85%). However, more than 500,000 girls and boys were unable to keep that linkage with their schools. This information was revealed by a survey of households conducted by the Education Evaluation and Information Secretariat and UNICEF Argentina as part of the Education Ministry's National Evaluation of the Education Continuity Process.<sup>35</sup> This exercise helps reveal the disparities with which children are experiencing schooling from home due to the COVID-19-related preventive isolation.

34. For example, Argentina's Education Ministry, with support from UNICEF, has implemented the National Evaluation of the Pedagogic Continuity Process in order to gather detailed information on the response of the education system within the context of the COVID-19 health emergency (see <https://www.argentina.gob.ar/educacion/evaluacion-informacion-educativa/evaluacion-nacional-del-proceso-de-continuidad-pedagogica>). UNICEF has also endorsed a series of extensive polls with specific sections or questions on education to help evaluate the situation of children within the framework of the emergency in a number of Latin American and Caribbean countries (<https://www.unicef.org/lac/en/media/14531/file>).
35. Households survey, preliminary report, July 2020, Quality Evaluation Secretariat and UNICEF Argentina. See [https://www.argentina.gob.ar/sites/default/files/informe\\_preliminar\\_encuesta\\_a\\_hogares.pdf](https://www.argentina.gob.ar/sites/default/files/informe_preliminar_encuesta_a_hogares.pdf)

Evidence shows that the conditions and resources available at the households have a dramatic impact on the students' ability to sustain their learning. Also, significant differences prevail depending on their social background and on the management sector of their teaching institutions, which further deepen pre-existing inequalities. All this is not new, but the current context may lead to a deepening of educational gaps. In this scenario, it is important to bear in mind that in Argentina 7 out of every 10 children attend a public school, and that this ratio is even bigger in some provinces.

### Households with access to computer and availability of this resource for educational purposes, by level and management sector attended by students



The conditions of the households where boys and girls live, of the schools, and of their professionals, show the challenges posed by the emergency distant learning setup.<sup>36</sup> With regard to technological resources available at the households of children, the data indicates that less than half of the households have good quality fixed internet connection, that only one of every two households has a computer available for studying purposes, and that in 63% of the households that computer is shared among the children. On the question of what school they were attending, major gaps were found along the lines of management sector: in the public sector, nearly 4 out of every 10 primary and secondary students have a home computer to do their homework, compared with 7 out of 10 for boys and girls attending private schools. On the issue of internet access, there also are major territorial disparities, with the situation being more critical in northern provinces, where the share of households with fixed internet access and good quality signal only reaches 30% and 35%, respectively. In the different education segments, the most difficult situations with respect to good internet quality access are found in state-run primary and secondary schooling, with 36% and 39%, respectively.

A combined analysis of the households' situation helps identify the most critical situations in terms of access to technology vis-à-vis education in a context of suspension of in-person classes. Nearly one-third of the household with children attending public primary and secondary schools do not have a home computer and access the internet through their mobile phones, or even do not have internet. In comparison, among their pairs attending private schools this rate is below 10%.

36. To learn about the conditions of schools' institutional teams, see also Report on authorities and teachers, national survey, <https://www.argentina.gob.ar/educacion/evaluacion-informacion-educativa/evaluacion-nacional-del-proceso-de-continuidad-pedagogica>.

Learning continuity depends on sustained communication between schools and families. Communication with schools and between teachers and students on their subjects of study has been plentiful, and conducted mostly on the mobile phone. Both WhatsApp messages and texting were mentioned by 78% of the households, and their use is widespread through all levels and sectors both for communication and for turning in homework. Other devices and resources such as email and school platforms and apps were also used, but to a much lesser extent.

In spite of the disparity in conditions and technological resources at their household, most of the students managed to maintain some type of communication with their teachers at all educational levels. But what was the level of intensity of the learning activities? Who were the most affected girls and boys in this period? When analyzing the intensity and considering the frequency of homework turned in each week, as well as the feedback received by students from their teachers, disparities were detected, and a group of nearly 900,000 girls and boys who received only a low or null intensity learning continuity was identified. The latter consist mostly of girls and boys with no access to ICT (computer and internet) as well as students from public schools and vulnerable households. In contexts where major preexisting social, territorial, and educational inequalities combine with a recent deepening of childhood poverty, it is critical to sustain differentiated strategies. At the same time, in a context of high uncertainty over when to resume school attendance, it is essential to enhance and democratize access to connectivity and to technological resources. It is also crucial to strengthen the implementation of equity-promotion policies that pave the way for the delivery of specific solutions for those girls and boys who have received low or null learning continuity, and to press forward with the planning and creation of the conditions necessary for a quick reopening of schools in a safe manner.



Source | UNICEF National Office in Argentina.

It is therefore paramount to determine whether countries in the region have been able to deploy these ad hoc appraisals to systematize data that answers the new questions, or whether their statistics offices have simply continued to collect traditional data that fails to reflect what actually happened with the education systems while at the same time having to deal with the extra burden of conducting the operation with the schools closed.

It may also be worth adding some reflections on the information produced by standardized students' learning evaluations. In the context of the interruption of in-person classes, the countries have decided to put on hold, postpone, or adapt the evaluation exercises (OREALC/ UNESCO-LLECE, 2020a); this comes as no surprise, since this scenario presents a number of problems and challenges for the evaluation process. The remote format, for example, is not too favorable for the deployment of a country's evaluation operations, while at the same time schooling continuity strategies put pressure on schools' budget and on the curricula that lies underneath the evaluated context.

This problem is particularly acute in those countries that have high-impact evaluations whose results have a direct impact on certifications, affect access to other educational levels,

or are used as reference for the allocation of school resources or subsidies. In these cases, the absence of information forces them to reorganize and reformulate policies associated with these results.

It should also be considered that it will be necessary to have an up-to-date diagnosis of the learning losses in order to assess the impact of the pandemic on mandatory education. This information needs to shed light on gaps and also identify the most affected sectors of the population. In a scenario of return to in-person schooling, the countries will face decisions on how, when, and for what reasons to resume the evaluation process, which will put extra pressure on the decisions related to budget allocation.

## 5.2. LESSONS AND PROSPECTS OF THE EDUCATIONAL INFORMATION SYSTEMS

We still don't know the duration or depth of the impacts of the COVID-19 emergency, but it is highly likely that education systems will suffer major medium- and long-term modifications as a result of this experience. In this sense, the EMIS will also need to be reconfigured in sync with this process of adaptation. This begs the question of what lessons will this experience teach us to help identify and strengthen the information we need in order to be prepared for the next crisis.

One first step is the importance of distinguishing urgent from important. As part of the recovery strategy, EMIS should focus on those aspects of the educational process that have taken the hardest hits during the crisis and on those that may have a mid-term impact on expected results.<sup>37</sup> However, EMIS strengthening planning should have the capacity to take an integral view of matters. There is a risk that the information produced will end up being "slanted" towards certain aspects that were critical in this context, while not paying enough attention to others that may have lost some relevance in the current situation but could be crucial in years to come.

EMIS will need to contribute to reinforce constant monitoring in the future. For example, by tracking the school trajectories of children at risk of losing their learning continuity. They should also focus on gathering and updating information on students' access to remote education platforms. This may cause some diagnosis data collection to be improved and institutionalized in order to meet EMIS criteria.<sup>38</sup> Also, additional efforts are expected to extend the use of technologies that help make the data collection and analysis process more efficient.<sup>39</sup>

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37. In its analysis of education data that should be collected within the COVID-19 framework, UIS (2020) stresses the need for equality in access to learning. It therefore proposes that measuring and communicating learning should be made a key component of the post-COVID strategy, with particular emphasis on the constant monitoring and evaluation of schoolchildren's performance (UIS, 2020c).

38. In contexts of crises, data and indicators on non-traditional issues (e.g., how many schools have contingency plans in place) may require conducting special surveys and integrating them into the EMIS platform (IIEP et al., 2015).

39. In Latin America and the Caribbean, 80% of the countries store students' information in the EMIS in individual logs, which opens up interesting and innovating possibilities in data processing and analysis. See UIS, 2020a.

Lastly, it will be necessary to make a bigger effort to coordinate information systems and databases in order to allow for a more integral diagnosis of the situation of the population in general and the education system in particular, so as to be better prepared to tackle situations like the current emergency. Equally crucial is to develop the ability of linking the educational, healthcare and social protection information systems, not just for devising crisis response plans but also for improving public policies in social areas.





The COVID-19 pandemic has posed a major challenge to education systems in the region, overturning the basic principles ruling teaching and learning activities, and also having a strong impact on the countries' social, political, and economic configuration.

The real magnitude of the effects of the pandemic on education in Latin America and the Caribbean is still unknown due to its short, medium- and long-term impacts on the population, and in particular on the most vulnerable sectors, deepening the preexistent gaps. Its advent is jeopardizing the advances made towards achieving the SDG 4-Education 2030 goals and has increased the likelihood that the targets may not be attained.

The responses implemented by countries to ensure schooling continuity reflect a remarkable ability to react to unexpected situations. Nevertheless, the possibilities of incidence vary depending on the structural and unequal conditions of each society in Latin America and the Caribbean.

This emergency situation requires taking urgent political actions in a complex scenario: short deadlines, prioritization of contagion prevention measures, unforeseeable future scenarios, scarcity of resources, and a situation of widespread economic crisis. All this, in an environment where the longer it takes to return to in-person schooling, the bigger exclusion and inequality will grow.

In this panorama, international cooperation agencies have launched a set of guidelines and recommendations for sustaining the continuity of distance learning and the safe return to in-person classes under safe health conditions to avoid the spread of the virus. The statistics available in the region have made it possible to provide a succinct overview to characterize these conditions.

The data surveyed reveals that conditions to tackle the global education crisis triggered by the COVID-19 pandemic vary widely from country to country in Latin American and the Caribbean. The region began 2020 with major shortcomings in the area of education. Children are facing unequal opportunities to access, stay, make progress, and complete the mandatory educational levels and to acquire the knowledge they need to fully exercise their rights.

The massive suspension of in-person classes for a long period of time has deepened these gaps. The crisis has hit the hardest those in the most vulnerable sectors of society, who already were in a disadvantaged position in the first place and who have met more difficulties to continue with their education on a remote basis.

The return to school, probably under hybrid formats, does not look too promising either. Coming up with an educational proposal capable of integrating this year's unequal tuition experiences and of bringing back in those who have not returned to school will be a daunting challenge.

The multiplicity of emerging demands has to be tackled with scarce resources, since the crisis has also hurt the economy and the ability to generate resources, and therefore the state coffers. In all likelihood, there won't be sufficient resources to meet all wants and to guarantee a return to in-person classes at every school in a way that is consistent with international recommendations.

On the other hand, the information resources are also under strain. In this extremely exceptional context, the educational information systems have a limited capacity to provide an adequate picture of key elements of the schooling scenario. As we have already seen in this report, there are many gaps on key, comparable indicators needed to plan the return to in-person classes. In many cases, these gaps reflect the state of basic information that is not available at national level either.

The main line of argument of this report is in no way intended to present a gloom and doom scenario. Quite the contrary, its intention is to send a wakeup call on the urgent need to plan education policies carefully and to prepare for future emergencies. The ability of countries to define priority actions aimed at ensuring the security of schools' operations and prioritizing tuition services to the most vulnerable sectors will be crucial.

The suspension of in-person classes and the tremendous efforts that both countries and individuals have made to ensure the continuity of learning have exposed the historic shortcomings of the education sector in the region. In the process of returning to in-person classes, it will be essential to make all possible efforts to avoid further excluding those sectors that were already at disadvantage in the first place. These efforts revolve around two big issues: financing for education, and access to connectivity and ICTs.

Protecting and increasing the education budget, coupled with equitable and efficient spending, can have a major impact on the future quality of life of many children. The equitable distribution of resources can help bridge the learning gap between students from different socioeconomic levels. At the same time, assigning resources to areas that have proved to have a major impact on school performance –such as investment in teachers– needs to be at the center of the response strategy for the recovery from the COVID-19 pandemic crisis (Elacqua et al. 2020b).

As the secretary-general of the United Nations has recommended, in order to prevent the current schooling crisis to blow up into a generation-wide catastrophe, national authorities and the international community must protect education financing by mobilizing domestic resources, preserving the share of education as a budgetary priority, reducing any inefficiencies that spending on education may have, and improving

the international coordination and assistance mechanisms (UN, 2020).

The recent declaration by the Global Education Meeting on the post-COVID-19 education scenario stresses the need to increase or maintain the public spending education share to at least between 4% and 6% of GDP and/or between 15% and 20% of total spending (UNESCO, 2020).

At the same time, the pandemic has exacerbated more than ever the consequences, in terms of exclusion, of the lack of connectivity and access to ICTs. This is why concrete action is of the essence to improve access to equipment and to electricity and internet services for those lacking such resources, particularly in a world where access to the internet and technology is being increasingly recognized as a right (Mateo and Lee, 2020).

The objective of this document is to analyze the structural conditions of education systems in Latin America and the Caribbean to face the pandemic and implement the international recommendations for a return to in-person classes. In an uncertain scenario like the one we have today, this diagnosis will need revisions and updates. In addition, it would be wise to look into other elements included in the international recommendations but not covered by this report, such as communication aspects, and the socio-emotional wellbeing of students and teachers. Lastly, it would also be crucial to generate and analyze information on the pandemic's impacts on education and its costs, particularly those concerning learning and school dropouts.

The world is facing an unprecedented crisis that has affected all countries, communities and families, and has jeopardized fundamental human rights, including the right to education. From the beginning of the pandemic, countries have deployed a wide array of response and recovery plans, which need to incorporate education as a core issue, not only to ensure a response at the educational level, but also to attain an equitable, inclusive and sustainable recovery (UNESCO, 2020). Today more than ever, it is imperative to uphold our commitment to the 2030 Agenda for Sustainable Development and its SDG 4. Timely and efficient investment can help reduce both current and future damage caused by the pandemic on education.







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## Reopening schools in Latin America and the Caribbean

**Key points, challenges, and dilemmas to plan a safe return to in-person classes**



United Nations  
Educational, Scientific and  
Cultural Organization

**Santiago Office**  
Regional Bureau for Education in  
Latin America and the Caribbean