Schooling disrupted, schooling rethought

How the Covid-19 pandemic is changing education

PRELIMINARY VERSION

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Editorial

The education systems of the 59 countries that participated in this survey have demonstrated remarkable resilience, flexibility and commitment to education in having established strategies for education continuity, in extremely challenging conditions, during the Covid-19 pandemic. For the most part, those strategies were viewed positively by senior administrators, teachers, and school and other education administrators, in terms of their implementation and the results they achieved in providing a considerable number of students access to at least part of the curriculum.

More attention has been given to ensuring the continuity of academic learning than to the socioemotional development of students, and there is agreement that not all students have been able to engage consistently with their education as provided under these emergency strategies. Although most of the countries surveyed were able to put alternative learning opportunities in place, respondents estimate that just about half of the students were able to access all or most of the curriculum.

An important component of implementing the strategy of continuity was professional development for teachers, principally using online platforms that allowed them to communicate with their peers. At the same time, only 61% of the government representatives reported that their teachers were offered professional development.

The considerable effort expended in allowing teachers and students to find ways to learn and teach remotely has immense potential to augment the pedagogical efficacy of teachers and schools in the future, not only in the immediate return to school, but beyond. The knowledge and experience gained with various modalities of remote learning are assets that could be deepened and deployed in the future, creating blended modalities of teaching and learning, also in service of a greater personalization of education, and to extend learning time and learning opportunities for all students. It will be important that the lessons learned from this real-life experience are systematically collected and evaluated, and that education systems and schools investigate ways through which innovative teaching and learning environments can be more fully integrated into schooling.

The efforts to sustain educational continuity during the period of physical distancing revealed two different but equally important lessons. The first, the deep

disparities in access to technology, connectivity and skills to engage with technology faced by students from different socioeconomic groups. Addressing such disparities must become a priority to fully integrate all students in a world where participation is increasingly mediated by access to technology. The second, concerns the significant access to technology that teachers have and their readiness to engage in multiple modalities of collaboration and professional development using technology. This realisation is an extraordinary silverlining, these practices should be continued and deepened in the aftermath of the Pandemic for the purpose of building capacity for 21st century education.

Our recommendations focus all on school organisation, management and instruction, as this was also the focus of the survey. However, the pandemic has also likely influenced educational opportunity diminishing family income for some, which could diminish the ability of families to keep their children in schools. A reopening strategy should take notice of which of the students enrolled before the pandemic return to school, and determine the reasons for drop out, in the cases of children who do not return. Options to retain students in school in those cases could include conditional cash transfer programs or carefully designed campaigns with information on the benefits of school attendance.

Balancing education and health-related priorities

Many countries are well on their way to establishing strategies for the reopening of schools, with half of the responding countries being able to offer a specific date for reopening. However, strategies to reopen schools require a difficult balance between the obvious educational benefits to students and the health and well-being of students, their families as well as education professionals.

The responses analysed in this report indicate that the learning that has taken place during this period when schools were closed is at best only a proportion of what students would have learned in school. In this sense, this period of learning at home has made evident the many benefits that students draw from being able to attend school regularly and learn in close contact with their teachers and peers, and with full access to the wide variety of services that schools

offer, including meals, and psychological and health support. Those benefits are likely of greater value to the most marginalized children and in societies with greater levels of social inequality. This awareness of the importance of schools and teachers could be used strategically to mobilise further engagement and support from parents and communities for schools and teachers. This will be important, as a likely result of the pandemic will be greater financial constraints, resulting from the economic and public health costs of the pandemic. At the same time, the innovation potential evidenced in the efforts to sustain educational continuity should be continued and augmented for the purpose of improving education delivery in the context of new fiscal austerity. For example, approaches to using technology to support teacher professional development and collaboration, and to cultivate student autonomy and independent learning, particularly for older students, should be fostered.

The benefits of reopening, to continue to develop students' knowledge and skills, are of unquestionable value to students and to society as a whole. In fact, the learning loss that has already occurred will, if left unremedied, likely take an economic toll on societies in the form of diminished productivity and growth. As a rough guide, a lost school year can be considered equivalent to a loss of between 7% and 10% of lifetime income.

Added to this are the economic benefits to families: reopened schools would allow parents to return to work, once public health authorities deem that this is feasible.

Those benefits, however, must be carefully weighed against the health risks and requirements in order to mitigate the toll of the pandemic. Evidence from previous epidemics suggests that school closures can prevent up to 15% of infections. While this proportion is modest compared with other public policy measures (e.g. workplace social distancing, which can reduce transmission by up to 73%, case isolation, with an effect around 45% or household quarantine, with an effect of around 40%), it is not negligible, and in some countries there is extensive interaction between the youngest children and the older generation most at risk from the virus.

The need to consider such tradeoffs calls for sustained and effective co-ordination between education and public health authorities at different levels of government. Such collaboration should be enhanced with forms of local participation and autonomy that enable the contextualisation of responses. Many survey respondents indicated that school reopenings are planned to be progressive, beginning in areas with the lowest rates of transmission and lowest localised risk.

However, several steps can be taken to manage the risks and trade-offs. It is important to develop clear protocols on physical distancing, including banning activities that require large gatherings, staggering the start and close of the school day, staggering meal times, moving classes to temporary spaces or outdoors, and having school in shifts to reduce class size. Equally important are protocols and practice on hygiene, including handwashing, respiratory etiquette, use of protective equipment, cleaning procedures for facilities and safe food-preparation practices.

It is also important to protect teachers, administrative staff and students and their family members who are at high risk due to age or underlying medical conditions, with plans to cover absent teachers and continue remote education to support students who are unable to attend school. Governments and teacher organisations may also need to revise personnel and attendance policies to accommodate health-related absences and support remote and blended teaching.

Investment in training is central. School leaders need to have the capacity and training to establish procedures if students or staff become unwell, and to put in place partial or complete school closures when needed. They need to be able to conduct risk assessments for teachers and other staff, and take appropriate action to support them. Effective guidance and procedures are needed to monitor the health of students and staff, maintain regular contact with local health authorities, and update emergency plans and contact lists. When students enter the premises, their temperature may need to be taken and infected students isolated and cared for by specialised medical staff - without stigmatising the students. Teachers, too, may need to be tested before the school reopens, and the health and sanitary managers of schools should take the temperature of teachers when they enter the premises.

Similarly, administrative staff and teachers need training on how to cope with the virus, to recognise risks and to implement appropriate measures. This includes implementing physical distancing and school hygiene practices. Cleaning staff need to be trained on disinfection and be equipped with personal protective equipment to the extent possible. Behaviour change is needed to increase both the intensity and frequency of cleaning and disinfection activities and improve wastemanagement practices.

Balancing coherence with flexibility

On the one hand, it is important to establish clear and consistent guidance and communication on the parameters for deciding when to reopen schools in order to ensure coherence and limit confusion in both the education sector and the general public. At the same time, local conditions vary significantly. Schools also differ in the level of exposure between the school population and high-risk groups, such as the elderly and those with underlying medical conditions, the ways in which the school population travels to and from school, and community-related and epidemiological risk factors, public health and healthcare capacities, population density and adherence to social distancing and good hygiene practices. Therefore, national health guidelines to reopen schools that are developed without attention to the physical and organisational characteristics of schools could cause more harm than good.

Countries should therefore prioritise investment in local capacity, recognizing that conditions are very heterogenous across schools and that in many countries large proportions of schools have exceedingly low levels of capacity. Schools need to prepare themselves, engage parents and teachers, and build trust in the community that they are handling the situation well and wisely. Schools should reopen when the necessary conditions are in place and when school teams feel sufficiently capable of coping with the situation and parents are ready to send their children to school. This may imply that not all schools will reopen at the same time. Respecting the autonomy of schools in different circumstances is important. Failing to do so – for example, because governments opt for highly prescriptive approaches – may lead to confusion and feelings disempowerment, which will ultimately harm the reopening strategy.

The crisis has also shown how important it is to secure ownership and buy-in of the reopening strategies from parents, teachers, school leaders and communities. Even the best regulation will achieve its goals only if schools implement them proactively. For example, schools will need to implement effective measures to ensure personal hygiene and social distancing between children, ensure clean and disinfected infrastructure, furniture, equipment and classrooms. Some of this may require creative solutions adapted to local environments, such classes in outside and open spaces. In this regard, it is encouraging that over 75% of the respondents reported that reopening strategies were designed in a collaborative fashion with teachers. Very few reported there were conflicts with teachers, parents or between the government and schools; over 65% said communications were well managed. Perhaps most important, over 80% reported that everybody did all they could to help. However, only 25% of the respondents indicated that such collaboration also included parents. Schools and teachers may need to expand and intensify their relationships with parents and families. Many parents have suffered in maintaining their children's learning and are in need of support and guidance.

Experience has shown how important it is to clearly and consistently communicate what is to be accomplished. Resistance to change is often due to incomplete information about the nature of the proposed policies, their impact, or whether or not the stakeholders involved will be better or worse off. Opposition to change can signal that the public has not been sufficiently briefed or prepared or that there is a lack of social acceptance of policy measures. Individuals and groups are more likely to accept changes that are not necessarily in their own immediate individual interest if they and society at large understand the reasons for these changes and can see the role they should play. This will be an issue particularly when further school closures are local. To achieve this, the evidence base of the underlying diagnosis, the policy options and their likely impact, and information on the costs of the measures versus inaction should be disseminated widely in a language that is accessible to all.

That is the way to build a solid a consensus. Data from the survey show that many countries have still some way to go to engage key stakeholders in the design and implementation of their response to the pandemic.

Balancing needs and capacities

Respondents indicated that strategies for reopening schools are often progressive. This involves choices and trade-offs that are often not easy to make. For instance, maintaining minimum standards of physical distance in schools is more feasible for older students who can understand the concept of social distance and who have the cognitive abilities to self-monitor and follow such rules. At the same time, the need for structured site-based learning and personal interaction with educators is highest amongst the youngest children, for whom social distancing is more difficult to achieve – and for whose working parents, the reopening of school is most urgent.

Where schools have to make choices, on-site learning should give priority to struggling students who lack supportive infrastructure at home, while other students can benefit from e-learning and home-schooling; to students in critically important stages of their schooling trajectory; and to classes with a significant share of practical training.

It is also encouraging how many countries are envisaging large-scale remedial programmes to mitigate learning loss and compensate for school closures. The specific strategies developed to recover learning loss should vary depending on whether the school closures took place at the end of the school year vs. the places where the closures happened at the beginning of the school year. In countries where the school year was ending there is more likely to be information on what students had learned up to the point of the closures. The lessons to recover learning can be organised on days that schools are normally closed, as well as in the evenings or on weekends. They can also take the form of summer classes, combined with sports and recreational activities. An extension of the school year into the vacation period could also be considered, or the start of the school year can be advanced by one or two weeks. In addition, where the availability of infrastructure allows this, it may be possible to extend the duration of the school day for the purpose of recovering learning loss. Here, it is important that schools do not lose sight of the urgent needs of students who are completing their secondary education. The ongoing economic crisis is creating a labour market that is deeply hostile to young people. Students will be in need of more help than ever in managing their transitions. Very many will seek, at short notice, to find ways of staying in education. It is essential that they are supported in making the best possible decisions at this most difficult time.

Countries have taken different approaches as to whether students should be legally obliged to attend school in the post-Covid-19 environment, with about 60% of the respondents indicating mandatory attendance. Ideally, the school should provide the most appropriate and beneficial teaching and learning environment for each student. Where the legal enforcement of compulsory education is temporarily suspended, the progression and development of each student should still be tracked and monitored. The specific arrangements and responsibilities of schools, students and families may be formalised in a "learning contract".

For the school year 2020-21, a contingency plan should be developed, both at the level of the government and the level of the individual school, aimed at ensuring optimal learning opportunities for all students, in case school closures disrupt the school year. Temporary school closures seem very likely to occur in the 2020-21 school year, at least locally. Schools need to be better prepared for similar circumstances in the future.

Balancing constraints on curriculum time with curriculum innovation

The results of the survey show that school closures have significantly reduced effective curriculum time. Countries and schools need to develop adapted alternative curricula and academic programmes based on different public health scenarios and taking into consideration modalities to be used for remote learning.

Some countries and schools have opted to prioritise core curriculum content that is essential for student progression and examinations, often focusing on literacy and numeracy; other countries consider that the crisis has shown the need to foster a wider range of cognitive, social and emotional competencies, and focus on student well-being. Similarly, the survey has exposed a gap between the responses from government representatives, which tend to prioritise academic learning, and the responses from teachers, which highlight the need to bolster student engagement.

Such trade-offs are not easy; they require strategic reporting around curriculum design, adaptation and implementation so as not to overburden teachers and students. An appropriate policy response likely requires flexibility to accommodate regional differences or across type of school, when those relate to levels of institutional capacity.

The public health requirements for safe attendance at school need to be assimilated into the educational requirements for learning and instruction. If physical distancing at school limits the possibility of collaborative work, or project-based learning, for example, the instructional activities that take place in school, such as teacher-centred whole-class instruction, may need to be balanced with online activities that engage students in collaboration with peers and that provide opportunities for studentdirected learning. Countries may need to increase their investments in digital learning opportunities not just to prepare for future school closures, but also to enhance blended learning and innovative learning environments.

The survey results highlight how central teachers have been to the delivery of alternative learning opportunities. Two-thirds of respondents indicated that students were accessing the curriculum directly from their teachers. Data from OECD's Teaching and Learning International Survey (TALIS) show that, in many countries, teachers' familiarity with integrating technology into instructional practice is still limited. This finding highlights the need for timely training for staff on remote learning, and opportunities for knowledge sharing and mobilisation amongst teachers, well beyond what is currently offered.

Beyond that, teachers need to be supported to address not just the academic needs of students, but also students' mental health, and social and emotional needs. Some of this can be accomplished through innovative teacher support methods, such as online professional development, coaching or mentoring to build capacity at scale.

Last but not least, countries may need to adapt admissions, assessment and examination policies so as to focus time and resources on examinations that are critically important for student transitions and the recognition of student learning in the labor market.

Ways forward

There are two significant opportunities to seize as part of the plans to reopen schools. The first is to take stock of the lessons learned in this crisis upon returning to school and to assess the learning loss. This exercise in student assessment should focus not just on the extent to which students gained the knowledge and skills intended in the curriculum, but also on what skills and competencies they demonstrated, or failed to demonstrate, during the period of remote learning. Clearly, effective learning out of school placed greater demands on autonomy, capacity for independent learning, executive functioning, self-monitoring, and the capacity to learn on line. These are all essential skills for now and for the future. It is likely that some students were more proficient than others and that, as a result, they were able to learn more than their peers while not in school. The plans to return to school should therefore focus on more intentional efforts to cultivate these essential skills amongst all students.

Second, it is equally important to continue the already ongoing efforts to build an infrastructure for online and remote learning, and to develop the capacity of students and teachers to learn and to teach in that way, including augmenting the capacity of students to learn independently. This is essential because there is a possibility that, until a vaccine is widely available, any return to school may have to be interrupted as a result of future outbreaks, at least locally. But beyond the Covid-19 pandemic, there are evident benefits to students in expanding their learning time and learning opportunities beyond the walls of the school through distance learning. The plans for school reopening could consider blended modalities to access the curriculum for all students. Access to online learning and to independent learning using technology can facilitate the acquisition of essential 21st century competencies such as collaboration, communication, independent research and higher order cognitive skills. The momentum created by the strategies of education continuity in their use should be sustained and deepened on behalf of making education more relevant to the needs of the 21st century.

In one way, the crisis has revealed the enormous potential for innovation that is dormant in many education systems. The results of this survey show a considerable capacity for innovation in education. One of the lessons that needs to be examined and assimilated is what processes unleashed such potential and how can such innovative capacity be extended going forward. Just as the pandemic will create some unexpected burdens to education, it could also generate a dividend in innovative capacity. This dividend should be catalysed so that education systems do not merely attempt to "return to the past normal" but address what have been well-recognised shortcomings in the capacity to educate students with the full range of skills essential to build a better future.

There is a long history of introducing new tools in education – such as television, video, digital whiteboards or computers – in the hope of radically improving teaching and the effectiveness of schooling, only to end up with incremental change achieved at a higher cost and greater complexity. This highlights the need for a more intentional and strategic approach to innovation, supported by well funded and methodologically sound research. Part of the problem lies in the comparatively weak and fragmented education innovation and research sector: public health-research budgets in OECD countries are 17 times larger than education-research budgets which results in a thin knowledge base about innovation and improvement. The pandemic calls on governments to address this.

It will be equally important to create a more level playing field for innovation in schools. Governments can help strengthen professional autonomy and a collaborative culture where great ideas are refined and shared. Governments can also help with funding, and can offer incentives that raise the profile of, and demand for, what works. They can also provide teachers and students access to devices and connectivity that are basic inputs for pedagogical innovations mediated by technology. But governments alone can only do so much. Silicon Valley works because governments created the conditions for innovation, not because governments do the innovating. Similarly, governments cannot innovate in the classroom; they can only help by opening up systems so that there is an innovation-friendly climate where transformative ideas can bloom. That means encouraging innovation within the system and making it open to creative ideas from outside. The responses from government representatives and administrators to the questions on governance in this survey suggest that too little of that is happening. Labour-management relations may also either facilitate or impede innovation. In order for schools to become learning organisations, it is essential that both governments and teacher unions embrace the value of innovation, flexibility and the need to experiment and create an entrepreneurial culture in education.

Policy makers and union leaders often still view schools as industrial rather than professional knowledge organisations, and education industries as providers of goods and services to schools. They tend to underappreciate that innovation in education is also changing the very environment in which schools operate. In particular, technology-based innovations open up schools to the outside world, both the digital world and the social environment. They also bring new actors into the system, including the education industries with their own ideas, views and dreams about what a brighter future for education could hold.

Governments should be more demanding of the education industry. Most of our children would

not voluntarily play with the kinds of software that companies are still able to sell to schools and that have been deployed at scale during the pandemic. Is innovation in the education industry as dynamic as it should or could be? Can we break the cartel of a few large suppliers of educational resources who use an army of salespeople to sell their services to a fragmented market? Can we overcome the slow sales cycles, where buyers have to deal with layers and layers of people all "in charge"? In many countries public procurement processes make the acquisition of educational technology very difficult, in practice providing unfair advantages to large providers with the right access to government decision makers. There is urgent need to redesign and facilitate the acquisition of educational software and resources by public schools.

Is it possible to create a business culture for managing innovation in school systems? At the moment, it is so much easier for administrators to buy new tools and systems, and to use existing staff, because this costs them "nothing" than to redesign the organization of schools and of school work. The treatment of teacher time as a sunk cost means people see no benefit to saving this time. It is worthwhile to explore how industry can help the education sector close the productivity gap with new tools and new practices, organisations and technology.

Success may be less about the "killer app" or "disruptive" business model that will somehow turn existing practices upside down, and more about how to identify, interpret and cultivate a capacity for learning across the entire ecosystem that produces education outcomes. To deliver on the promises offered in the digital age, countries will need convincing strategies to build teachers' capacity not just to use but also to develop new tools; and policy makers will need to become better at building support for this agenda. Given the uncertainties that accompany all change, the status quo will always have many protectors.

To mobilise support for innovation, resilience and change, particularly in the uncertainty created by the pandemic, education systems need to become better at communicating the need and building support for change. Investing in capacity development and change-management skills will be critical; and it is vital that teachers become active agents for change, not just in implementing technological innovations, but in designing them too. That means also that education systems need to become better at identifying key agents of change and champion them, and find more effective ways of scaling and disseminating innovations. It will be crucial that the many good experiences learned during the pandemic will not be lost when things return to "normal", but rather provide inspiration for the further development of education. That is also about finding better ways to recognise, reward and celebrate success, to do whatever is possible to make it easier for innovators to take risks and encourage the emergence of new ideas.

In sum, while this crisis has exposed the many inadequacies and inequities in our education systems, this moment also holds the possibility that we won't return to the status quo when things return to "normal". It is the nature of our collective and systemic responses to the disruptions that will determine how we are affected by them. We have agency, and real change often takes place in deep crises. When school closures are needed again, we can mitigate their impact on learners, families and educators, particularly on those in the most disadvantaged groups; the survey shows that much of this is already happening. We can collaborate internationally to share open online educational resources and digital learning platforms, and encourage technology companies to join this effort. This process of global collaboration to foster educational innovation is still in its infancy. We can

rapidly enhance digital learning opportunities for teachers and encourage teacher collaboration beyond borders. Perhaps most important, we can seize the moment to make curricula and learning environments more relevant to the needs of the 21st century.

If there is one thing this crisis has illuminated, it is that no country will be able to tackle the crisis and its aftermath alone, and that there is enormous potential for global collaboration to fight the pandemic in every sector of public policy, including education. There is also great potential to generate adaptive innovative approaches to improve education in fostering fluid communication and collaboration across levels of government, between the public and private sectors, and by engaging multiple actors in civil society. This is also likely to be a key distinction between the countries that will make progress in education and those that will not. The distinction may be between those education systems that feel threatened by alternative ways of educating and those that are open to the world and ready to learn from and with the world's education leaders.

A checklist to sustain education continuity in the second phase of the pandemic

1. Prepare. Challenging as providing educational continuity during the first phase of the COVID-19 pandemic has been, the coming years may be even more challenging. Educational leaders need to prepare their institutions for more rapid change and even greater volatility. Schools, school districts, municipalities, states, and nations, will need to develop dynamic strategies of educational continuity that adjust rapidly and have close feedback loops with learners, educators and the societies around them.

2. Learn from the first phase of the pandemic. A rapid exercise of stock taking can codify the lessons learned during the first phase of the pandemic. These should make visible shortcomings, challenges, needs as well as silverlinings. Until there is a vaccine there is a possibility that further school closures may be necessary. A contingency plan to continue learning remotely should be developed, building on what was learned from the plan advanced during the first phase.

3. Develop protocols to maintain physical distancing in schools and in school operations and build capacity to implement them. There are significant demands to operate schools safety following guidelines of public health authorities, implementing those effectively will require a process of design which needs to be responsive to the conditions of each school. This process of school based design needs to include professional development for all staff, and for students and parents.

4. Create an effective delivery system for remote learning. The strategies for education continuity implemented in many jurisdictions revealed significant shortcomings and inequities in access to technology and skills to use them. Addressing these shortcomings should be a priority not only because it is indispensable to execute a possible Plan B over a protracted period, but also because it is essential to help students develop the skills they need to thrive and participate in tomorrow's world. Reimagining the education delivery system requires to rethink roles. Teachers and school staff should be declared 'first responders' and their need for professional development, emotional support and protection are critical. The role of families in supporting the education of their children has changed considerably and they need professional support to play a more direct role as learning coaches of their children. Students themselves should be seen as agents of their own learning, and their roles in learning should be reimagined to leverage and cultivate their agency, purpose, self-direction and independent learning.

5. Strengthen an expanded learning ecosystem. Education during the first phase of the pandemic was possible to the extent that remote learning was possible and home environments were ready to serve as learning environments. Enabling this required new alliances and partnerships, for example with technology and telecommunications companies, with television and radio stations. This ecosystem should be maintained and strengthened.

6. Sustain and deepen teacher professional development. Educational continuity was possible because systems of teacher support and collaboration were quickly developed to provide just in time knowledge and skills for teachers to embrace new pedagogies but also to assume new functions beyond teaching in order to support students and their families. Ongoing professional development needs to become a much more integral part of the work organisation in education, and ensure that teachers have a deep understanding not only of the curriculum as a product, but also of the process of designing a curriculum and the pedagogies that will best communicate the ideas behind the curriculum. Finding out which pedagogical approaches work best in which contexts takes time, an investment in research, and collaboration so that good ideas spread and are scaled across the school system. Achieving that will require a major shift from the current industrial work organisation to a truly professional work organisation for teachers and school leaders, in which professional norms of control replace bureaucratic and administrative forms of control.

7. Develop capacity for blended learning that incorporates face to face learning and teaching in schools. The reopening of schools should not be understood as merely resuming the operation of schools, but to creatively integrate the spaces, time, people and technologies into an ecosystem of learning. These approaches need to achieve an adequate balance between standards and guidelines and responsiveness to local conditions in schools and communities. It is likely that an important proportion of learning time will remain online, increasingly depending on and cultivating student agency and independent learning.

8. Assess student needs and outcomes. It is essential to assess where students are academically, and what their emotional needs are. Many of them will have experienced trauma as a result of the impact of the pandemic on them or their families. This assessment should especially take note of students who do not reengage with school, who don't return, or who return but were very minimally engaged with school work during the pandemic. It will be essential to develop individualised strategies to retain the engagement of those students and their families.
9. Recover learning loss. The majority of students were unable to learn what the curriculum expected them to learn during the first phase of the pandemic. Additional learning time will be necessary to minimise the long term impact of those losses. Creating expanded learning opportunities might involve extending the duration of the

school day, extending the number of days of instruction per week, or work during the summer and other school holidays.

10. Rebalance the curriculum. The instructional priorities for the coming year must respond to the needs of students and to the different conditions in which it will be necessary to teach, in the modified school environments that health guidelines will create, and at home and the expanded learning ecosystem that will be essential to sustain education. In most cases, schools will be more restricted environments than they normally are, increasing the amount of time necessary for handwashing and hygiene, for instance, reducing the possibility of collaborative work, sports or other extracurricular activities which require close physical contact in others. This will require redesigning learning and teaching in order to provide students the best opportunities possible to learn, making optimal use of each of the elements of the new blended learning ecosystems. Those plans should balance the constrains that will be inevitable in the use of physical spaces, with the possibilities offered by collaborative and independent work remotely and at home. Ensuring an effective infrastructure to allow collaboration online should be a priority because of the possibility of interactivity it enables. The exercise of rebalancing the curriculum should begin with a whole child view of the essential competencies students need, including cognitive, social and emotional domains. It should identify opportunities created by the new conditions, for example, the need to foster greater student agency as a significant portion of their learning will require these. This will require greater attention to executive functioning, time management and self-monitoring and self-direction and the curriculum should explicitly cultivate these essential intrapersonal skills. At the same time, learning under the conditions created by the pandemic has created new emotional needs which must be addressed. Similarly, essential social skills which are ordinarily cultivated as students collaborate with peers in schools, will now require imagination and design in order to develop them through a variety of blended approaches. This work in curriculum rebalancing is an opportunity not just to respond to the immediate conditions which the public health crisis has created, but to address the important task of building 21 st century schools accelerating progress in addressing gaps which learning during the first phase of the

pandemic has now made more visible.

11. Develop an effective communication system. Communication of the strategy among all stakeholders in schools, always important, has now become critical to ensure the coherence of an expanded blended learning eco-system that includes not just students, teachers and staff, but also parents and other members of the community. An effective communication system, which includes opportunities for feedback from multiple constituencies, is a key pillar of the implementation of an education continuity strategy. Communication should not be confused with broadcasting of messages from leadership. If messages are not received, if they are not processed, if they are not understood or accepted, communication remains ineffective. Technology affords extraordinary possibilities for more inclusive, participatory and interactive forms of communication than are normally deployed in schools and systems. Learning to use them effectively should be integral to the essential leadership development to manage the current adaptive crisis. It is imperative to create more opportunities to listen to the voice of students, in assessing their experience, in taking stock of how schools have adjusted to the pandemic, in including their views in the design of a new expanded blended ecosystem for learning, and in providing them more agency and autonomy in directing their learning going forward. It is essential to create opportunities to consult families on what kind of education they prefer for their children, as they know their circumstances best.

12. Build capacity to lead adaptively and support innovation. Sustaining education during the pandemic brought to the surface new leadership, from those in formal positions or authority and beyond. It also revealed the limitations of existing leadership. Those who were able to create alliances, to build collaborations across stakeholders in the public and private sector, to use rapid feedback cycles to guide their work with knowledge of conditions on the ground, to engage with peers to rapidly mobilise knowledge, and to revise and adjust regulations to quickly support essential adaptations to new conditions were able to foster the necessary innovation, collaboration and flexibility to sustain educational opportunity. Associations of principals, of school superintendents, schools of education in universities, and organisations that focus on professional development can play a critical role in creating the future leadership development infrastructure.

13. Differentiate autonomy and support to reflect conditions of each school. An appropriate balance is essential between autonomy and support to schools in mobilising the capacity for an effective educational continuity. Capacities in schools should be fostered to the greatest possible extent, providing support as requested and needed by the schools. Some schools, however, have very limited institutional and financial capacity and will require more guidance and support from education authorities. There are also actions which are beyond the reach of schools, for example, establishing partnerships with technology or telecommunication companies, where government can play an important facilitating role. There are actions, such as deciding whether it is safe for students to all attend school every day or how to use school transportation where those leaders and teachers in the school are best positioned to make the decisions in the best interest of students.

14. Unleash innovation. Educational continuity during the first phase of the pandemic was the result of sometimes extraordinary levels of innovation resulting from broad based participation of students, teachers, parents, civil society, and education leaders. Innovation and creativity will remain critical assets to face the daunting challenges that sustaining education in the coming year will require. Leadership and organisation, at all levels of the education system, can and should support ongoing innovation. Leadership to foster innovation should depend on strategic clarity on goals and great flexibility on means. Regulations, norms, graduation requirements, exams, timetables, class sizes, school schedule and curriculum should all be understood for what they are, as means to an end and not an end in themselves. Looking forward, the strategic clarity on ends should begin with what competencies should be gained by students, then thinking creatively and flexibly to devise means that are fit for purpose, given the financial, institutional and human constrains of schools. Education leaders must make decisions in an expeditious and timely manner on options for next year early, for the sake of having the necessary time to develop education approaches which are developed as offline and online, rather than attempts to translate the face to face model in a distant model. It should be clear that most past efforts have been a stop gap measure using remote resources, not efforts designed to fully leverage what quality online instruction can deliver.

15. Mobilise resources. The pandemic has exerted a significant financial toll on societies and a period of financial austerity is to be expected in the immediate aftermath, to absorb the costs incurred to address the health emergency. Education must a priority as an investment during the immediate aftermath to the pandemic. In particular, if the education responses to the pandemic involve redesigning a more capacious and effective education delivery system in preparing students with the full breath of skills essential to invent the future, financial resources will be essential.

Introduction

The Covid-19 pandemic has created a range of education challenges, not just to public health, but to many other areas of activity including education. The need to contain the spread of the pandemic led many governments to put in place measures limiting physical proximity. In many cases this constrained the ability of students and teachers to meet in schools, as they normally would. Sustaining education continuity amidst this pandemic has been challenging around the world. To assist education leaders in those efforts the OECD and the Global Education Innovation Initiative at Harvard University have collaborated to obtain and analyse information on the education conditions faced in countries, and on the approaches adopted to sustain educational opportunity. The World Bank and the Organization Hundred have contributed to this effort as well. Our goal was to do this as rapidly as possible, in order to offer information that can be used in the timeframe within which education leaders must respond to the emergency. The first result was a framework developed on the basis of a rapid survey conducted between 18 and 27 March 2020, with 333 responses from 99 different countries. The framework examined the immediate education needs and priorities caused by the pandemic and the anticipated education challenges. It also discussed a series of options to sustain education continuity and offered a 25 item check-list to support the development of a strategy for education continuity. The report was translated into Arabic, French, Portuguese, Spanish and Turkish by various education organisations, which adopted it into their own efforts to advocate for education continuity.

The second result of this collaborative initiative was a curated list of online education resources that had been identified in the first survey described above. Using a framework of cognitive, interpersonal and intrapersonal skills, we evaluated each of the online resources respondents to the survey had indicated they were using, and presented them in a manner that would facilitate the use of these resources by those including online resources in their strategies for education continuity.

Third, we are currently documenting and analysing innovative practices to sustain education continuity in a range of jurisdictions around the world, showcasing practices of governments at the city, state and national levels, as well as efforts of education organisations in civil society. Our aim is that those will inform the ongoing design and revision of global efforts of education continuity. This new report is based on a survey conducted between 25 April and 7 May 2020. As with the previous survey, we conducted the survey on line through our various networks, including the country delegations of the OECD and the institutional partners of the Global Education Innovation Initiative at Harvard University. We also distributed the survey to those who had responded to the first survey and through other education organisations, such as WISE and the Organization of Iberoamerican States. We received 1 370 responses from 59 countries, a much greater number than the 333 respondents to the first survey. The following table describes the roles of the respondents to the survey.

The first part of this report analyses the responses of 37 senior government officials and 113 education administrators. The second part of this report analyses the responses provided by 747 teachers and 246 school administrators. Table A1 in the Appendix presents the total number of responses from senior government officials and education administrators received per country and the specific roles of the respondents. A total of 150 surveys were received for senior government officials and administrators from 36 countries; for most countries, three or fewer surveys were received, except in three countries where more people responded. Unless otherwise indicated, the figures represent aggregate estimates over all countries with valid responses. To provide all countries the same weight in the analysis, the data were weighted by a factor equal to one over the number of respondents per country. For the section of the report that examines plans for reopening, the weights were recalculated for the sample of respondents who had knowledge of such plans, so that each country would have the same weight in the overall analysis. Appendix C presents the unweighted responses by country.

Table 1 • Countries that responded to the survey and number of responses received per country

Primary Role	Number
a. A public school teacher	705
b. A public school principal or member of the leadership team	194
c. A private school teacher	42
d. A private school principal or member of the leadership team	52
e. A senior government official	37
f. An education administrator, not in a senior role	113
g. An employee in an education company (not a school)	14
h. An employee in an education non-governmental organisation	34
i. Other, specify	148
Not available	31

Section I. The views of senior education administrators

Instructional time lost

Education outcomes are shaped by the amount of instructional time that is available times the instructional quality of how this time is used. Almost all countries have statutory or regulatory requirements regarding the number of hours of instruction that must be delivered in an academic year. These are most often stipulated as the minimum number of hours of instruction a school must offer. Matching resources with students' needs and making optimal use of time are central objectives of sound education policy.

A first way to assess the impact of the pandemic on education is to estimate the amount of instructional time lost. Those losses result from institutional responses to the pandemic, such as the closure of schools as part of the physical distancing measures, and from individual responses, resulting from the constraints facing students resulting from the direct impact of the pandemic on them or their families. Respondents were asked to estimate the number of instructional days, excluding weekends and holidays, on which students had not been able to attend school, for each level of education, and also to estimate the additional number of days that they were expected to still stay at home (Table 1). On average across the participating countries, students had spent about 30 instructional days at home, and were, at the time the survey was conducted, expected to remain an additional 15 instructional days outside of school, for a total of about 40-45 instructional days. This represents about two months of school work, a considerable proportion of the expected learning time, which on average across OECD countries amounts to 799 compulsory instruction hours per year at the primary level, and 919 compulsory instruction hours per year at the lower secondary level.

However, as shown in Appendix A2, the number of instructional days schools were closed varies greatly across countries. For example, while a number of countries were already reopening schools at the time the survey was conducted and expected few or no additional days at home, in Brazil, Costa Rica and Peru, primary schools were expected to be closed for an additional 50 days or more. Most countries have prioritised the reopening of primary schools, given the importance of social interaction in the early grades and the greater difficulties that younger students face in learning remotely, despite the much greater challenges to maintain physical distancing among younger students if they are brought together in schools. There is greater variability across countries with respect to the expected days of future school closures than with respect to the number of days

Level	Median	Mean	Std. dev.	
Number of instructional days already spent at ho		mean		
Primary school	30	27.35	12.11	
Lower secondary school	30	27.43	12.18	
Upper secondary school	30	29.72	9.88	
Estimated number of additional instructional days to be spent at home				
Primary school	15	18.36	25.44	
Lower secondary school	15	18.35	24.82	
Upper secondary school	15	67.29	278.27	
Total number of instructional days to be spent at	home			
Primary school	40	45.62	30.51	
Lower secondary school	40	45.69	29.93	
Upper secondary school	41.67	97.06	283.54	

Table 2 • Average number of instructional days students could not attend school because of school closure

schools have been closed. There are no significant differences across education levels. The coefficient of variation for instructional days primary school students have been at home is 44%, but 138% for expected instructional days to be at home in the future. For lower secondary education, these coefficients are 44% vs 135% and for upper secondary 33% vs 413%.

Alternative learning opportunities during school closures

In order to minimise the loss of learning while schools were closed, countries sought to provide alternative learning opportunities. To examine how they did this, respondents were asked to indicate which were the principal forms used to provide education continuity during the period of physical distancing, and who made those arrangements.

Responsibilities for alternative learning opportunities

The survey asked respondents to rank the various approaches that had been followed to make alternative education arrangements. The responses indicate that governments played an important role making arrangements for education continuity, but in many countries schools and parents played an important role too. The modality most frequently mentioned as the main form of education continuity (for the options chosen as the top option followed) included the government making alternative education arrangements but in ways that involved the schools (52%), followed by schools making their own arrangements without governmental support (31%) (Table 3).

Delivery of alternative learning opportunities

Respondents were also asked to estimate what percentage of the students accessed the curriculum, during the most recent week when it was not possible to attend school, through various means of education continuity. The most frequently mentioned options all involve teachers. About 67%% indicated that students are accessing the curriculum directly from teachers, and 53% indicated that they are doing so from teachers plus other means (Table 4).

Instructional resources used

A range of instructional resources have been used to provide education continuity, often in combination. The most common are existing online resources, online instruction delivered by the same teachers of the students and instructional packages with printed

Methodology	First option (%)	Second option (%)	Third option (%)	Fourth option (%)	Fifth option (%)	No rank (%)
a. The government (any level) made alternative edu- cation arrangements that involved the schools	52.11	25.14	5.75	8.61	0	8.39
b. The government (any level) made alternative education arrangements that did not involve schools (educational television, radio).	8.14	49.89	28.68	4.81	0.08	8.39
c. Schools made their own alternative education arrangements, without government	31.31	16.19	39.14	3.56	1.42	8.39
d. Parents made their own arrangements, without support from schools	0.03	0.42	14.67	70.33	6.17	8.39
e. There were no alternative arrangements made	0	0	3.39	4.28	83.94	8.39

 Table 3 • Approaches followed to develop strategies of education continuity amongst the various options ranked as first, second, third, fourth and fifth modality (percentages)

Table 4 • Estimates of the percentage of students who were able to access the school curriculum, through various means, during the time when unable to meet

Level of Support	Median (%)	Mean (%)	Std. Dev. (%)
Support from teachers	66.67	60.46	38.04
Support through other means	0	15.78	23.14
Support from teachers and other means	53.52	52.45	41.83
No support	0	5.18	10.94
Not available			31

Table 5 • Instructional resources used

Resources	Yes (%)	No (%)	No answer (%)
a. Instructional packages (textbooks, worksheets, printouts)	89.19	6.5	4.31
b. Radio education	40.82	42.9	16.28
c. Educational television	77.61	11.69	10.69
d. Existing online instructional resources	95.78	0.06	4.17
e. Online instruction delivered by the same teachers of the students learning	92.75	3.08	4.17
f. Online instruction provided by private tutors	35.03	46.81	18.17
g. Other modalities	29.25	32.14	38.61

 Table 6
 Estimates of percentage of students who can access all or most of the curriculum through the various approaches of education continuity available

Access	Median (%)	Mean (%)	Std. Dev. (%)
All or most of the curriculum	51.42	43.3	38.82
A good amount	11.66	17.69	23.4
Some, but not much	0	5.4	11.7
Very little or none	0	3.67	10.65

resources as well as educational television. In a number of countries, online instruction provided by private tutors also played an important role (Table 5).

Equity in access

In spite of the variety of resources used to provide education continuity, a significant percentage of students was unable to access the curriculum during the period when they could not attend schools. Respondents estimate that only about half of the students were able to access all or most of the curriculum, and an additional 12% indicated that they were able to access a good amount but not all (Table 6). It is noteworthy that educators generally estimated higher figures of access to the curriculum than government representatives or administrators (see section II). Appendix A3 presents these estimates per country.

Evaluation of the strategy for education continuity

In general, the education continuity strategy is viewed positively by senior government representatives and administrators, though the views of educators were somewhat more reserved (see section II). Most reported it was well planned and executed, very few see it as chaotic, but almost 30% reported there

Table 7 •	Evaluation of the strategy	for education continuity

	Com- pletely	Agree	Not sure	Disagree	Com- pletely	No
Statement	agree (%)	(%)	(%)	(%)	disagree (%)	answer (%)
It was well planned	25.47	45.01	11.23	3.11	2.78	12.4
It was well executed	24.88	41.25	14.74	0.4	2.86	15.88
It was fairly chaotic	0.23	3.95	9.96	42.16	24.5	19.19
There was a lot of improvisation	3.11	25.9	22.76	22.96	12.51	12.76
There was no co-ordination	0.67	6.14	7.39	38.35	34.46	12.98
It was designed in a top-down fashion by the government	12.94	17.68	6.51	31.79	17.2	13.88
It was designed in a top-down fashion by local education authorities	4.29	18.01	8.6	30.38	22.52	16.2
It was designed in a top-down fashion by school principals	0.25	19.09	22.23	27.36	12.43	18.64
It was designed in a collaborative manner including teachers	25.18	51.33	6.69	2.52	0.97	13.32
It was designed at the discretion of the teacher, in isolation	0.06	12.86	18.92	26.67	25.73	15.75
It was designed in a collaborative manner including parents	4.33	24.03	29.98	18.59	7.25	15.81
It was designed in a collaborative manner including the community	0.33	25.28	30.68	19.98	5.14	18.59
There was strong collaboration between public and private sectors	14.55	29.01	18.55	13.18	5.6	19.12
There were conflicts between schools and the government	0.03	5.81	9.86	34.12	34.4	15.78
There were conflicts with parents	2.81	3.64	20.09	43.79	11.09	18.59
There were conflicts with teachers	0	7.25	21.2	42.79	10.17	18.59
Communications were well managed	14.11	51.55	10.34	2.34	2.9	18.76
Everybody did all they could to help	48.42	32.33	3.22	3.06	0.03	12.94

Table 8 • Compared to what students normally learn in school, how effective was the strategy of education continuity in helping them learn?

Statement	%
It is not possible to assess how effective it was	47.87
No answer	12.34
They did not learn very much	0.44
They learned about what they would have learned if they had attended school	3.89
They learned some, but not very much	3.78
They learned, but less than they would have in school	31.68

Table 9 • Compared to what is normally the focus in schools, what was the focus of the curriculum during the strategy of	
education continuity?	

Statement	%
No answer	9.64
The focus and amount of teaching was similar to what happens in school	39.86
The focus was on fewer subjects than is normally the case in school	38.97
The focus was on keeping students engaged but there was not much focus on academic learning	11.53

was a lot of improvisation (and amongst educators this percentage is almost half). Very few reported that co-ordination was lacking. About 30% see the strategy as designed in a top down fashion by the government. At the same time, over 75% reported that the strategy was designed collaboratively, including the teachers, about 25% mentioned that collaboration also included parents, and for one in five respondents collaboration also included the community. Very few reported there were conflicts with teachers, parents or between the government and schools, and over 65% said communications were well managed. Importantly, over 80% reported that everybody did all they could to help (Table 7).

When asked to estimate how effective the strategy of education continuity was, compared to what

students normally learn in schools, almost half of the respondents indicated that it is not possible to know and 32% indicated that students learned but less than they would have normally learned in school (Table 8). It is noteworthy that educators assessed this aspect more positively, with over 60% of educators reporting that students either learned about what they would have learned if they had attended schools or that they learned, but less than they would have in school (see Section II of this report).

Respondents are split with respect to whether the focus of the curriculum during the strategy for education continuity was similar to or different from what normally happens in school. About 40% indicated that it was similar, and 39% indicated that the focus was on fewer subjects than are regularly taught in school.

Box 1: Screentime and child well-being

With the increased use of digital technologies during the pandemic, a common concern has been the amount of screen time that children are exposed to and the potential impact on their emotional and physical well-being.

A review of the evidence suggests that a moderate use of digital technology, especially watching age appropriate, high quality programming, may promote certain cognitive and social benefits. In addition, "co-viewing" (i.e. engaging in screen time with a parent or caregiver) can enhance infant attention and their propensity to learn from on-screen content (Gottschalk, 2019[35]).

Although excessive time online should be avoided, the short-term intensive use of digital devices for education purposes during school closures as a result of the COVID-19 pandemic is not expected to lead to long term challenges, as long as:

• good practice is followed (imposed breaks, balancing learning online with physical and social activity in the home, etc).

• parents and students are vigilant about potential increased exposure to risks (e.g., cyber-bullying, etc),

• device settings limiting exposure to harmful or inappropriate content and protection of personal data traces are installed and activated,

Moving forward, education decision-makers will have to review and verify that any agreements signed with digital providers and products during the crisis meet the safety and design standards for children and protection of student data.

Source: Burns, T. and F. Gottschalk (eds.) (2019), Educating 21 st Century Children: Emotional Well-being in the Digital Age, Educational Research and Innovation, OECD Publishing, Paris, https://doi.org/10.1787/b7f33425-en.

Statement	Not at all (%)	Very little (%)	Not sure (%)	To some extent (%)	To a great extent (%)
Ensure the continuity of the academic learning of students	0.17	5.11	1.25	23.52	63.09
Provide professional support, advice to teachers	0.06	1.94	8.47	38.69	40.97
Support education of disadvantaged students	1.17	3.08	12.67	35.28	40.69
Ensure continuity/integrity of the assessment of student learning	0.31	4.89	3.28	44.61	37.11
Revise graduation/grade transition policy to allow student progress	4.67	4.28	11.75	30.24	36.41
Ensure distribution of food to students	13.09	5.86	13.06	22.21	35.96
Ensure well-being of students	0.06	7.39	15.19	34.92	35.42
Ensure provision of other social services to students	0.72	8.28	22.56	27.14	31.5
Ensure medical attention to teachers affected by Covid-19	10.5	5.81	23.44	21.5	28.94
Support education of students with special needs	0.89	6.44	13.55	43.07	28.66
Ensure medical attention of students affected by Covid-19	10.56	7.61	24.17	19.31	28.54
Address emotional needs of students	2.86	6.7	16.92	39.79	26.7
Support students whose parents have limited command of the language of instruction	2.31	7.17	13.72	41.75	24.92
Ensure support for parents and caregivers to support student learning	0.11	7.53	5.75	53.58	23.14
Ensure that career guidance was maintained	2.83	3.44	18.53	42.22	23.11
Ensure well-being of teachers	3.06	5.06	16.31	46.19	22.31
Ensure social development of students	5.61	5.42	4.31	57.07	20.62
Ensure student collaboration and teamwork	0.17	11.58	15.94	47.22	18.02
Support students at risk of violence at home	3.97	6.31	30.01	32.9	16.92
Ensure physical education of students	9.22	12.75	14.16	50.1	6.44
Other, specify	3.89	0.39	12.33	3.81	8.83

Table 10 • What was the focus of the strategy of education continuity?

Table 11 • Professional development to support teachers during education continuity

Statement	Yes (%)	No (%)	No answer (%)
Providing them with access to resources (printed, online, etc.)	90.31	5.47	4.22
Participation in peer networks within the school	86.94	5.94	7.11
Participation in peer networks across schools	79.86	12.42	7.72
Just-in-time guidance from leadership as needed	77.17	17.97	4.86
Teachers were not offered professional development during the pandemic	23.47	60.94	15.58
Providing them funds to take courses	15	69.7	15.3

Almost 12% indicated that the focus was on keeping students engaged but there was not much focus on academic learning (Table 9). It is noteworthy that amongst educators the latter percentage was almost twice as high, which may highlight the difficulties that teachers faced with ensuring student participation and engagement (see section II).

When asked what was the focus of the strategy of education continuity, the most frequent responses focus on academic learning: ensure the continuity of academic learning (63%), provide support to teachers (41%), and provide support for disadvantaged students (41%) (Table 10).

Other responses were ensure social and emotional development of students (21%), address emotional needs of students (67%), ensure support to parents to assist their students, ensure continuity and integrity of academic learning (37%), and revise graduation and transition policies (36%). About one in three respondents also identified as a focus of the strategy the provision of food to students, the well-being of students, the provision of social services to students, supporting students with special needs or the well-being of teachers. One in four respondents identified the maintenance of career guidance as a focus of strategies for educational continuity.

Support for teachers

To support the implementation of the strategy of education continuity, government representatives and administrators reported that teachers were supported in various ways, the main ones included providing them with access to resources, peer networks within the school and across schools, and just in time guidance from leadership. However, one in five respondents indicated that teachers were not offered professional development during this period (Table 11). For some of these dimensions, the assessment provided by teachers differed. For example, while 87% of government representatives or administrators reported participation in peer networks in schools, only 50% of teachers reported so (see Section II).

A variety of resources were used to support teacher professional development as shown in Table 12, mostly existing online learning platforms, tools that enable teachers to communicate with other teachers and virtual classrooms. In this respect, the reports from educators show quite similar results (see Section II).

Reopening of schools

In the context of the pandemic it is far more complex to reopen schools than to close them. Policy makers need to make difficult and uncertain trade-offs between keeping education services locked down to reduce the risk of the virus transmission, on the one hand, and managing the adverse effects of school closures on children's safety, well-being and learning, on the other. School closures not only lead to a loss of education opportunities, and thus long-term social and economic prospects of students (see the preceding sections), but the longer disadvantaged children are out of school, the less likely they are to return. Further, prolonged closures disrupt essential school-based services, such as immunisation, school meals, and mental health and psychosocial support, and can cause stress and anxiety due to the loss of peer interaction and disrupted routines. These negative impacts are likely to be significantly higher for disadvantaged children, children living with disabilities, and children in institutions. Not least, school closures have also serious long-term consequences for economies and societies,

Statement	Yes (%)	No (%)	No answer (%)
Existing online distance learning platform	91.89	3.89	4.22
Tools that enable teachers to share knowledge with other teachers in the same country	80.42	14.8	4.78
New online platforms (virtual classrooms) so that teachers can access professional development and engage in self-directed or collaborative learning with peers	77.33	9.72	12.94
Instructional packages, printouts, texts	66.97	24	9.03
Educational television	50.92	38.97	10.11
Tools that enable teachers to collaborate with peers in other countries	44.72	41.86	13.42
Radio education	21.17	56.67	22.17
Other modalities, please describe	15.39	10.78	73.83

Table 12 • What resources were used to provide professional development for teachers?

such as increased inequality, poorer health outcomes, and reduced social cohesion.

Nevertheless, school reopenings must be safe and consistent with each country's overall health response to the pandemic, with all reasonable measures taken to protect students, staff, teachers and their families. The timing of school reopenings must be guided by the best interest of the child and overall public health considerations, based on an assessment of the associated benefits and risks and informed by crosssectoral and context-specific evidence, including education, public health and socio-economic factors. These issues are examined in this section.

When asked if they knew whether there were plans to reopen schools this academic year, half of the respondents indicated that there were definite plans to reopen them (Table 13). One in four indicated that there were plans to reopen schools, but no definite date had yet been set. The figures vary considerably from those provided by educators (see Section II). For example, while half of the government representatives and administrators, on average across countries, reported that there is a definite date for reopening schools, only 17% of educators said so. Conversely, while only 4% of the government representatives and administrators said that schools would not reopen this academic year, 21% of educators said so.

Strategies for reopening schools

For the respondents who had definite knowledge of what the plans to reopen the schools were, which represented 48% of the respondents, we analysed the plans reported by senior government officials and administrators from 20 countries. Table A3 in the Appendix lists the countries included in this group (we weighted this reduced dataset by a factor that would give each country equal weight in the analysis).

Table 13 • Are there plans to reopen schools this academic year?

Statement	%
1. Yes, there is a definite date, if so specify month/day	49.83
2. There are plans to reopen, but there is no definite date	24.78
3. There is no clarity as to whether schools will reopen	14.39
4. Schools will not reopen this academic year	3.94
5. I don't know	2.97
No answer	4.08

Table 14 • What groups are likely to be involved in the process of reopening schools?

Statement	Not much/ not at all (%)	Don't know (%)	To a great extent (%)	No answer (%)
a. Ministry of Education	0	0.5	99	0.5
b. Ministry of Health	0	1	99	0
c. Civil protection	10.5	10.5	71	8
d. Local authorities	15	1.5	80.5	3
e. Police	27.5	29.5	29	14
f. Students	35.5	6	45	13.5
g. Teachers' unions	2.5	8.5	80.5	8.5
h. Principals or principal associations	5	0	92	3
i. Parents	20	6.5	60.5	13
j. Local community	15.5	19.5	52	13
k. NGOs	40.5	34	17.5	8
I. International organisations	37.5	30	19	13.5
m. Private partners	43	27	21.5	8.5
n. Other	16	16.5	5.5	62

Schooling Disrupted, Schooling Rethought: How the Covid-19 pandemic is changing education

When establishing their approaches to reopening schools, governments need to weigh trade-offs between ensuring coherence and consistency in their approaches, on the one hand, and responsiveness to local circumstances and needs, efficiency and improved financial control, and reduced bureaucracy and incentivised local initiative, on the other. In most cases (79%), respondents indicated that the process of school reopening is decided at the national level; only in 17% of the cases is the process of school reopening decided locally.

Furthermore, the structures and regulations involved in the reopening of schools are just like the small visible tip of an iceberg. The reason the reopening of schools is so difficult is that there is a much larger invisible part under the waterline. This invisible part is composed of the beliefs, motivations and fears of the people who are involved, parents and teachers included. This is where unexpected collisions occur, because this part tends to evade the radar of public policy. Therefore, policy makers are rarely successful with processes such as the reopening of schools unless they help those concerned understand the merits and risks involved, and build a shared understanding and collective ownership for the processes involved in reopening schools.

In this regard, the data show considerable variation across countries. In the countries examined here, the groups more likely to be involved in the process of reopening the schools include the ministries of education, health, civil protection, local authorities and principals and principal associations (Table 14). Over 80% of the respondents also indicated that teacher unions are involved, although this percentage was just 34% amongst the responding educators (see section II). Over 60% of the government representatives and administrators indicated the parents are involved in the process of reopening schools, 52% that communities are involved, (though just 36% amongst educators) and 45% that students are involved.

In most cases (72%) the reopening plans cover all education institutions, but in 40% of the cases the plans will refer only to certain levels of education (Table 15). Only 15% of the plans will focus on specific geographic regions.

The strategies to reopen schools vary. In most cases, schools will reopen on different dates depending on the level of education (69%) or grade (59%). In about a third of the cases (35%), schools will reopen on different dates based on their location. One in three respondents reported that all schools will be open on the same date (Table 15).

Related to securing ownership and support for the reopening of schools from parents and students, but also related to how equitable access will be, is the question of whether attendance should be mandatory or not. On average across countries, attendance will not be mandatory in 30% of the cases; in 62% of the

Statement	Yes (%)	Don't know (%)	No (%)	No answer (%)
a. All educational institutions (from pre-primary to secondary levels)	72	0.5	25	2.5
b. Educational institutions covering some levels of education only (please specify)	40	6.5	18	35.5
c. Educational institutions in some geographical areas only (please specify)	14.5	7	38	40.5

Table 15 • What are the schools covered by the reopening plans?

Statement	Yes, definitely (%)	Don't know (%)	No (%)	No answer (%)
a. All schools will re-open on the same date	30	3.5	56	10.5
b. Schools will re-open on different dates based on the levels of education they cover	69	1.5	26	3.5
c. Schools will re-open on different dates based on their geographical location	35	8.5	43	13.5
d. Schools will re-open on different schedules based on the grade	58.5	6.5	21	14

cases it will be mandatory except for students with family members who are sick. In less than 1% of the cases will attendance be mandatory.

The strategies for school reopening also comprise a wide range of approaches, amongst which the most frequent include a progressive return of students by age cohorts (75%) and school attendance scheduled in shifts (70%) (Table 17). These figures indicate that more innovative learning environments that are projectbased, interactive or that require co-creation or other forms of dynamic and close interaction will in most cases not be part of the initial phase where social distancing is imperative. At the same time, 57% of respondents indicate a hybrid model of in-person and distance learning to facilitate social distancing, which could entail new forms of interactive and collaborative learning. Some 16% of respondents reported that student and teacher returns would be contingent upon results of antibody testing. Only one in five respondents reported a return to normal scheduling and school attendance.

In most countries national and state governments have issued guidelines elaborating the conditions for school reopening. For instance, in France, classes will reopen under strict sanitary conditions, with no more than 15 students per class. School life will be organised to respect physical distancing rules with strict hygiene measures and the distribution of hydro alcoholic gels. All teachers and school supervisors will receive masks that they must wear when they cannot respect distancing. In Iceland, the norms involve a distance

Table 17 • What strategies will be used for school reopening?

Yes, Don't know No answer No Statement definitely (%) (%) (%) (%) a. Return to normal scheduling and student attendance, as was 22.5 11.5 45.5 20.5 practiced before the pandemic b. Progressive return of students (e.g. by age cohorts) 75 1 20.5 3.5 c. Classroom-based teaching and learning with school attendance 9.5 7.5 69.5 13.5 scheduled in shifts to reduce student numbers in schools and facilitate social distancina d. Hybrid model of distance- and classroom-based teaching and 56.5 12.5 22.5 8.5 learning to reduce student numbers in schools and facilitate social distancing e. Classroom teaching conducted in schools' outdoor spaces 16 20 42.5 21.5 15 f. Student and teacher returns contingent upon results of antibody 16.5 50 18.5 testing g. None 2 0.5 30.5 67 15.5 h. Other 13.5 2 69

of 2 meters between students and a maximum of 50 students in the same area.

In Germany, the federal states have agreed that schools will gradually reopen from the end of April/ beginning of May. However, this will initially only apply to graduating and transition classes of the various education courses/levels. Strict safety measures will apply to those groups, e.g. a limited number of students per classroom, a supply of disinfectant. The ongoing schooling of those students who do not fall into the above categories is subject of a framework for the gradual reopening of schools approved on May 6 by Chancellor Merkel and the Prime Ministers of the federal states. The framework provides that students will be able to visit the school on a daily or weekly basis before summer holidays start. In addition, particular attention will be paid to students with special needs.

Assessment and remediation

It is encouraging that plans for school reopening generally include arrangements to assess and remediate learning gaps for all students, for disadvantaged students, for students who were unable to access e-learning during the confinement period, for students at risk of dropping out or repeating a grade and for students transitioning from one level to the next. Some 89% of government respondents and administrators reported that their plans would include remedial measures to reduce students' learning gaps (Table 18), although that percentage was only 66% amongst educators (see Section II). Some 78% reported that remedial measures would have a special focus on disadvantaged students and 81% will focus on students who were unable to access e-learning. Slightly more than half (55%) anticipated placing a specific focus on students transitioning from school into the labour market. Some 70% indicated a focus on student with special education needs, 62% on students with an immigrant background and 49% on students from ethnic minority or indigenous students. However, amongst educators, only around 17% reported a special focus on the latter two groups (see section II).

Supporting the well-being of students

Plans for school reopening also include provisions to address the well-being of students, particularly with counseling, supporting students in psychological distress, those who have been victims of violence at home and students from socio-economically disadvantaged backgrounds (Table 19). At the same time, only 14% indicated that there would be hiring of additional school doctors, nurses, psychologists or specialised teachers, and amongst educators that percentage was just 10%.

Statement	Yes, definitely (%)	Don't know (%)	No (%)	No answer (%)
a. Assessment of any gaps in student learning that may have accumulated during confinement period	78.5	6	15	0.5
b. Remedial measures to reduce students' learning gaps (in general)	88.5	6	5	0.5
c. Remedial measures with a special focus on disadvantaged students	78	11.5	10	0.5
d. Remedial measures with a special focus on students who were unable to access e-learning	80.5	8.5	10]
e. Remedial measures with a special focus on students at risk of drop-out	71	6	17.5	5.5
f. Remedial measures with a special focus on students at risk of grade repetition	74.5	9.5	10	6
g. Remedial measures with a special focus on students who had dropped out of school before the crisis	47.5	27	15	10.5
h. Remedial measures with a special focus on students with special education needs	69.5	20	10	0.5
i. Remedial measures with a special focus on immigrant and refugee students	61.5	14.5	18	6
j. Remedial measures with a special focus on ethnic minority or indigenous students	49	22.5	22.5	6
k. Remedial measures with a special focus on students in programmes with a vocational orientation (where a large part of the programme consists of practical or work-based components that cannot be compensated for through online learning)	69.5	19.5	5	6
I. Remedial measures with a special focus on all students transitioning from one level of education to the next (e.g. from pre- primary to primary education, from primary to lower secondary, from lower secondary to upper secondary, from upper secondary to tertiary)	82	9.5	2.5	6
m. Students transitioning from school into the labour market	54.5	22	18	5.5
n. Other measures to address learning gaps (please specify)	26	11.5	11	51.5

Table 18 • Do plans for school reopening include arrangements to assess and remediate learning gaps?

Table 19 • Plans to reopen to address well-being of students
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Statement	Yes, definitely (%)	Don't know (%)	No (%)	No answer (%)
a. Assessment of students' mental health (efforts to identify students that may be experiencing particularly challenging circumstances)	55	24	20.5	0.5
b. Counselling for students	75.5	9	15	0.5
c. Hiring additional school doctors, nurses, psychologists, specialised teachers	13.5	32	38.5	16
d. Special support measures for students from socio-economically disadvantaged backgrounds	78	9	12.5	0.5
e. Special support measures for students who may be victims of violence at home	73	4	12.5	10.5
f. Special support measures for students in psychological distress	67.5	13.5	18]
g. Other support measures (please specify)	11	7	1	81

Adjustments of the curriculum

While 47% of the respondents indicated that there are plans to adjust the curriculum, it is noteworthy that 26% do not have such plans, and a further 23% do not yet know whether they will adjust the curriculum or not. This is an area in need of urgent attention, given the magnitude of the learning gap reported in the first section, and the limitations foreseen with the reopening of schools reported in the last section of this report.

Some 67% of the respondents expected that teachers will need to teach differently after the return to classes, and an additional 20% reported they don't know yet.

Over half (52%) of the respondents indicated that the reopening plans include adjustments to the scheduling and school calendar, with only 38% indicating that they will not include such adjustments.

A third (31%) of the respondents is considering extending the current school year or adjusting the schedule of the next school year. However, 59% are not considering such adjustments, which risks making permanent the learning gaps identified above.

Over half (56%) of the respondents are planning time to recover learning loss during the evenings, weekends or summer; only 18% have not considered such extensions in learning time.

Half of the respondents indicated that the plans include adjustments to the graduation criteria; only 34% said that they will not include such adjustments. However, 72% of the respondents indicated that the reopening plans do not include adjustments to the entry criteria for the next year; only 21% said that they will include such adjustments. Just 23% reported the hiring of additional teachers or teaching assistants.

Preparation of teachers and school leaders

The reopening plans generally include training and counseling for teachers and for school leaders, but 20% of respondents said there would not be training for teachers before and/or after the reopening of schools and 15% reported that there would be no such training for school leaders (Table 20).

Health and safety measures

The reopening plans include the following activities to promote health: review of health and develop new hygiene standards to promote health, communicate new protocols to students and parents, deep clean school facilities, sanitary facilities and transportation (Table 21).

The reopening plans will include training on basic health and hygiene protocols, including physical distancing norms, mandatory use of masks and antiseptic gel, for students, teachers, and staff (Table 22).

For those students who become Covid-19 positive, the reopening plans contemplate requiring that those students self-quarantine; in about half of the cases they will require that staff and students are tested. Only in Schooling Disrupted, Schooling Rethought: How the Covid-19 pandemic is changing education

Table 20 • Which of these measures are part of the reopening plans?

Statement	Yes, definitely (%)	Don't know (%)	No (%)	No answer (%)
a. Counseling for teachers	68	16.5	10	5.5
b. Hiring of additional teachers or teaching assistants	22.5	35	28.5	14
c. Training for teachers before and/or after re-opening of schools	63	9	20	8
d. Training for school leaders before and/or after re-opening of schools	59.5	17	15	8.5
e. Support from technology experts or companies	41.5	31.5	21	6
f. Other support measures (please specify)	8	1.5	6	84.5

Table 21 • Health measures included in the reopening plans

Statement	Extremely likely (%)	Somewhat likely (%)	Neither likely nor unlikely (%)	Somewhat unlikely (%)	Extremely unlikely (%)	No answer (%)
a. Assessment of students' physical health (presence of COVID 19-like symptoms, infection history of students and family members during the confinement period, etc.)	24.5	22	20.5	10	12.5	10.5
b. Development/review of standards and procedures for school hygiene prior to taking concrete steps	91	5.5	0.5	0	2.5	0.5
c. Disinfection/deep cleaning of school facilities	81	10.5	0.5	0	2.5	5.5
d. Disinfection/deep cleaning only of sanitation facilities	76	3	0.5	7.5	7.5	5.5
e. Disinfection/deep cleaning of public transportation used by students to reach the school premises	60	13.5	6	7.5	2.5	10.5
f. Procurement of (additional) soap dispensers	65	21.5	10.5	0	2.5	0.5
g. Procurement of automatic soap dispensers (so that students do not touch any surfaces)	37	21	13.5	12.5	5.5	10.5
h. Procurement of masks for students and teachers in school	34	29	9	20	7.5	0.5
i. Procurement of gloves for students and teachers in school	9	26.5	23	23	12.5	6
j. Procurement of antiseptic gel dispensers to be placed outside/inside each classroom	43	41	10.5	2.5	2.5	0.5
k. Procurement of antiseptic wipes to be distributed to all students and teachers	21.5	36.5	30.5	8.5	2.5	0.5
I. Communication about school organisation to parents and students	87	6.5	3	0	2.5]
m. Other (please specify)	10.5	1	1	0	3.5	84

Table 22 • Health measures included in the reopening plans
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Statement	Extremely likely (%)	Somewhat likely (%)	Neither likely nor unlikely (%)	Somewhat unlikely (%)	Extremely unlikely (%)	No answer (%)
a. Mandatory use of gloves for all students, teachers and school staff	6.5	17	15.5	20.5	40	0.5
b. Mandatory use of masks for all students, teachers and school staff	42	24.5	0.5	5	27.5	0.5
c. Mandatory use of antiseptic gel by students, teachers and school staff before entering a classroom or the canteen	46	38	8	0	2.5	5.5
d. Mandatory use of antiseptic wipes for students and teachers to clean their desks every day	21.5	34	28	6	5	5.5
e. Mandatory application of social distancing protocols	80.5	11	0.5	0	7.5	0.5
f. Closure of all common areas in school (e.g. canteen, gym, library)	23.5	30	23.5	17.5	0	5.5
g. Installation of additional open-air handwashing facilities outside the school building	11	29.5	28.5	3	17.5	10.5
h. Training students, teachers and staff on basic hygiene and barrier gestures	78	13.5	0.5	0	7.5	0.5
i. Other (please specify)	5.5	0.5	0.5	0.5	11	82

Table 23 • Security measures in the reopening plans

Statement	Yes (%)	No (%)	No answer (%)
a. The school will be closed	13	50.5	36.5
b. The classroom will be closed	35.5	25	39.5
c. The affected students or teachers will be required to quarantine	81	0.5	18.5
d. All students and staff will be tested	51	15.5	33.5
e. None	0.5	27	72.5
f. Other (please specify)	20	7	73

a few instances will the school (13%) or the classroom (36%) be closed (Table 23).

Lessons learned

The reopening plans contemplate making time to analyse the lessons learned during the lockdown, identify effective mitigation strategies for future closures, learn from the experience of other countries, update emergency planning for large-scale closures and adopt protocols to address cases of infection in the school community (Table 24). The reopening plans also envisage procuring devices for students and teachers to support e-learning in the future, investing in the creation of effective e-learning platforms and providing professional development to teachers for effective e-learning instruction (Table 25). Schooling Disrupted, Schooling Rethought: How the Covid-19 pandemic is changing education

Table 24 • Learning provisions in reopening plans

Statement	Yes (%)	No (%)	No answer (%)
a. Analyse the lessons learned during lockdown within the country	84	0.5	15.5
b. Identify effective mitigation measures for future school closures	79	0.5	20.5
c. Undertake research into what other countries have done and engage in international peer learning	82.5	1	16.5
d. Update existing emergency planning for school facilities to account for large-scale school closures	88.5]	10.5
e. Consider re-purposing school buildings for use as temporary quarantine facilities or hospitals	9.5	66.5	24
f. Adopt protocols for schools to follow in the event that a new case of infected student, teacher, school staff or parent is reported	89	0.5	10.5
g. Designate a space in the school as an isolation room	29	42	29
h. Other (please specify)	10.5	7	82.5

Table 25 • E-learning readiness in reopening plans

Statement	Yes (%)	No (%)	No answer (%)
a. Procure devices and equipment for students and teachers to facilitate e-learning	68	16.5	15.5
b. Invest in updating or creating effective e-learning platforms and content	79	15.5	5.5
c. Deliver targeted training for teachers on effective e-learning and assessment	84	10.5	5.5
d. Ensure that all teachers and students are equipped with suitable devices for e-learning	72.5	16.5	11
e. Secure Internet connectivity for all teachers and students (e.g. through partnerships with internet providers to secure lower rates for students and teachers)	80.5	14	5.5
f. Develop alternative modes of instruction for students without Internet connectivity (e.g. radio, TV, instant messaging and other tools)	68.5	20.5	11
g. Other (please specify)	16.5	2	81.5

Section II. The views of teachers, school principals and senior administrators in schools

This section of the report examines the responses provided by teachers and school administrators. Table B1 in the Appendix presents the total number of responses received per country and the specific roles of the respondents. A total of 993 surveys were received for teachers and school administrators from 28 countries. Because the number of respondents across countries varied significantly, the data were weighted by a factor equal to one over the number of respondents per country in order to give each country the same weight in the analysis. Table 26 describes the characteristics of the sample of respondents to the survey analysed in this report.

The analysis that follows replicates the preceding analysis for senior government officials and administrators. The results are broadly consistent with those reported in the previous section, with a few exceptions. Those exceptions include how arrangements were made to develop the strategy of education continuity. Senior officials were more likely to report that the arrangements for education continuity involved government AND schools than teachers and school administrators. Amongst senior officials, 52% selected this option as the top approach used, compared to 30% of teachers. Conversely, teachers and school administrators were more likely to report that schools made their own arrangements for continuity as their top and second choice, without involvement from government.

Senior officials were also more likely to report that educational television was used to provide education continuity (78%) than teachers and school administrators (50%).

Teachers and school administrators believe that a greater percentage of students accessed most or all of the curriculum during the period of education at home than senior officials. Whereas teachers and school administrators estimated that 68% of the students, on average, accessed most or all of the curriculum, senior officials estimated that figure at 43%, on average.

There were also differences between both groups in their estimates of whether it is possible to determine the effectiveness of the delivery of education while students were not in schools. Whereas half of the senior officials believe it is not possible to assess how effective education delivery was, only 18% of the teachers or school heads share this belief.

The groups also differed in their assessment of how much students learned while at home, with teachers more likely to estimate that students learned less than they would have in school, a view shared by 51% of the teachers and school administrators, compared to 39% of senior officials.

There were also differences in the estimates of the extent to which teachers were able to participate in peer networks across schools for professional

Table 26 • Characteristics of respondents to the survey				
Primary role	(%)			
a. A public school teacher	27.57			
b. A public school principal or member of the leadership team	14.07			
c. A private school teacher	9.68			
d. A private school principal or member of the leadership team	48.68			
Type of school	(%)			
a. Schools under the direct authority of a national ministry of education	20.56			
b. Schools under the direct authority of a department or state ministry of education	14.28			
c. Schools under the authority of a municipal government or local education authority	2.96			
d. A public network of public schools (such as charter schools)	3.25			
e. A network of independent schools (private or religious)	50.12			
f. Other, specify	8.75			
No answer	0.07			

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development during the period of education continuity. Whereas 80% of the senior administrators reported that teachers participated in such networks, only 50% of the teachers and school heads reported the same. There are similar differences in the estimate of whether teachers could access tools that enabled them to share knowledge with other teachers in the same country: 80% of the senior officials believed such tools were made available to teachers, a view shared only by 64% of teachers and school administrators.

A greater percentage of senior administrators than teachers and school administrators believe that there are plans to reopen and have specific knowledge of such plans. Whereas 38% of the senior administrators reported that there is a specific date for reopening, only 17% of the teachers knew this. Almost half of senior officials (48%) indicated that they have specific knowledge of the plans to reopen, compared to only 22% of teachers.

For those with knowledge of plans to reopen, senior officials were more knowledgeable about a number of areas than teachers and school administrators. For instance, while 80% of senior officials believe that teacher unions will be involved in plans to reopen, only 40% of the teachers believe the same. More senior officials were knowledgeable about the plans for reopening than teachers and school heads.

There are also important differences in knowledge about plans to address learning gaps and the curriculum, in knowledge about plans to adjust graduation and grade-transition criteria and in knowledge about plans to support teachers with professional development. Proportionately more teachers and school administrators reported a lack of knowledge than senior officials. We also conducted the same analysis reported in this section of the report, for teachers and school administrators, separately for public and private schools. For the most part there are no differences in the responses provided by both groups, with a few exceptions. Teachers and administrators in public schools were more likely than their peers in private schools to indicate that planning the strategy for education continuity involved schools. Conversely, teachers and administrators in private schools were more likely to report that schools made their own arrangements for education continuity without government involvement. Proportionately more teachers and school administrators in private schools than in public schools did not respond whether their plans for reopening include adjustments to scheduling and the school calendar.

Instructional time lost

Respondents were asked to estimate the number of instructional days, excluding weekends and holidays, on which students had not been able to attend school, for each level of education, and also to estimate the additional number of days that they were expected to remain at home. Table 27 presents the averages of those estimates across countries. According to teachers, students have spent about 21-28 instructional days at home, on average, and were expected to remain an additional 10-12 instructional days outside school, depending on the level of education, for a total of about 30-50 instructional days that they would have been unable to learn in school. The statistics for each level and country are presented in Appendix B2.

Level	Median	Mean	Std. Dev.
Number of instructional days already spent at home			
Primary school	21.04	19.5	13.2
Lower secondary school	22.41	21.93	12.27
Upper secondary school	28.16	53.53	142.04
Estimated number of additional instructional days to be spent at hom	е		
Primary school	10.04	18.1	22.23
Lower secondary school	14.5	18.86	19.14
Upper secondary school	21.32	59.41	135.85
Total number of instructional days to be spent at home			
Primary school	32.67	38.25	31.93
Lower secondary school	33.44	40.83	27.17
Upper secondary school	50.86	112.97	200.57

Table 27 • Number of instructional days students could not attend school because of school closure

Alternative learning opportunities during school

closures

Responsibilities for alternative learning opportunities

How did students learn what was intended in the school curriculum while they could not attend school? Respondents were asked to indicate the principal means used to provide education continuity during the period of physical distancing. The responses indicate that governments played an important role making arrangements for education continuity. The modality most frequently mentioned as the main form of education continuity included schools making their own arrangements without governmental support (51%) followed by the government making alternative education arrangements that involved the schools (30%). Table 28 presents the various options ranked as first, second, third, fourth and fifth modality.

Delivery of alternative learning opportunities

Respondents were also asked to estimate the percentage of students who were able to access the curriculum, during the most recent week when it was not possible to attend school, through various means of education continuity. The most frequently mentioned options involve the participation of teachers. About 67%% indicated that students were accessing the curriculum directly from their teachers, and 53% indicated that they were doing so from teachers plus other means (Table 28a).

Methodology	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	No rank
a. The government (any level) made alternative education arrangements that involved the schools	29.68	34.5	17.21	12.5	1.29	4.82
b. The government (any level) made alternative education arrangements that did not involve schools (educational television, radio).	12.43	32.25	40.75	8.64	1.11	4.82
c. Schools made their own alternative education arrangements, without government	51.04	16.18	22.29	1.96	3.71	4.82
d. Parents made their own arrangements, without support from schools	1.93	11.82	8.93	67.08	5.43	4.82
e. There were no alternative arrangements made	0.11	0.43	6	4.96	83.68	4.82

Table 28 • During the period when students could not attend school, how were they taught the school curriculum?

Table 28a • Estimates of the percentage of students who were able to access the school curriculum, through various means, during the time when unable to meet

Level of support	Median	Mean	Std. Deviation
Support from teachers	66.67	60.46	38.04
Support through other means	0.00	15.78	23.14
Support from teachers and other means	53.52	52.45	41.83
No support	0.00	5.18	10.94

Instructional resources used

Respondents were asked to estimate the percentage of students who accessed the curriculum, during the most recent week when it was not possible to attend school, through various means of education continuity. The most frequently mentioned options involve teachers. About 87%% indicated that students were accessing the curriculum directly from their teachers, and 50% indicated that they were doing so from teachers plus other means (Table 29).

A range of instructional resources have been used to provide education continuity. The most common are online instruction delivered by the students' regular teachers, existing online instructional resources, and Schooling Disrupted, Schooling Rethought: How the Covid-19 pandemic is changing education

instructional packages with printed resources and educational television (Table 30).

Equity in access

In spite of the variety of resources used to provide education continuity, a significant percentage of students was unable to access the curriculum during the period when they could not attend school. Respondents estimated that only about 75% of students were able to access all or most of the curriculum, and an additional 30% indicated that they accessed a good amount but not all (Table 31). Appendix B3 presents these estimates per country.

In general, the education continuity strategy is viewed positively by respondents. Most reported it was well planned and executed, 18% saw it as chaotic, and almost 48% reported there was a lot of improvisation. Some 14% reported that co-ordination was lacking (Table 32). About 23% saw the strategy as designed in a top down fashion by the government. At the same time, about 70% reported the strategy was designed in a collaborative fashion, including teachers, and about 28% reported the collaboration also included parents, and 20% reported it also included the community. Some reported that there were conflicts with teachers (21%), parents (25%) or between the government and schools (18%). Over 62% reported communications were well managed and 82% reported that everybody did all they could to help.

When asked to estimate how effective the strategy of education continuity was, compared to what students normally learn in schools, 18% of the respondents indicated that it was not possible to know, 12% indicated that students learned what they would have

Table 29 • Estimates of the percentage of students who were able to access the school curriculum, through various means, during the time when unable to meet

Level of support	Median	Mean	Std. Deviation
Support from teachers	86.5	77.71	25.95
Support through other means	19	22.49	24.12
Support from teachers and other means	50.12	51.3	45.49
No support	2.92	8.8	13.43

Table 30 • What resources were used to provide education continuity?

Statement	Yes (%)	No (%)	No answer (%)
e. Online instruction delivered by the same teachers of the students learning	93.32	1.11	5.57
d. Existing online instructional resources	92.21	1	6.79
a. Instructional packages (textbooks, worksheets, printouts)	79.43	10.07	10.5
c. Educational television	49.3	29.99	20.71
b. Radio education	26.68	49.04	24.29
f. Online instruction provided by private tutors	25.68	41.29	33.04
g. Other modalities	20.06	30.56	49.38

Table 31 • Estimates of the percentage of students who were able to access all or most of the curriculum through the various approaches of education continuity available

Level of Support	Median	Mean	Std. Deviation
All or most of the curriculum	75	68.25	29.48
A good amount	30	30.95	25.79
Some, but not much	1.79	8.69	19.37
Very little or none	0.79	6.72	16.77

Table 32 •	Evaluation	of the	strategy	for	education	continuity	y

Statement	Comple- tely agree (%)	Agree (%)	Not sure (%)	Disagree (%)	Com- pletely disagree (%)	No answer (%)
It was well planned	16.22	56.81	11.93	12.08	0.32	2.63
It was well executed	7.62	60.49	15.87	2.72	1.97	11.33
It was fairly chaotic	0.75	16.77	22.81	43.55	5.22	10.9
There was a lot of improvisation	2.18	45.69	22.19	13.11	3.07	13.75
There was no co-ordination	1.11	12.61	9.63	41.4	22.99	12.25
It was designed in a top-down fashion by the government	3.61	18.94	13.11	22.15	28.62	13.58
It was designed in a top-down fashion by local education authorities	2.36	10.58	12.08	30.2	29.63	15.15
It was designed in a top-down fashion by school principals	7.54	28.88	6.43	28.48	14.37	14.3
It was designed in a collaborative manner including teachers	21.18	48.76	7.92	11.97	0.68	9.49
It was designed at the discretion of the teacher, in isolation	2.72	16.55	19.13	37.54	13.59	10.48
It was designed in a collaborative manner including parents	7.25	21.27	15.03	31.46	15.82	9.18
It was designed in a collaborative manner including the community	2	18.57	15.79	37.57	17.46	8.61
There was strong collaboration between public and private sectors	7	10.07	15.36	26.04	27.11	14.43
There were conflicts between schools and the government	2.53	19.09	19.67	28.96	18.84	10.92
There were conflicts with parents	2.32	22.75	13.21	47.04	5.21	9.46
There were conflicts with teachers	0.29	17.45	9.08	52.13	11.58	9.47
Communications were well managed	18.73	43.03	17.08	11.22	0.29	9.65
Everybody did all they could to help	46.23	35.32	7.29	1.61	0.14	9.4

Table 33 • Compared to what students normally learn in school, how effective was the strategy of education continuity in helping them learn?

Statement	Weighted %
It is not possible to assess how effective it was	18.11
No answer	2
They did not learn very much	0.18
They learned about what they would have learned if they had attended school	11.71
They learned some, but not very much	16.89
They learned, but less than they would have in school	51.11

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learned in school, 17% reported students did not learn very much and 51% indicated that students learned, but less than they would have normally learned in school (Table 33). Respondents are split with respect to whether the focus of the curriculum during the strategy for education continuity was similar to or different from what normally happens in school (Table 34). About 30% indicated

Table 34 • Compared to what is normally the focus in schools, what was the focus of the curriculum during the strategy of education continuity?

Statement	Weighted %
No answer	2.11
The focus and amount of teaching was similar to what happens in school	30.29
The focus was on fewer subjects than is normally the case in school	46.64
The focus was on keeping students engaged but there was not much focus on academic learning	20.96

Table 35 • To what extent where the following areas sufficiently addressed by the strategy of education continuity?

Statement	Not at all (%)	Very little (%)	Not sure (%)	To some extent (%)	To a great extent(%)	No answer (%)
Ensure the continuity of the academic learning of students	0.93	7.82	2.68	20.08	65.99	2.5
Provide professional support, advice to teachers	9.11	6.93	3.18	33.39	39.71	7.68
Ensure well-being of students	0.75	12.03	5.07	38.02	36.63	7.5
Support education of disadvantaged students	8.57	12.29	17.89	21.36	31.14	8.75
Address emotional needs of students	4.89	10.43	7.54	40.69	29.62	6.82
Ensure well-being of teachers	1.18	17.1	3.61	41.2	29.2	7.71
Ensure that career guidance was maintained	6.5	14.49	10.67	28.92	28.13	11.28
Ensure social development of students	1.14	14.93	8.82	43.43	27	4.68
Support education of students with special needs	5.36	12.53	10.57	37.09	26.78	7.68
Ensure continuity/integrity of the assessment of student learning	4.46	15.67	5.75	43.09	24.71	6.32
Revise graduation/grade transition policy to allow student progress	6.68	13.25	17.03	30.7	24.63	7.71
Ensure support for parents and caregivers to support student learning	5.21	9.86	13.18	42.21	22.21	7.32
Ensure medical attention to teachers affected by Covid-19	15.35	10.6	17.21	20.28	19.14	17.42
Ensure medical attention of students affected by Covid-19	24.17	16.53	17.53	9.96	16.78	15.03
Ensure physical education of students	5.93	15.99	11.82	44.91	13.64	7.71
Ensure distribution of food to students	38.14	13.86	8.39	10.61	12.89	16.11
Support students at risk of violence at home	14.39	9.53	34.84	18.49	12	10.75
Ensure provision of other social services to students	26.14	15.61	13.04	17.36	11.5	16.36
Ensure student collaboration and team work	5.36	16.99	16.28	44.38	11.21	5.78
Support students whose parents have limited command of the language of instruction	13.25	10.79	28.44	26.22	10.43	10.86
Other, specify	9.18	4	10.42	5.18	2.07	69.15

that it was similar, and 47% indicated that the focus was on fewer subjects than is normally the case, while 21% indicated that the focus was on keeping students engaged but not on academic learning.

When asked whether the following areas were sufficiently addressed by the strategy of education continuity, the most frequent response focused on academic learning: ensuring the continuity of academic learning (66%), followed by providing support to teachers (40%), ensuring the well-being of students (37%), providing support for disadvantaged students (31%), addressing the emotional needs of students (30%), and ensuring the well-being of teachers (29%) (Table 35). Fewer teachers reported that the strategy ensured support to parents to assist their students, ensured continuity and integrity of academic learning, revised graduation and transition policies, provided food to students, provided social services to students or supported students with special needs.

Support for teachers

To implement the strategy of education continuity, teachers were supported in various ways, particularly providing them access to resources, timely guidance from leadership and participation in peer networks within the school. One in five respondents indicated that teachers were not offered professional development during this period (Table 36).

A variety of resources were used to support teacher professional development, as shown in Table 37, mostly existing online learning platforms, new online platforms and tools that enable teachers to communicate with other teachers.

Table 36 • Professional development to support teachers during education continuity

Statement	Yes (%)	No (%)	No answer (%)
Providing them with access to resources (printed, online, etc.)	88.64	8.57	2.79
Just-in-time guidance from leadership as needed	81.6	10.9	7.5
Participation in peer networks within the school	86.71	8.96	4.32
Participation in peer networks across schools	49.64	41.04	9.32
Providing them funds to take courses	26.39	61.64	11.96
Teachers were not offered professional development during the pandemic	21.43	64.57	14

Table 37 • What resources were used to provide professional development for teachers?

Statement	Yes (%)	No (%)	No answer (%)
Existing online distance learning platform	88.6	4.97	6.43
New online platforms (virtual classrooms) so that teachers can access professional development and engage in self-directed or collaborative learning with peers	86.43	7.71	5.86
Tools that enable teachers to share knowledge with other teachers in the same country	64.04	22.11	13.86
Instructional packages, printouts, texts	60.29	25.25	14.46
Tools that enable teachers to collaborate with peers in other countries	39.57	43.36	17.07
Educational television	36.82	45.75	17.43
Radio education	29.43	54.79	15.79
Other modalities, please describe	4.93	12.18	82.89

Reopening of schools

When asked if they knew whether there were plans to reopen schools this academic year, 17% indicated that there were definite plans to reopen, an additional 30% indicated that there were plans to reopen schools, but no definite date had been set yet (Table 38).

Strategies for reopening schools

For the respondents who had definite knowledge of the plans to reopen schools, which represented 23% of the respondents from 13 countries, we analysed what those plans were (Table 39). This group includes the following countries:

In those countries, the groups more likely to be involved in the process of reopening the schools include the ministries of education and health, local authorities, principals and principals' associations and parents. In most cases (73%) the process of school reopening will be decided at the national level; only in 27% of the cases will the process of school reopening be decided locally (Table 40).

In most cases (70%), the reopening plans cover all educational institutions, but in 27% of the cases the plans will refer only to some levels of education. Only in 6% of cases will the plans focus on specific geographic regions (Table 41).

There is variation with respect to the strategy to reopen schools: in some cases schools will reopen on the same date (45%), in others they will open on different dates, depending on the level of education (37%) or grade (40%). In 14% of the cases, schools will reopen on different dates based on their location (Table 42).

Table 38 • Are there plans to reopen schools this academic year?

Statement	Weighted %
1. Yes, there is a definite date, if so specify month/day	17.36
2. There are plans to reopen, but there is no definite date	30.46
3. There is no clarity as to whether schools will reopen	22.29
4. Schools will not reopen this academic year	21.43
5. I don't know	5.43
No answer	3.04

Table 39 • Countries whose plans to reopen schools are known				
Country	Number of respondents			
Brazil	1			
Canada	1			
Chile	1			
Croatia	17			
Dominican Republic	7			
France	1			
Jamaica	1			
Jordan	1			
Kazakhstan	2			
Madagascar	1			
Mexico	92			
Peru	11			
Portugal	1			

lable 40 • What groups are likely to be involved in the process of reopening schools?							
Statement	To a great extent (%)	Don't know (%)	Not much/ not at all (%)	No answer (%)			
a. Ministry of Education	98.62	1.23	0.08	0.08			
b. Ministry of Health	87.68	12.09	0.15	0.08			
c. Civil protection	24.75	41.66	16.22	17.37			
d. Local authorities	65.38	22	10.31	2.31			
e. Police	13.76	49.5	26.13	10.61			
f. Students	53.89	14.7	28.64	2.77			
g. Teachers' unions	34.18	12.24	42.88	10.7			
h. Principals or principal associations	64.59	12.93	20.17	2.31			
i. Parents	64.18	14.07	19.37	2.38			
j. Local community	36.15	33.92	27.85	2.08			
k. NGOs	23.49	26.35	45.75	4.4			
l. International organisations	23.17	30.48	42.03	4.31			
m. Private partners	15.23	19.69	45	20.08			
n. Other (please specify)	4.77	16.76	16.45	62.03			

Table 40 • What groups are likely to be involved in the process of reopening schools?

Table 41 • What are the schools covered by the reopening plans?

Statement	Yes (%)	Don't know (%)	No (%)	No answer (%)
a. All educational institutions (from pre-primary to secondary levels)	70	14.31	12.62	3.08
b. Educational institutions covering some levels of education only (please specify)	27.48	22.32	3.23	46.96
c. Educational institutions in some geographical areas only (please specify)	6.23	22.21	14.45	57.11

Table 42 • When do schools plan to reopen?

Statement	Yes, definitely (%)	Don't know (%)	No (%)	No answer (%)
a. All schools will re-open on the same date	45	25.92	13.08	16
b. Schools will re-open on different dates based on the levels of education they cover	36.62	31.31	9.85	22.23
c. Schools will re-open on different dates based on their geographical location	13.91	38.05	10.45	37.59
d. Schools will re-open on different schedules based on the grade	40.2	21.91	6.38	31.51

Once schools reopen, attendance will not be mandatory in 23% of the cases; in 43% of the cases it will be mandatory except for students with family members who are sick. In one in three cases, (34%) attendance will be mandatory (Table 43).

The strategies for school reopening also comprise a wide range of approaches, amongst which the most

frequently cited include classroom-based teaching with attendance in shifts (63%), a progressive return of students (51%), and a hybrid model of in-person and distance learning to facilitate social distancing (44%). Only one in three (29%) respondents reported a return to normal scheduling and school attendance (Table 43).

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Table 43 • What strategies will be used for school reopening?

Statement	Yes, definitely (%)	Don't know (%)	No (%)	No answer (%)
a. Return to normal scheduling and student attendance, as was practiced before the pandemic	29.15	5.23	41.31	24.31
b. Progressive return of students (e.g. by age cohorts)	50.81	33.72	11.62	3.85
c. Classroom-based teaching and learning with school attendance scheduled in shifts to reduce student numbers in schools and facilitate social distancing	63.15	21.92	3.62	11.31
d. Hybrid model of distance- and classroom-based teaching and learning to reduce student numbers in schools and facilitate social distancing	43.92	32.31	18.15	5.62
e. Classroom teaching conducted in schools' outdoor spaces	16.94	33.95	28.41	20.71
f. Student and teacher returns contingent upon results of antibody testing	23.52	27.29	28.21	20.98
g. None	1.69	18.15	14.62	65.54
h. Other	0.92	18.69	5.62	74.77

Table 44 • Do plans for school reopening include arrangements to assess and remediate learning gaps?

Statement	Yes, definitely (%)	Don't know (%)	No (%)	No answer (%)
a. Assessment of any gaps in student learning that may have accumulated during confinement period	76.92	11.77	9.69	1.62
b. Remedial measures to reduce students' learning gaps (in general)	65.69	21.38	9.69	3.23
c. Remedial measures with a special focus on disadvantaged students	60.03	19.45	16.14	4.38
d. Remedial measures with a special focus on students who were unable to access e-learning	60.57	13.14	21.91	4.38
e. Remedial measures with a special focus on students at risk of drop- out	55.69	25.31	14.08	4.92
f. Remedial measures with a special focus on students at risk of grade repetition	57	16.54	21.38	5.08
g. Remedial measures with a special focus on students who had dropped out of school before the crisis	44.08	15.69	35.15	5.08
h. Remedial measures with a special focus on students with special education needs	48.92	21.69	24.69	4.69
i. Remedial measures with a special focus on immigrant and refugee students	17.31	43.31	34.08	5.31
j. Remedial measures with a special focus on ethnic minority or indigenous students	17.54	42.15	34	6.31
k. Remedial measures with a special focus on students in programmes with a vocational orientation (where a large part of the programme consists of practical or work-based components which cannot be compensated through online learning)	22.62	34.92	37.23	5.23
I. Remedial measures with a special focus on all students transitioning from one level of education to the next (e.g. from pre-primary to primary education, from primary to lower secondary, from lower secondary to upper secondary, from upper secondary to tertiary)	51.89	29.72	13.16	5.23
m. Students transitioning from school into the labour market	21.94	41.88	14.24	21.94
n. Other measures to address learning gaps (please specify)	22.29	26.13	9.76	41.81

Most teachers do not know the national and state government-issued guidelines elaborating the conditions for school reopening.

Assessment and remediation

Plans for school reopening include arrangements to assess and remediate learning gaps for all students, for disadvantaged students, for students who were unable to access e-learning during the confinement period, for students at risk of dropping out or repeating a grade, and for students transitioning from one level to the next (Table 44).

Supporting the well-being of students

Plans for school reopening also include provisions to address the well-being of students, particularly with counseling and assessments of students' mental health, and by supporting students in psychological distress those who have been victims of violence at home, and students from socio-economically disadvantaged backgrounds (Table 45).

Adjustments of the curriculum

While 46% of the teachers indicated that there are plans to adjust the curriculum, 23% do not have such plans, and 50% do not yet know whether they will adjust the curriculum or not. Some 52% of the respondents expected that teachers will need to teach differently after the return to classes, and an additional 31% do not know yet.

Preparation of teachers and school leaders

The reopening plans include training and counseling for teachers and for school leaders. Twenty-one of the respondents indicated that the plans include adjustment to the graduation criteria, and only 31% reported that they will not include such adjustments (Table 46). However, 55% of the respondents indicated that the reopening plans do not include adjustments to the

Table 45 • Plans to reopen to address well-being of students

Statement	Yes, definitely (%)	Don't know (%)	No (%)	No answer (%)
a. Assessment of students' mental health (efforts to identify students that may be experiencing particularly challenging circumstances)	59.46	22.23	9.31	9
b. Counselling for students	84.38	9.08	0.69	5.85
c. Hiring additional school doctors, nurses, psychologists, specialised teachers	9.62	39.11	40.42	10.85
d. Special support measures for students from socio-economically disadvantaged backgrounds	57.97	21.79	9.16	11.09
e. Special support measures for students who may be victims of violence at home	74.08	20.85	1.77	3.31
f. Special support measures for students in psychological distress	74.08	13.54	9.23	3.15
g. Other support measures (please specify)	2.62	20.25	5.62	71.52

Table 46 • Which of these measures are part of the reopening plans?

Statement	Yes, definitely (%)	Don't know (%)	No (%)	No answer (%)
a. Counseling for teachers	76.38	21.38	0.38	1.85
b. Hiring of additional teachers or teaching assistants	16.69	25.31	46.15	11.85
c. Training for teachers before and/or after re-opening of schools	74.13	21.79	1.85	2.23
d. Training for school leaders before and/or after re-opening of schools	45.92	31.46	10.54	12.08
e. Support from technology experts or companies	43.26	41.26	3.85	11.62
f. Other support measures (please specify)	1.23	25.67	6.38	66.72

entry criteria for the next year, and only 6% reported that they will include such adjustments.

One in two (40%) of the respondents indicated that the reopening plans include adjustments to the scheduling and school calendar, with only 8% indicating that they will not include such adjustments.

A third (32%) of the respondents reported that they are considering extending the current school year or adjusting the schedule of next school year. But 28% are not considering such adjustments.

One in two (40%) of the respondents are planning time to recover learning loss during the evenings, weekends or summer; only 28% have not considered such extensions in learning time.

Health and safety measures

The reopening plans include the following activities to promote health: review and develop new hygiene standards to promote health, communicate new protocols to students and parents, and deep clean school facilities, sanitary facilities and transportation (Table 47).

The reopening plans will include training on basic health and hygiene protocols, including physical distancing norms, mandatory use of masks and antiseptic gel, for students, teachers and staff (Table 48).

For students who become Covid-19 positive, the reopening plans envisage requiring that those students self-quarantine, and requiring that staff and students are tested. In some cases, the school (43%) or the classroom (57%) will be closed (Table 49).

Statement	Extremely likely (%)	Somewhat likely (%)	Neither likely nor unlikely (%)	Somewhat unlikely (%)	Extremely unlikely (%)	No answer (%)
a. Assessment of students' physical health (presence of COVID 19-like symptoms, infection history of students and family members during the confinement period, etc.)	45.96	24.79	24.87	2.69	0.69]
b. Development/review of standards and procedures for school hygiene prior to taking concrete steps	70.98	24.17	1.46	0	0.08	3.31
c. Disinfection/deep cleaning of school facilities	77.37	11.39	8.62	0	0.08	2.54
d. Disinfection/deep cleaning only of sanitation facilities	57.69	18.46	2.69	0.46	0.62	20.08
e. Disinfection/deep cleaning of public transportation used by students to reach the school premises	52.08	5.15	30.54	0.54	0.23	11.46
f. Procurement of (additional) soap dispensers	68.38	17.54	1.15	1.54	0.38	11
g. Procurement of automatic soap dispensers (so that students do not touch any surfaces)	50.42	25.21	2	16.76	1.69	3.92
h. Procurement of masks for students and teachers in school	55.77	15.77	21.54	0.85	1.54	4.54
i. Procurement of gloves for students and teachers in school	28.46	11.85	21.54	25	9.23	3.92
j. Procurement of antiseptic gel dispensers to be placed outside/inside each classroom	76.4	16.3	1.38	0.69	0.69	4.53
k. Procurement of antiseptic wipes to be distributed to all students and teachers	43.31	19	21.62	1.92	10.23	3.92
l. Communication about school organisation to parents and students	79	14.31	1.38	0.31	0.38	4.62
m. Other (please specify)	11.24	1.46	10.93	4.77	4.39	67.21

Table 47 • Health measures included in the reopening plans

Lessons learned

The reopening plans contemplate making time to analyse the lessons learned during the lockdown, identify effective mitigation strategies for future closures, learn from the experience of other countries, update emergency planning for large-scale closures and adopt protocols to address cases of infection in the school community (Table 50). The reopening plans also contemplate procuring devices for students and teachers to support e-learning in the future, investing in the creation of effective e-learning platforms and providing professional development to teachers for effective e-learning instructions (Table 50a).

Table 48 • Health measures included in the reopening plans

Statement	Extremely likely (%)	Somewhat likely (%)	Neither likely nor unlikely (%)	Somewhat unlikely (%)	Extremely unlikely (%)	No answer (%)
a. Mandatory use of gloves for all students, teachers and school staff	18.83	17.76	17.68	27.44	17.37	0.92
b. Mandatory use of masks for all students, teachers and school staff	43.46	27.15	13.92	11.69	1.23	2.54
c. Mandatory use of antiseptic gel by students, teachers and school staff before entering a classroom or the canteen	70.59	16.01	0.77	9.47	0.15	3
d. Mandatory use of antiseptic wipes for students and teachers to clean their desks every day	37.23	22.77	25.62	9.15	0.69	4.54
e. Mandatory application of social distancing protocols	73.75	9.47	4.85	9.08	0.31	2.54
f. Closure of all common areas in school (e.g. canteen, gym, library)	20	20.15	25.62	23	8	3.23
g. Installation of additional open-air handwashing facilities outside the school building	26.23	22.54	23.46	14.15	10	3.62
h. Training students, teachers and staff on basic hygiene and barrier gestures	74.15	8.23	5.62	8.85	0.38	2.77
i. Other (please specify)	5.77	0.92	2.92	1.62	7.54	81.23

Table 49 • Security measures in the reopening plans

Statement	Yes (%)	No (%)	No answer (%)
a. The school will be closed	43.38	26.54	30.08
b. The classroom will be closed	56.8	13.99	29.21
c. The affected students or teachers will be required to quarantine	79.31	1.92	18.77
d. All students and staff will be tested	62.15	10.08	27.77
e. None	1.69	30.98	67.33
f. Other (please specify)	1	22.79	76.21

Table 50 • Learning provisions in reopening plans

Statement	Yes (%)	No (%)	No answer (%)
a. Analyse the lessons learned during lockdown within the country	84.31	10.77	4.92
b. Identify effective mitigation measures for future school closures	80.02	14.6	5.38
c. Undertake research into what other countries have done and engage in international peer learning	84.47	10.61	4.92
d. Update existing emergency planning for school facilities to account for large-scale school closures	77.48	17.14	5.38
e. Consider re-purposing school buildings for use as temporary quarantine facilities or hospitals	23.54	61.85	14.62
f. Adopt protocols for schools to follow in the event that a new case of infected student, teacher, school staff or parent is reported	83.85	10.62	5.54
g. Designate a space in the school as an isolation room	66.15	19.23	14.62
h. Other (please specify)	3.62	18.63	77.75

Table 50a • E-learning readiness in reopening plans

Statement	Yes (%)	No (%)	No answer (%)
a. Procure of devices and equipment for students and teachers to facilitate e-learning	66.49	29.52	4
b. Invest in updating or creating effective e-learning platforms and content	85.62	9.08	5.31
c. Deliver targeted training for teachers on effective e-learning and assessment	77.98	18.09	3.93
d. Ensure that all teachers and students are equipped with suitable devices for e-learning	69.92	24.77	5.31
e. Secure Internet connectivity for all teachers and students (e.g. through partnerships with Internet providers to secure lower rates for students and teachers)	62.08	32.23	5.69
f. Develop alternative modes of instruction for students without Internet connectivity (e.g. radio, TV, instant messaging, and other tools)	56.26	32.51	11.22
g. Other (please specify)	2.62	20.77	76.62

Appendix A. The views of senior education administrators

Table A1.1 • To which countries do the responses provided in this survey refer?

Country	Intry Number of respondents Country		Number of respondents
Austria	1	Italy	1
Belgium	1	Jamaica	1
Brazil	3	Japan	1
Canada	3	Latvia	1
Chile	1	Lithuania	5
Colombia	1	Mexico	89
Costa Rica	1	Netherlands	1
Croatia	1	Norway	1
Czech Republic	1	Peru	1
Dominican Republic	11	Portugal	1
Estonia	1	Republic of Korea	2
Finland	1	Slovenia	1
France	1	South Africa	1
Georgia	2	Spain	2
Germany	1	Sweden	3
Greece	1	United Kingdom	1
Hungary]	United States	3
Iceland	1	Uruguay	2

Country	Number of respondents	Median	Mean	Standard Deviation
Austria	1	30	30	NA
Belgium	1	24	24	NA
Brazil	3	36	32	30.2
Canada	3	27	29	4.36
Chile	1	28	28	NA
Colombia	1	14	14	NA
Costa Rica	1	30	30	NA
Croatia	1	34	34	NA
Czech Republic	1	40	40	NA
Dominican Republic	11	30	25.27	17.22
Estonia	1	58	58	NA
Finland]	29	29	NA
France	1	30	30	NA
Georgia	2	19.5	19.5	20.51
Germany	1	0	0	NA
Greece]	31	31	NA
Hungary	1	32	32	NA
Iceland	1	0	0	NA
Italy	1	36	36	NA
Jamaica	1	38	38	NA
Latvia	1	40	40	NA
Lithuania	5	27	17.8	16.57
Mexico	89	0	15.01	16.89
Netherlands	1	32	32	NA
Norway	1	25	25	NA
Peru	1	32	32	NA
Portugal	1	28	28	NA
Republic of Korea	2	46	46	0
Slovenia	1	34	34	NA
South Africa	1	22	22	NA
Spain	2	31.5	31.5	3.54
Sweden	3	0	0	0
United Kingdom	1	20	20	NA
United States	3	28	19.33	16.77
Uruguay	2	35	35	4.24

Table A2.1 • Primary level, number of instructional days already spent at home

Country	Number of respondents	Median	Mean	Standard Deviation
Austria	1	12	12	NA
Belgium	1	6	6	NA
Brazil	3	50	40.33	36.47
Canada	3	34.5	34.5	0.71
Colombia	1	16	16	NA
Costa Rica	1	53	53	NA
Croatia	1	31	31	NA
Czech Republic	1	10	10	NA
Dominican Republic	11	25	19.55	15.2
Estonia	1	16	16	NA
France	1	0	0	NA
Georgia	2	15	15	14.14
Germany	1	0	0	NA
Greece	1	15	15	NA
Hungary	1	0	0	NA
Iceland	1	0	0	NA
Italy	1	27	27	NA
Jamaica	1	23	23	NA
Latvia	1	0	0	NA
Lithuania	5	2.5	5.25	7.54
Mexico	89	0	12.69	17.62
Netherlands	1	1	1	NA
Norway	1	0	0	NA
Peru	1	140	140	NA
Portugal	1	28	28	NA
Republic of Korea	2	11.5	11.5	3.54
Slovenia	1	5	5	NA
South Africa	1	15	15	NA
Spain	2	5	5	7.07
Sweden	3	0	0	0
United Kingdom	1	20	20	NA
United States	3	28	19	16.46
Uruguay	2	25	25	14.14

Country	Number of respondents	Median	Mean	Standard Deviation
Austria]	30	30	NA
Belgium]	24	24	NA
Brazil	3	36	32	30.2
Canada	3	27	29	4.36
Chile]	28	28	NA
Colombia]	14	14	NA
Costa Rica]	30	30	NA
Croatia]	34	34	NA
Czech Republic]	40	40	NA
Dominican Republic	11	30	21.09	17.27
Estonia]	58	58	NA
Finland]	29	29	NA
France]	30	30	NA
Georgia	2	19.5	19.5	20.51
Germany]	0	0	NA
Greece]	31	31	NA
Hungary]	32	32	NA
Iceland	1	0	0	NA
Italy]	36	36	NA
Jamaica]	38	38	NA
Latvia	1	40	40	NA
Lithuania	5	27	17.8	16.57
Mexico	89	0	14.66	16.97
Netherlands	1	32	32	NA
Norway]	32	32	NA
Peru	1	32	32	NA
Portugal	1	28	28	NA
Republic of Korea	2	46	46	0
Slovenia]	34	34	NA
South Africa]	22	22	NA
Spain	2	31.5	31.5	3.54
Sweden	3	0	0	0
United Kingdom	1	20	20	NA
United States	3	28	19.33	16.77
Uruguay	2	35	35	4.24

	Number of Median		M	Standard
Country	respondents	Median	Mean	Deviation
Austria	1	12	12	NA
Belgium	1	6	6	NA
Brazil	3	0	23.67	40.99
Canada	3	34.5	34.5	0.71
Colombia	1	16	16	NA
Costa Rica	1	53	53	NA
Croatia	1	31	31	NA
Czech Republic	1	10	10	NA
Dominican Republic	11	25	17.27	16.14
Estonia]	16	16	NA
France	1	5	5	NA
Georgia	2	15	15	14.14
Germany	1	0	0	NA
Greece	1	5	5	NA
Hungary	1	0	0	NA
Iceland	1	0	0	NA
Italy	1	27	27	NA
Jamaica	1	23	23	NA
Latvia	1	0	0	NA
Lithuania	5	2.5	5.25	7.54
Mexico	89	0	12.52	17.67
Netherlands	1	15	15	NA
Norway	1	5	5	NA
Peru	1	140	140	NA
Portugal	1	28	28	NA
Republic of Korea	2	11.5	11.5	3.54
Slovenia	1	10	10	NA
South Africa	1	15	15	NA
Spain	2	5	5	7.07
Sweden	3	0	0	0
United Kingdom	1	20	20	NA
United States	3	28	19	16.46
Uruguay	2	25	25	14.14

Table A2.5 • Upper secondary level, number of instructional days already spent at home
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Country	Number of respondents	Median	Mean	Standard Deviation
Austria	1	30	30	NA
Belgium	1	24	24	NA
Brazil	3	36	32	30.2
Canada	3	27	29	4.36
Chile	1	28	28	NA
Colombia	1	14	14	NA
Costa Rica	1	30	30	NA
Croatia	1	34	34	NA
Czech Republic	1	40	40	NA
Dominican Republic	11	30	26.55	13.87
Estonia	1	58	58	NA
Finland	1	29	29	NA
France	1	30	30	NA
Georgia	2	19.5	19.5	20.51
Germany	1	0	0	NA
Greece	1	31	31	NA
Hungary	1	32	32	NA
Iceland	1	27	27	NA
Italy	1	42	42	NA
Jamaica	1	38	38	NA
Latvia	1	40	40	NA
Lithuania	5	27	17.8	16.57
Mexico	89	25	24.54	14.21
Netherlands	1	32	32	NA
Norway	1	32	32	NA
Peru	1	32	32	NA
Portugal	1	28	28	NA
Republic of Korea	2	46	46	0
Slovenia	1	34	34	NA
South Africa	1	22	22	NA
Spain	2	31.5	31.5	3.54
Sweden	3	30	32	3.46
United Kingdom	1	20	20	NA
United States	3	28	19.33	16.77
Uruguay	2	35	35	4.24

Table A2.6 • Upper secondary	level, estimated	d number of additiona	l instructional da	vs to be spent at home

Country	Number of respondents	Median	Mean	Standard Deviation
Austria	1	12	12	NA
Belgium	1	6	6	NA
Brazil	3	0	23.67	40.99
Canada	3	34.5	34.5	0.71
Colombia	1	16	16	NA
Costa Rica	1	53	53	NA
Croatia	1	31	31	NA
Czech Republic	1	0	0	NA
Dominican Republic	11	30	23.64	14.98
Estonia	1	1611	1611	NA
France	1	15	15	NA
Georgia	2	15	15	14.14
Germany	1	0	0	NA
Greece	1	0	0	NA
Hungary	1	0	0	NA
Iceland	1	0	0	NA
Italy	1	32	32	NA
Jamaica	1	23	23	NA
Latvia	1	0	0	NA
Lithuania	5	5	6.5	7.9
Mexico	89	20	28.64	53.78
Netherlands	1	15	15	NA
Norway	1	5	5	NA
Peru	1	140	140	NA
Portugal	1	5	5	NA
Republic of Korea	2	6.5	6.5	3.54
Slovenia	1	5	5	NA
South Africa	1	15	15	NA
Spain	2	5	5	7.07
Sweden	3	20	13.33	11.55
United Kingdom	1	20	20	NA
United States	3	33	22.33	19.35
Uruguay	2	37.5	37.5	3.54

Table A3.1 • Considering the support provided by teachers and schools and other modalities, about what percentage of the students were able to access all or most of the school curriculum, a good amount, not much, or none at all Student access, by country

				I		
Country	Num of Respon- dents	All or most of the curri- culum	A good amount	Some, but not much	Very little or none	
Austria	1	NaN	NaN	NaN	NaN	
Belgium	1	70	20	5	5	
Brazil	3	3.33	23.33	13.33	10	
Canada	3	66.67	33.33	0	0	
Chile	1	5	30	60	5	
Colombia	1	55.8	23.2	21	0	
Costa Rica	1	70	10	10	10	
Croatia	1	80	20	0	0	
Czech Republic	1	0	0	0	0	
Dominican Republic	11	41.73	39.18	19.09	10.91	
Estonia	1	99.4	0	0	0.6	
Finland	1	70	30	0	0	
France	1	100	0	0	0	
Georgia	2	0	0	0	0	
Germany	1	0	0	0	0	
Greece	1	NaN	NaN	0	0	
Hungary	1	NaN	NaN	NaN	NaN	
Iceland	1	85	15	0	0	
Italy	1	0	0	0	0	
Jamaica	1	0	70	0	0	
Japan	1	NaN	NaN	NaN	NaN	
Latvia	1	100	0	0	0	
Lithuania	5	32.8	23.8	2.2	1	
Mexico	89	54.15	32.55	12.44	6.28	
Netherlands	1	0	0	0	0	
Norway	1	100	0	0	0	
Peru	1	0	0	0	0	
Portugal	1	80	10	5	5	
Republic of Korea	2	98.8	0	0	1.2	
Slovenia	1	0	0	0	0	
South Africa	1	10	15	15	60	
Spain	2	49.5	0	0	0	
Sweden	3	53.33	13.33	0	0	
United Kingdom	1	0	100	0	0	
United States	3	0	0	0	0	
Uruguay	2	60	57.5	15	6	

Table A4.1 • Countries whose plans to reopen schools are known
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Country	Number of respondents	Country	Number of respondents
Austria	1	France	1
Belgium	1	Georgia	2
Chile	1	Germany	1
Colombia	1	Greece	1
Costa Rica	1	Iceland	1
Croatia	1	Japan	1
Dominican Republic	2	Mexico	10
Finland	1	Norway	1
France	1	Portugal	1
Georgia	2	Republic of Korea	2
Estonia	1	Spain	1
Finland	1	Uruguay]

Appendix B. The views of teachers and school administrators

Country	Number of respondents	Country	Number of respondents
Argentina	3	Jordan	1
Brazil	2	Kazakhstan	12
Canada	3	Madagascar	2
Central African Republic	3	Mexico	517
Chile	1	Nigeria]
China	1	Pakistan]
Colombia	3	Peru	119
Croatia	63	Portugal	3
Dominican Republic	217	Russian Federation	15
Ecuador	3	Spain	5
France	1	Timor-Leste	1
Indonesia	1	Tunisia]
Italy	1	United States of America	11
Jamaica	1	Uruguay	1
			993

Table B1.1 • To which countries do the responses provided in this survey refer?

	Number of			Standard
Country	Number of respondents	Median	Mean	Standard Deviation
Argentina	3	0	0	0
Brazil	2	27.5	27.5	3.54
Canada	3	24	18.67	16.65
Central African Republic	3	0	8.33	14.43
Chile	1	35	35	NA
Colombia	3	27	27	5
Croatia	63	31	23.51	17.31
Dominican Republic	217	25	21.04	23.68
Ecuador	3	30	23.33	20.82
France	1	0	0	NA
Indonesia	1	0	0	NA
Italy	1	41	41	NA
Jamaica	1	30	30	NA
Jordan	1	30	30	NA
Kazakhstan	12	0	2.42	8.37
Madagascar	2	21.5	21.5	4.95
Mexico	517	0	12.57	25.13
Nigeria	1	0	0	NA
Pakistan	1	30	30	NA
Peru	119	0	20.88	50.35
Portugal	3	22	15.67	13.65
Russian Federation	15	30	31.27	11.51
Spain	5	26	16.8	15.39
Timor-Leste	1	0	0	NA
Tunisia]	46	46	NA
United States of America	11	0	15	21.08
Uruguay]	29	29	NA

Table B2.1 • Primary level, number of instructional days already spent at home

Table B2.2 • Primary level, estimated number of additional instructional days to be spent at home					
Country	Number of respondents	Median	Mean	Standard Deviation	
Argentina	3	0	0	0	
Brazil	2	35.5	35.5	7.78	
Canada	3	7.5	7.5	10.61	
Central African Republic	3	20	21.67	2.89	
Chile	1	40	40	NA	
China	1	0	0	NA	
Colombia	3	35	40	22.91	
Croatia	63	6	70.65	344.67	
Dominican Republic	217	1	23.33	35.17	
Ecuador	3	30	30	30	
France	1	0	0	NA	
Indonesia]	0	0	NA	
Italy	1	20	20	NA	
Jamaica	1	0	0	NA	
Jordan	1	10	10	NA	
Kazakhstan	12	0	0.83	2.89	
Madagascar	2	8	8	5.66	
Mexico	517	0	10.07	16.06	
Nigeria	1	0	0	NA	
Pakistan	1	22	22	NA	
Peru	119	0	35.22	65.65	
Portugal	3	9	17	22.11	
Russian Federation	15	0	2.93	6.08	
Spain	5	14	16.4	17.07	
Timor-Leste]	0	0	NA	
Tunisia	1	90	90	NA	
United States	11	0	5.73	10.43	
Uruguay	1	0	0	NA	

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Table B2.2 • Primary level, estimated number of additional instructional days to be spent at home

Country	Number of respondents	Median	Mean	Standard Deviation
Argentina	3	29	19.67	17.04
Brazil	2	27.5	27.5	3.54
Canada	3	24	26	5.29
Central African Republic	3	0	0	0
Chile	1	35	35	NA
China	1	0	0	NA
Colombia	3	27	27	5
Croatia	63	0	11.08	16.59
Dominican Republic	217	0	12.98	25.23
Ecuador	3	30	23.33	20.82
France	1	35	35	NA
Indonesia	1	0	0	NA
Italy	1	41	41	NA
Jamaica	1	30	30	NA
Jordan	1	30	30	NA
Kazakhstan	12	20	20.33	11.06
Madagascar	2	21.5	21.5	4.95
Mexico	517	0	11.85	21.86
Nigeria	1	13	13	NA
Pakistan	1	30	30	NA
Peru	119	0	13	17.28
Portugal	3	22	15.67	13.65
Russian Federation	15	30	27.73	15.98
Spain	5	26	16.8	15.39
Timor-Leste	1	40	40	NA
Tunisia	1	46	46	NA
United States	11	0	10.73	18.56
Uruguay	1	29	29	NA

Table B2.3 • Lower secondary level, number of instructional days already spent at home

Table B2.4 • Lower secondary level, estimated number of additional instructional days to be spent at home						
Country	Number of respondents	Median	Mean	Standard Deviation		
Argentina	3	0	0	0		
Brazil	2	35.5	35.5	7.78		
Canada	3	32.5	32.5	24.75		
Central African Republic	3	20	15	13.23		
Chile	1	40	40	NA		
China]	0	0	NA		
Colombia	3	35	40	22.91		
Croatia	63	0	8.41	16.14		
Dominican Republic	217	0	13.64	31.99		
Ecuador	3	30	30	30		
France	1	14	14	NA		
Indonesia]	0	0	NA		
Italy	1	20	20	NA		
Jamaica	1	0	0	NA		
Jordan	1	10	10	NA		
Kazakhstan	12	11.5	11.17	11.3		
Madagascar	2	8	8	5.66		
Mexico	517	0	9.6	16		
Nigeria	1	40	40	NA		
Pakistan]	22	22	NA		
Peru	119	0	27.79	54.99		
Portugal	3	12	18	21.63		
Russian Federation	15	0	2.93	6.08		
Spain	5	14	16.4	17.07		
Timor-Leste]	20	20	NA		
Tunisia]	90	90	NA		
United States	11	0	3	6.71		
Uruguay]	0	0	NA		

Table B2.4 • Lower secondary level, estimated number of additional instructional days to be spent at home

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Table B2.5 • Upper secondary level, number of instructional days already spent at home						
Country	Number of respondents	Median	Mean	Standard Deviation		
Argentina	3	0	10	17.32		
Brazil	2	30	30	0		
Canada	3	24	18.67	16.65		
Central African Republic	3	20	19.33	19.01		
Chile	1	35	35	NA		
China	1	0	0	NA		
Colombia	3	32	774.67	1290.67		
Croatia	63	0	20.79	51.86		
Dominican Republic	217	23	19.23	21.37		
Ecuador	3	30	23.33	20.82		
France	1	35	35	NA		
Indonesia	1	5	5	NA		
Italy	1	41	41	NA		
Jamaica	1	30	30	NA		
Jordan	1	30	30	NA		
Kazakhstan	12	21	24.25	11.51		
Madagascar	2	19	19	1.41		
Mexico	517	24	76.17	903.58		
Nigeria	1	13	13	NA		
Pakistan	1	30	30	NA		
Peru	119	5	20.01	31.23		
Portugal	3	25	27.33	6.81		
Russian Federation	15	30	22.47	17.32		
Spain	5	29	29.6	4.93		
Timor-Leste	1	40	40	NA		
Tunisia]	46	46	NA		
United States	11	30	30.09	12.83		
Uruguay	1	29	29	NA		

Table B2.5 • Upper secondary level, number of instructional days already spent at home

Country	Number of respondents	Median	Mean	Standard Deviation
Argentina	respondents 3	0	24	41.57
Brazil	2	38	38	4.24
Canada	3	7.5	7.5	10.61
Central African Republic	3	20	16.67	15.28
Chile	1	40	40	NA
China	1	0	0	NA
Colombia	3	35	40	22.91
Croatia	63	0	23.94	68
Dominican Republic	217	0	18.22	28.58
Ecuador	3	30	30	30
France	1	14	14	NA
Indonesia	1	10	10	NA
Italy	1	20	20	NA
Jamaica	1	0	0	NA
Jordan	1	10	10	NA
Kazakhstan	12	12	11.42	11.35
Madagascar	2	10	10	2.83
Mexico	517	20	701.01	15045.17
Nigeria	1	40	40	NA
Pakistan	1	221	221	NA
Peru	119	0	195.51	1559.6
Portugal	3	33	29	15.39
Russian Federation	15	0	2.93	6.08
Spain	5	37	57.6	52.79
Timor-Leste	1	20	20	NA
Tunisia	1	60	60	NA
United States	11	15	22.64	27.9
Uruguay	1	0	0	NA

Table B2.6 • Upper secondary level, estimated number of additional instructional days to be spent at home

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Table B3.1 • Considering the support provided by teachers and schools and other modalities, about what percentage of the students were able to access all or most of the school curriculum, a good amount, not much, or none at all Student access, by country

Country	Number of respon- dents	All or most of the curri- culum	A good amount	Some, but not much	Very little or none
Argentina	3	96.33	31.67	1.33	0.67
Brazil	2	35	47.5	15	2.5
Canada	3	0	33.33	0	0
Central African Republic	3	75	25	0	0
Chile	1	75	10	10	5
China]	NaN	54	0	0
Colombia	3	85	30	10	2
Croatia	63	75.3	22.51	2.79	0.71
Dominican Republic	217	55.76	37.18	7.66	3.35
Ecuador	3	66.67	31.67	0	0
France	1	80	5	5	5
Indonesia	1	96	4	0	0
Italy	1	100	0	0	0
Jamaica	1	98	100	100	0
Jordan	1	100	80	0	0
Kazakhstan	12	89.5	9.58	0	0
Madagascar	2	0	1	34	65
Mexico	517	69.11	33.13	11.15	6.76
Nigeria	1	80	90	0	0
Pakistan	1	80	18	1	1
Peru	119	68.56	35.49	6.21	3.14
Portugal	3	90	8.33	1.67	0
Russian Federation	15	72.67	50.6	1.6	0.87
Spain	5	54.4	38.4	14	1.2
Timor-Leste	1	30	30	10	30
Tunisia	1	10	20	10	60
United States	11	65.45	15.33	1.91	1
Uruguay]	95	5	0	0

Appendix C. Senior officials by country

Data accessible at: http://www.oecd.org/education/Appendix-C-Senior-Officials-by-Country.xlsx

Appendix D. Teachers by country

Data accessible at: http://www.oecd.org/education/Appendix-D-Teachers-by-country.xlsx

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