LEARNING FOR SUSTAINABLE DEVELOPMENT

COMMONWEALTH of LEARNING

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Report to Commonwealth Education Ministers:

FROM RESPONSE TO RESILIENCE

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Lessons from the COVID-19 pandemic

- Governments should build resilience into their education systems by strengthening capabilities for responding to various crises and having the ability to implement them quickly.
- Responses to crises must avoid exacerbating existing educational disparities. High-achieving educational systems are usually better at countering inequalities.
- Countries can extend equality of access and create reservoirs of resilience by having open and distance learning (ODL) arrangements in place.
- Teaching and learning require both interactive and independent activities. A resilient system blends these components of education in different ways as necessary.
- The importance of access to learning materials cannot be over-emphasised. Open Educational Resources can assist in making these accessible to all learners.
- Curriculum development for crises should start with designing the student assessments. This clarifies learning objectives and content, providing consistency and efficiency.
- Teacher training and professional development should include scenarios for coping with crises.
- Countries have different technological systems available. Using them well in a crisis requires a coordinated approach for deploying resources and monitoring progress.
- Crises are anxious times for students and parents. Reassuring them with targeted communication must be a priority.

Introduction

The COVID-19 pandemic has had a global impact. Closures of schools and colleges aimed at slowing the spread of infection took 90% of the world's students out of their classrooms. By 15 May 2020, an estimated 574 million students were out of school across the Commonwealth. Provisions for them to continue studying at home varied widely. This brief to Ministers of Education gives examples of how governments and institutions made it possible for people to continue their education during the pandemic and identifies factors that contributed to success.

Table 1: COVID-19: Use of technologies by selected Commonwealth governments

Country	TV & radio channels	Interactive radio	eLearning portal/hub	YouTube/ WebTV channels	Print & app distribution	OER/ online	Computer based learning
Caribbean							
Bahamas[1]			X				
Belize[2]	X		X		X		
Jamaica[3]			X				
Guyana[4]	X	X	X				
Africa							
Botswana[5]	X						
Eswatini[6]	X		X	X	X		
Kenya[7]	X	X		X			
Namibia[8]	X	X		X	X		
Nigeria[9]			X		X	X	X
South Africa[10]	X		X			X	X
Asia							
India[11,12,13, 14]	X		X	X		X	X
Malaysia[15]			X	X			
Maldives[16]	X		X		X		
Sri Lanka[17]	X						
Pacific							
Fiji[18]	X					X	
Kiribati[19]			X			X	
Samoa[20]	X					X	
Solomon Islands[21]	X					X	
Europe							
Cyprus[22]			X	X	X		X
Malta[23]			X	X		X	X

[1] https://www.bahamasvirtuallearning.com/
[2] Information from COL Focal Point.
[3] https://bit.ly/3ejavZQ
[4] https://bit.ly/2ZDIB6B
[5] https://bit.ly/3d6wsuP
[6] Information from COL Focal Point.
[7] https://bit.ly/3gznnx0
[8] https://bit.ly/2McWYap
[9] https://bit.ly/36QfOgJ
[10] https://bit.ly/2U059eb
[11] https://swayam.gov.in/
[12] https://nroer.gov.in/welcome
[13] https://nptel.ac.in/
[14] https://www.swayamprabha.gov.in/
[15] https://bit.ly/2yyz7hY
[16] Information from COL Focal Point.
[17] https://bit.ly/2M2ukZc
[18] https://bit.ly/2AeBKWw
[19] Information from COL Focal Point.
[20] https://bit.ly/2M2wmsy
[21] Information from COL Focal Point.
[22] Information from COL Focal Point.
[23] Information from Director, Commonwealth Centre for Connected Learning

Students in Fiji with Aptus.

The aim is to draw lessons from the COVID-19 experience that will make education systems more resilient in future. Except where national systems had previously coped with epidemics like SARS or Ebola, most countries had to scramble to address the challenge of the COVID-19 pandemic. New approaches to teaching and learning had to be improvised and implemented in a matter of days with results that differed widely from place to place. Yet the experience of previous crises suggests that unless special efforts are made to build resilience for the future, the lessons of COVID-19 will soon be forgotten (Fox, 2004; Johnson, & Ronan, 2014).

As countries gradually return to more 'normal' ways of educating and training their people, each must hope that the first wave of COVID-19 will not be followed by further waves of infection that necessitate closing institutions again. But COVID-19 is not the only disruptive force that the global community and individual states will face in the coming years. As well as further pandemics and epidemics, climate change will affect all countries, albeit differently. As mean temperatures rise, tropical cyclones will become more extreme – though, perhaps less frequent. Some parts of the planet will become inhospitable for human settlements.

Going forward, various disruptions can be expected. The expansion of ocean water in a warming world, combined with increased meltwater from glaciers and the breakdown of polar ice sheets, is already producing a one-centimetre rise in sea levels every three years – a figure that could increase sharply were these ice sheets to collapse. This will disrupt life in coastal regions, just as droughts and wildfires will likely become more frequent in drier areas. Added to this are the threats of civil war and terrorism, with which some countries are already all too familiar, and the mass migrations of people that often follow.

Pandemics, climate change and social/political unrest are realities that countries will continue to face in the future. How can governments build education systems that not only respond to disasters but are resilient to them? They should use the challenge of better preparing their education systems for the next pandemic to make them permanently more resilient to shocks in two ways. **First**, by rendering education systems less susceptible to disruptions of all kinds. Analogous to the cybernetic Principle of Requisite Variety, this means having systems ready with responses for the crises most likely to confront them.[24] **Second**, by having coordinating mechanisms in place among the components of educational systems to mitigate the impact of a crisis more effectively than occurred with COVID-19, where some responses were described as a 'free for all'.

The response required is reviewed from four perspectives: social, pedagogical, technological and psychological (Mahajan, 2020). The challenge of trying to manage COVID-19 has reminded authorities to take a broad view of their education systems. Ensuring that any emergency measures taken do not exacerbate existing inequalities among pupils is as important as modifying curricula to support home schooling and harnessing technology for teaching and learning. Finally, reassuring anxious students and parents is a vital task for institutions and governments.

We address these four aspects of the response as follows.

[24] http://requisitevariety.co.uk/what-is-requisite-variety/

Social issues: continuing to combat inequalities during crises

A World Bank study shows that while the children of the rich will forge ahead during the crisis, the children of the poor will be even more deprived and marginalised and may drop out of the system altogether. The COVID-19 crisis has had a devastating impact on economies in the short term and may lead to significant loss of learning (Iqbal et al, 2020) and future earning potential (Psacharopoulos, Patrinos, Collis, & Vegas, 2020) in the longer term. The impact will be more visible on the vulnerable, particularly girls (United Nations, 2020). Economic recession will also have its impact on the ability of poor and middle-income families to invest in the education of their children (Thomas, 2020). Millions, notably migrants and refugees, have been displaced by the crisis. Learning on the move while struggling to find basic food and shelter is a huge challenge.

The increasing inequalities among countries and within the populations of individual nations are a major challenge of our times. Education, through schooling, is the most powerful tool that governments can use to counter inequality, promote social mobility and widen opportunities. The OECD's Programme for International Student Assessment (PISA), which has reached three million students in 90 countries so far this century, measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges.[25] PISA reports the performance scores in each jurisdiction and also their spread. In general, countries with higher median scores also have lower spreads between the top and bottom performers. High-achieving school systems are, therefore, also better at countering inequalities.

The relationship between the performance of education systems and the resources invested in them is complex. Lavish funding does not correlate well with high achievement. Strongly performing systems usually invest equitably in rich and poor areas alike, sometimes adding extra support in disadvantaged regions. But, as well as an equitable school system, countries can extend the notion of equal access and create reservoirs of resilience, which they can tap into during crises, by having open and distance learning (ODL) arrangements already in place.

The establishment of the Open University in the United Kingdom in 1969 was a historic moment in the democratisation of higher education. Lord Crowther, the founding chancellor, stated that the mission of the Open University was to be open to people, to places, to methods and to ideas, throwing open the ivory towers (Perry, 1976). Its aim was to promote social justice by providing a second chance to those who had missed the opportunity of higher education earlier. Its relevance was quickly recognised worldwide and today there are 30 other open universities in the Commonwealth catering to over four million learners every year (COL, 2017). Open schooling, which is secondary education offered at a distance, is a cost-effective means of reaching learners who would otherwise not have the opportunity. Millions more pupils are enrolled in open schools, and distance education has become the preferred mode of study for working people with family responsibilities (Tait, 2018), women and girls (Kanwar & Taplin, 2001), and persons with disabilities (PWD), (UNESCO, 2016). University of South Africa and the Open University of Tanzania have special provisions for PWD.

COVID-19 and similar crises in future are likely to exacerbate further the challenges faced by the vulnerable (Bassett, & Arnhold, 2020). Therefore, it is imperative to extend the provision of distance education for all these groups, knowing that ODL systems become a vital resource for whole populations, when they are rendered educationally vulnerable by pandemics and other upheavals.

Furthermore, the curricular variety and reach of open universities and open schools have been greatly enhanced by the growing movement to make educational materials freely available as Open Educational Resources (OER) that anyone can copy, use or modify.[26] OER are another major step in harnessing education to social justice (Lambert, 2018; Hodgkinson-Williams, & Trotter, 2018).

[25] https://www.oecd.org/pisa/
[26] https://en.unesco.org/themes/building-knowledge-societies/oer

The strategies used to provide education to the nomadic populations in Africa, such as the School-in-a-Box, are also relevant. Print materials, Aptus[27] servers and mobile devices in the hands of educated facilitators within the migrant communities ensure that learning is not a complete casualty in these times. There are plenty of successful examples of bridging the last mile and making a difference to marginalised populations.

EXAMPLE 1: Having left school at 12, when she was married, Rehana Sultan of Bangladesh was able to go back to school at the age of 22 when her three children asked her to help with their homework. This was only possible by enrolling in an open school.

EXAMPLE 2: The Ministry of Education in Guyana is using OER to reach remote Amerindian communities by translating quality content into local languages.

EXAMPLE 3: Preety Daby in Mauritius could not pass her class 9 exam because of the lack of a braille textbook. Now that she has been provided learning resources and assistive devices she is doing well in class and plans to go to university.

EXAMPLE 4: Illiterate women in India learned corporate finance through their basic mobile phones and established a farm producers' company. In the past two years, over 150,000 women in 11 countries have been lifted out of poverty and every dollar invested has resulted in assets worth 9 dollars.

Countries set up ODL systems (open universities; open schools; open polytechnics; and repositories of OER) with the express intention of making access to quality education more equal. It is ironic, therefore, that the scramble by schools and universities to move off campus and online in response to COVID-19, has tended to widen the inequalities of educational opportunity rather than reduce them. Educated middle-class parents with laptops and Internet access can readily support their children to learn at home, whereas poorer parents with none of these advantages – as well as anxieties about their own finances – can give little help.

Yet Commonwealth countries have benefited from ODL systems in past crises. When a polio epidemic struck New Zealand in 1948, all schools were closed and the Correspondence School prepared lessons to be sent to every home in the country, as well as radio broadcasting lessons from January to mid-April (C. Seelig, Personal Communication, May 24, 2020). Following this tradition, during the COVID-19 pandemic, New Zealand's Open Polytechnic has made its iQualify online learning platform available free-of-charge to tertiary-education and training organisations to help them convert to online teaching during the lockdown period, an offer taken up by over 20 organisations.[28] When Botswana closed its schools in 2011 because of a teachers' strike the nation's established open schooling network, BOCODOL (now Botswana Open University), responded immediately so that pupils could continue to learn at home. When Cyclone Gita devasted the Kingdom of Tonga, the Aptus device, created by the Commonwealth of Learning (COL), was loaded with secondary-school content to provide a 'classroom without walls' where learners could access digital materials without electricity or Internet.[29]

It is not enough, of course, to have an ODL infrastructure in place. Resilience requires that there also be a coordination mechanism to expand and optimise its benefits in a crisis. One example is the New Zealand Open Polytechnic making its online learning platform freely available to 20 other organisations in the country. Similarly, Botswana Open University has shared its course materials with other public universities. While campus institutions were closed, the National Open University of Nigeria, which caters to over half a million students, was able to remain open. Governments can create coordination mechanisms to harness these resources in support of the whole education system in a crisis like COVID-19.

[27] https://aptus.col.org/
[28] https://bit.ly/2X3V5CY
[29] https://bit.ly/3dh6epT

The pedagogical challenge: flexible approaches to teaching and learning

The World Bank estimates that there is a 'learning crisis' – students in school are not learning. In West and Central Africa, fewer than 45% of Grade 6 students achieved competency level in maths and reading. "More than 60% of primary-school children in developing countries still fail to achieve minimum proficiency in learning, according to one benchmark" (World Bank, 2018). Based on previous experiences of post-disaster impacts on education, researchers at the World Bank predict that this learning crisis could worsen (Iqbal et al, 2020). To reduce the negative impact of school closures, it is essential to build resilience in teaching and learning systems.

Teaching-learning systems

A resilient education system should be ready to adapt to situations, such as COVID-19, when teaching and learning has to be carried out in new circumstances. Designing such a system starts from the fact that all teaching and learning has two essential components. The first is an interactive component where teacher and student communicate directly and simultaneously. In such exchanges, whether in the classroom or by telecommunications, students' questions can be addressed immediately, and teachers can see how well they are learning. But, second, there is also an independent component. Here students study or prepare material, suggested by the teacher – or determined by themselves – in their own time. All approaches to education have these two components, whether the framework around them is a school with classrooms or people studying at home.

A resilient system has to be ready to blend the interactive and independent components of education in different ways according to circumstances.

A resilient system has to be ready to blend the interactive and independent components of education in different ways according to circumstances. This is easier if educators, both teachers and administrators, are aware of the strengths and weaknesses of each component. In the current pandemic, when institutions had to change within a matter of days to operating online, most had no time to prepare materials for independent learning and simply tried to move the interactive classroom experience online. Preparing for resilience means investing in quality learning materials, either developed in-house or chosen from among the variety of OER available from many sources. Having such materials ready, whether as part of normal campus teaching or for emergency off-campus moves, has two significant advantages.

First, learners and teachers do not have to communicate simultaneously. Asynchronous working gives teachers flexibility in preparing learning materials and enables students to juggle the demands of home and study. Teachers do not need to deliver material at a fixed time: it can be posted online for on-demand access and students can engage with it using wikis, blogs and e-mail to suit their schedules. Teachers can check on students' participation periodically and make online appointments for students with particular needs or questions. Having a pool of asynchronous learning materials gives teachers and students more room to breathe. Asynchronous learning works best if prepared in digital formats, even if some students use printed versions of the material. Asynchronous video lessons are usually more effective – as well as easier to prepare – if they are short (5-10 minutes).

Second, an education system that invests in materials for asynchronous use also gains economic advantages, because they can be reproduced at little cost and used many times. These economies of scale explain why open schools and open universities can handle large enrolments. Once learning materials are available, the cost per additional student for the independent component of their studies is low. While the cost of providing the interactive component of education through telecommunications or local study centres is more sensitive to student numbers than the independent component, the combination of the two is cost-effective. It is also educationally effective.

Distance learning contributes to resilience:

ACCESS
ODL accommodates large numbers of learners at low unit cost. Open schools and open universities reach millions of learners without constraints of place and time.

COST
In open institutions costs per student can vary from one third to one half of those of classroom instruction - with comparable results.

QUALITY
Research shows no significant difference of learning outcomes between ODL and traditional classroom instruction.

INCLUSION
Persons with disabilities often prefer ODL because it is flexible, affordable, and offers the anonymity of studying at home.

ECOLOGY
The environmental impact of ODL is one-third that of face-to-face teaching.

Source: COL (2020) .

Research shows that there is 'no significant difference' between distance and traditional classroom instruction in terms of learning outcomes (Russell, 1999). Meta-analysis of numerous research papers revealed that distance education is as effective as campus provision for leading to learning outcomes and student satisfaction (Bernard et al., 2004; Means, Toyama, Murphy, & Baki, 2013). A recent rapid research brief from Australia also suggests that combining face-to-face and online learning, may be as effective as classroom learning (Finkel, 2020).

The importance of access to learning materials cannot be over-emphasised. Research shows that access to textbooks is effective in improving learning, increasing literacy scores by 5-20% (Fehrler, Michaelowa, & Wechtler, 2009). Meta-analysis of research on the three types of interactions (student-content, student-teacher and student-student) that occur in distance education shows that, while all three types of interactions are associated with increasing achievement outcomes, student-content interaction is the most important. Asynchronous distance education has strong association with learner achievement (Bernard et al., 2009).

Yet in some countries every student does not have access to textbooks. Adopting OER mapped to local curricula can address this issue. Research commissioned by COL in Antigua and Barbuda demonstrated that the supplemental use of OER could reduce costs and improve student learning by 5.5% (Emarge Ed Consultants, 2017). Where online facilities are not available, especially for migrants and refugees, the content can be delivered to learners as printed text.

Curricula

What are the curricular implications of creating a resilient education system? The response must vary by jurisdiction. Some have prescriptive national curricula and have identified quality content mapped to these curricula to support teachers during COVID-19. In other jurisdictions teachers have wide discretion to choose programme content. General advice is for teachers to keep two objectives in mind. While it is important, during crises, to continue to orient students' learning to the formal curriculum and the assessments/examinations for which they were preparing, it is also vital to maintain students' interest in learning by giving them varied assignments. Project work that sets the reason for the upheaval in the education system in a wider global and historical context is one such example. For such enrichment, teachers can draw on the abundance of high-quality learning material now available as freely usable OER. The OpenLearn website, for example, contains over 1,000 courses at both school and tertiary level.[30] There is no dishonour in teaching through good materials prepared by others. At a practical level, some schools encourage students to engage with victims of the crisis by preparing hampers of food and supplies for vulnerable families or writing letters to elderly residents in care homes.

[30] https://www.open.edu/openlearn/

Assessment

How can states make assessment systems more resilient? In the COVID-19 crisis, examination systems did not prove to be very resilient. End-of-year examinations were cancelled or suspended by many examining bodies (e.g. the International Baccalaureate Organisation). This left millions of students, even those who do not relish examinations, feeling left in the lurch. At this writing (May 2020), as COVID-19 still rages in most parts of the world, these bodies are unable to say when they will resume normal operations and how, if at all, they will provide results for this year's cohort. Teachers are eager for advice on how to assess learners for these formal exit examinations so that they do not lose a year.

Institutions active in distance learning often start the process of course construction by designing the student assessments that will be part of it. This is a way of clarifying learning objectives and content that can make an education system more resilient. Teachers faced with the possibility of a sudden transition to remote operation should consider adopting this technique. It will help them to determine the parts of the standard curriculum on which they will focus as well as their aims in including other topics.

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Well before the outbreak of the COVID-19 pandemic many teachers and institutions were starting to think differently about assessment. They are coming to conceive it as a continuous rather than an occasional process, a collaborative activity focusing on verifying knowledge, competence and capabilities rather than on judging their status within a group of learners. The role of assessment is experiencing a renaissance as educators explore ways in which authentic assessment and feedback can be used to enable learning. COVID-19 gave further impetus to thinking about new methods of assessment by making the proctored examinations that feature in traditional approaches difficult, if not impossible.

Contact North (2020) provides a list of various ways in which assessment is changing. Those that might increase system resilience include:

- Basing credentials entirely on competence assessment, not coursework.
- Directing students to qualifications available through the study of Massive Open Online Courses (MOOCs).
- Assessment on demand, automated assessment generation and automated assessment marking.
- Video-based assessment of competencies.
- Adaptive systems that adjust learning content based on student performance on an assessment.
- Peer-to-peer assessment (which now has various supporting systems as a result of its use in mass-enrolment MOOCs).
- e-Portfolios. These enable students to share a portfolio of their work, including projects, videos, testimonials and assignments, with potential employers. The UK has a mandatory guide for the construction of these.
- Transnational Qualifications Frameworks (TQF) developed by 32 small states of the Commonwealth with COL, functions as a translation device, making qualifications more readable, transferable and transparent, which in turn, helps learners and workers move between countries or change jobs (COL, 2015).

Professional development of teachers

More flexible approaches to teaching and learning, including blending interactive and independent components, make added demands on teacher training and continuous professional development. Teacher-training programmes should include the interplay among technology, pedagogy and subject matter (Mishra & Koehler, 2006) to broaden teachers' capabilities. The quality of learning will be increased by teachers' imaginative and creative capacity to use technology appropriately. A comprehensive meta-analysis by Hattie (2003) emphasises that teachers matter. Students who are taught by expert teachers demonstrate integrated, coherent and higher levels of abstraction in understanding of concepts in comparison to others.

Harnessing technology to teaching and learning

The current COVID-19 crisis has highlighted, yet again, the uneven development of technology across the world.

As governments and institutions scrambled to maintain education during the COVID-19 pandemic, they focused particularly on finding and mastering technologies to reach students at home, where possible, for interactive sessions. Although appropriate technologies are clearly vital components of resilient education systems, we began this report by emphasising the social mission of education and the fundamentals of teaching and learning. Technology should always support those central purposes.

The current COVID-19 crisis has highlighted, yet again, the uneven development of technology across the world (Table 2). While only about 50% of the global population has access to the Internet, the percentage is even lower in Asia (40%), Africa (33%) and the Pacific (33%). Only the Caribbean region, at (61%), exceeds the global average.

Access to mobile subscriptions is much higher, exceeding 100% in all the Commonwealth regions except the Pacific (Table 3). This presents an opportunity to build a system of teaching and learning that is cloud-based and mobile-friendly supported with other affordable and accessible technologies.

Table 2: Internet access in the Commonwealth

Region (Commonwealth countries)	Individuals using the Internet (% of population), 2017
Africa	32.49%
Asia	52.71%
Caribbean	61.82%
Pacific	42.90%

Source: Calculated from The World Bank Data at https://data.worldbank.org/indicator/IT.NET.USER.ZS

Table 3: Mobile subscription in the Commonwealth

Region (Commonwealth countries)	Mobile subscriptions (% of population), 2017
Africa	100.23%
Asia	122.18%
Caribbean	113.17%
Pacific	85.55%

Source: Calculated from World Bank Data at https://data.worldbank.org/indicator/IT.CEL.SETS.P2

In responding to COVID-19, Commonwealth countries used a variety of technologies to take education out of the classrooms and into the students' homes (See Table 1). Once the challenge of responding to COVID-19 recedes, those countries listed in Table 1, and others across the Commonwealth, will doubtless assess the effectiveness of the technologies that they used. This could be the basis for developing more resilient educational ecosystems for the future.

For example, since 2009, the Government of India has invested systematically in information and communications technology (ICT) for education in both schools and higher education. As a result, India now has a robust ICT in Education policy at the school level. It supports increased access to ICTs, digital content and teacher capacity building, as well as a national OER repository, a MOOC platform (SWAYAM), and a bouquet of dedicated television channels for education available via Swayam Prabha providing access to digital content to both teachers and learners. However, optimal use of these systems during a crisis requires a coordinated approach with a centralised mechanism for deploying resources and monitoring progress.

In developing country-specific strategies, we recommend the following:

- Use educational radio in a planned manner to support teaching at the school level and involve parents in the teaching and learning process.

- Establish dedicated TV channels for education, especially for teacher capacity building and for providing curriculum-based support at the national level.
- Set up national digital-content platforms to provide quality OER mapped to the curriculum.
- Use cloud-based online learning platforms accessible via mobile phones.
- Provide financial support to access mobile devices for learning, especially for the disadvantaged, including for girls and persons with disabilities.

Table 4 lists the pedagogical affordances of various technologies.

Table 4: Technologies and pedagogical affordances

Technology	Affordances (what it can do, where it can be suitably used)
Asynchronous Possibilities	
Printed text	Easy to move anywhere, anytime; can be sent by post.
Online course	May use synchronous tools; can deliver multiple media, offer interaction and assessment
Synchronous Possibilities	
Radio	Highest reach in many countries; can also be interactive with phone-in programmes
Television	Can provide visual experiences to learning; be interactive with phone-in options
Video conference tools	Provides real-time experience for the learners; simulates face-to-face activities

There are also issues around cyber security during these times, as hackers and cyber criminals thrive in chaotic situations. It is important to be careful while providing online access, particularly, to children. Computers and mobile devices used by children should be updated with virus protection and age-appropriate filtering tools. We must prepare parents to support children to continue to learn during any crisis.

Being psychologically prepared

A study on teachers' responses to the 2011 Christchurch earthquake in New Zealand revealed the important role played by teachers in post-disaster recovery, particularly for providing emotional support to children and the communities (Johnson, & Ronan, 2014). The economic lockdowns occasioned by COVID-19 have created enormous stress on teachers, students and parents. Incidences of child abuse, domestic violence and sexual exploitation have been reported in several countries. By impacting schools it often deprived students of the mid-day meals that supported their studies.

Many parents have lost their jobs, sometimes leading to mass internal migrations. Education inevitably takes a back seat at such times. Many students trying to learn from home face isolation, lack of peer support and physical inactivity. Those in their terminal school year are anxious and stressed due to the uncertainty about the next phases in their lives.

"I work with my parents in the vegetable garden in our yard. This is similar to the practice of physical exercise that I did in my school regularly. I read story books and my textbook. I draw pictures; help my mother in household work. Now I don't play outside my home."– *Mokseda Akter, Grade 5 Student, Bangladesh*.

"We try to keep phone communication with our relatives to get and provide mental support. I and my husband and children spend more time together to overcome our fear and frustration." – *Ms Sundor Nesa, Parent, Bangladesh*.

"Despite feeling worried and stressed at times, I had to stay positive to ensure my family is ready in the best way possible to adapt to the changes we had to undergo in our lifestyle." – *Tara, Parent, Samoa*.

"The pandemic brought my students closer, we were able to share our experiences online with the availability of Moodle." – *Leua Latai, Sr Lecturer, National University of Samoa*.

We asked teachers, students and parents to share their experiences about the impact of COVID-19 on their lives.

Crises of all kinds are very anxious times for students and parents. They disrupt the lives of students in various ways, depending on their course of study and the point they have reached in their programme. Those ending one phase of their education and moving on to another (e.g. from school to tertiary, or tertiary to employment) face particular challenges. Education systems and their institutions should make the reassurance of students and parents through targeted communication, a priority. Teachers and counsellors will often have to provide this reassurance without clear answers to the general question of when the disruption will end and to specific queries about arrangements for replacing cancelled examinations or changes to procedures for admission to the next level of study. Teachers and school personnel may be better able than parents to assuage the anxieties of students in deprived situations. Some help lines and resources outside the school system specialise in addressing emotional and psychological challenges and welcome referrals. The National Institute of Open Schooling in India uses a call centre to provide support to the learners. Jamaica has provided parents with SIM cards to access help lines.

For students the hardest aspect of sudden school closures, especially when combined with injunctions to stay at home, is being torn away from their social group almost overnight. In crises (e.g. infectious diseases) where physical distancing is mandatory, some social contact may be restored through chat groups and meeting rooms on the virtual technologies that are used for teaching. Where physical distancing is not required, normal extra-curricular activities and opportunities for sport can be increased.

Wherever the sudden vacating of schools and colleges may be a possibility there are practical preparations to make. Students should identify the books, equipment, etc. that they will need for study at home. Staff should have protocols in place for continuing arrangements for safeguarding children; for the division of responsibilities between departments; and for remaining in contact collectively for mutual support. Teachers should ensure that regular feedback is provided, and test results and reports are up to date.

Conclusion

Commonwealth countries have done a remarkable job in guiding their education systems to face the challenge of COVID-19. Most had to close their schools and colleges and make arrangements, in short order, for continuing to educate pupils and students at home. As the immediate challenges of COVID-19 recede into memory, governments should not let their responses to this crisis go to waste. They should assess the effectiveness of their country's preparedness for COVID-19 with the aim of making its education system more resilient to shocks and upheavals of all kinds in the future.

Establishing a group to advise on crisis readiness could help a country's educational institutions react in a coordinated manner to future crises.

An immediate consequence of such crises is to exacerbate the existing inequalities within countries, especially as manifest in more limited access to education for poorer children, girls and persons with disabilities. Because quality education systems also tend to be equitable systems, governments should pursue both quality and equity as they develop their networks of educational institutions to become resilient. These considerations are especially important in making decisions about expanding ICT infrastructures and distance-learning arrangements: essential components that provide flexibility and choices to reach people wherever they are.

Finally, a resilient system must be greater than the sum of its parts. Governments have advisory bodies for different aspects of their education provision. Establishing a group to advise on crisis readiness could help a country's educational institutions react in a coordinated manner to future crises.

Distance learning and collaboration.

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