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The Impact of COVID-19 on Education Systems in the Commonwealth

Edited by Amina Osman with James Keevy



The Commonwealth

The Impact of COVID-19 on Education Systems in the Commonwealth

Edited by Amina Osman with James Keevy

Commonwealth Secretariat
Marlborough House
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Abbreviations and Acronyms

ACU	Association of Commonwealth Universities
AU	African Union
BCC	Behaviour change communication
C3	community communication centre
CCT	conditional cash transfer
COL	Commonwealth of Learning
COVID-19	coronavirus disease 2019
CSO	civil society organisation
DIB	development impact bond
DRC	Democratic Republic of the Congo
ECR	early career researcher
ECW	Education Cannot Wait
FGD	focus group discussion
GDP	gross domestic product
GPE	Global Partnership for Education
IAU	International Association of Universities
INEE	Inter-agency Network for Education in Emergencies
ICT	information and communication technology
IDB	Inter-American Development Bank
IT	information technology
JET	Joint Education Services
KICD	Kenya Institute of Curriculum Development
M&E	monitoring and evaluation
MHRD	Ministry of Human Resources and Development (India)
MoE	Ministry of Education (Kenya)
MoH	Ministry of Health (Kenya)
MOOC	massive open online course
NGO	non-governmental organisation

OBCs	Outcomes-based contracts
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
OERs	open educational resources
PBA	performance-based aid
PPE	personal protective equipment
PPP	public–private partnership
RBF	results-based financing
SDGs	Sustainable Development Goals
SEED	Sustainable Education and Enterprise Development (Nigeria)
SIB	social impact bond
TV	television
UN	United Nations
UNESCO	UN Educational, Scientific and Cultural Organization
UNFPA	UN Population Fund
UNICEF	UN Children’s Fund
USAID	US Agency for International Development
WFP	World Food Programme
WHO	World Health Organization

Summary

The Commonwealth Secretariat commissioned 11 papers to provide baseline information on how COVID-19 has impacted education systems in Commonwealth member countries. The papers have been edited and restructured so that they are now similar in length and arrangement, with the results collected into 11 chapters under four sections.

Each chapter features a research study, with data gathered using a combination of a literature review and online interviews or surveys. The chapters provide some background and context to the research, study methodology, and summarised findings. The researchers then discuss their findings and offer recommended solutions to the pressures and challenges being experienced because of the pandemic.

This summary is followed by an introduction to the research project that led to the Commonwealth Secretariat commissioning the 11 papers that make up the chapters of this report. There is also a brief section on research methods, given that these were often similar across the research.

Section 1 Systemic response and education sector resilience

Section 1 features chapters on education sectors in selected Commonwealth countries, how prepared they were for the COVID-19 pandemic and how they have responded.

Chapter 1 on the preparedness and resilience of education systems, identifies ways Commonwealth members have facilitated and supported the continuation of teaching and learning at the early childhood, primary and secondary education levels during the pandemic. Ultimately, the study aims to suggest ways education systems can meet multiple threats in the future, including from hurricanes, experiences of drought and other natural disasters.

Key issues and policy messages arising out of Chapter 1 include the need for education systems to:

- plan and be prepared to face emergencies of different types;
- acknowledge and support students' socioemotional and psychological well-being;
- leverage communities by providing low-cost and low-tech solutions;

- engage stakeholder business entities, community groups and external donors for collaboration and partnerships to ensure access to scarce resources;
- ensure the sustainability of flexible teacher training opportunities;
- introduce intensive monitoring strategies; and
- intensify the response to inequality of opportunities in the education system.

Chapter 2 on the role of governments and government support for schools looks at how India, Kenya, Nigeria, Sri Lanka, Tanzania and Zambia have implemented mitigation measures to ensure the continuation of teaching and learning across the schooling systems while at the same time, attempting to contain COVID-19. It examines government policies by country and also surveys teachers and parents.

Some key lessons and recommendations arising out of Chapter 2 include:

- the need for governments to prioritise the health and safety of learners and educators on schools reopening;
- the importance of broad-based support and partnerships to respond to education needs, including with civil society and the private sector;
- the need, on reopening, for governments to re-establish and adequately fund all services targeting learners living in poverty (for example, school feeding programmes);
- the need for specific support measures to address the learning loss of marginalised students and the socio-psycho impact that disrupted their learning;
- the development and distribution of structured school workbooks, with weekly predesigned lessons in conjunction with television programmes;
- adjusting the school calendar to maximise teaching time following lockdown;
- that governments should plan for teacher mobilisation, prioritising regions that have been worst hit by the crisis;
- the need to for government support for *all* teachers and education personnel (as frontline workers) to ensure their safety, well-being and decent working conditions;
- the need to determine the safety of school infrastructure, including renovating, improving or installing hygiene facilities; and

- the importance of governments communicating, consulting and co-ordinating with all education stakeholders.

Chapter 3 looks at the role of teachers and other stakeholders in supporting teaching and learning. It seeks to understand how teachers have coped under the abnormal conditions of the global pandemic. While countries had been contemplating a return to schooling in some form, the study looks forward to how this could occur, and what schools and teachers would require for a successful return to face-to-face teaching and learning.

Key issues that emerged from this chapter focused on the following broad themes:

- *Leadership and inequality*: Inequalities between schools that pre-dated the pandemic were exacerbated during lockdown. Yet one school was able to optimise the educational experiences of learners. There is a need to further explore the question of how this particular institutional culture – characterised by a sense of responsibility, a strong feeling of teamwork, the prioritisation of teaching and learning, and the exercise of initiative in getting activities and materials to learners – arose in the school.
- *Communication between school and home*: The study thought it possible that the large majority of learners spent most of the time schools were closed with no communication from their schools. There is a need to explore this issue further with a view to establishing communication networks, perhaps via cellphone.
- *Resources*: Government roll out of the hard- and software, connectivity and training necessary to maintain remote learning is often unrealistic. Print materials are the most obvious resources to use to keep learners busy.

Finally, in Section 1, Chapter 4 addresses the role of Commonwealth universities during the global pandemic. It looks at ways in which universities have responded, highlighting areas such as learning and teaching, research and scholarship, as well as the different levels of governance. It highlights opportunities and challenges as the higher education sector tries to react effectively in its own operation and to contribute constructively to broader societal responses.

Key conclusions and recommendations that came out of Chapter 4 fall under two categories:

- *Research-related messages*: Universities face new opportunities and challenges going forward; for example, responses to calls for Sustainable Development Goal (SDG)-oriented curricula and support for vulnerable/marginalised communities. It is

recommended that attention should continue to be drawn to the work that universities are undertaking – in terms of their resilient responses, their critical contributions to a sustainable society, and their vital role as a key partner in an overall societal response to the global pandemic. This will enhance the quality of the activities undertaken by universities by sharing best practice, by finding synergies, and by highlighting opportunities to non-traditional partners in society.

- *Youth engagement-related messages:* The chapter shows that Commonwealth youth are ready and keen to contribute to discussions about the role of universities in a pandemic and post-pandemic world. It is recommended that learning from this exercise should be used to offer additional research opportunities to Commonwealth youth in the future. Moreover, the perspectives of all participants should be deployed to build suggestions for similar future activities.

Section 2 Access, equity and inclusion

Section 2 moves on to address access, equity and inclusion of education systems during the pandemic, with an eye on what is likely to happen in its aftermath.

Through a series of narrative case studies, Chapter 5 explores the impact of COVID-19 on the educational opportunities afforded to the most disadvantaged and marginalised groups. Each case study – two from Ghana, and one each from Botswana, India, Nigeria, Rwanda and Sierra Leone – provides insights into a unique situation defined by the country from which data were gathered, and on a specific population sample such as migrant workers or girls.

The case studies allowed the researchers to draw out some common policy messages, as follows:

- *The role of technology in supporting learning:* It should not be assumed that digital technology and e-learning are wholly effective ways of supporting learners who are out of school. Technological support during the pandemic benefited the wealthiest in society, while failing to engage with those living in the poorest communities.
- *The role of parents in supporting learning:* Parental ability to support the learning of their children is dependent upon an ability to understand the education system and to have a reasonable level of literacy.

- *Girls are at greater risk of failure than boys:* There remains a disparity between the expectations placed upon boys and their sisters in respect of educational outcomes. This has been exacerbated by the COVID-19 pandemic.
- *Lack of financial and resident security:* Migrant workers from rural areas fear for their security and suffer both financial and social discrimination and hardships that deny them opportunities to adequately support their children's learning. This situation has been emphasised during the COVID-19 pandemic.
- *Poverty:* The current pandemic has exacerbated the situation of disadvantaged families and communities and reduced the learning opportunities available to their children compared to those of wealthier families in the same country.
- *Lack of effective government planning for inclusion:* Beyond the policy level, there are serious omissions in planning for the implementation of inclusion, which have resulted in the further distancing of those in greatest need from their peers.

Chapter 6 then looks at the impact of the pandemic with respect to gender equity and equality in education. The research here set out to identify the ways in which gender has played a role, while also exploring factors affecting access to learning/alternative learning modalities during COVID-19.

This chapter broadly recommends that more attention be paid to technology for students in Africa, including promoting its use in school curricula. It further emphasises the importance of government policies and budgets making provision for unpredictable circumstances. It recommends that telecoms companies could liaise with educational institutions to provide internet packages, as well as the need for further studies into gender roles and teacher–student relationships.

Chapter 6 provides some policy recommendations to address the challenges of online learning for females at the higher education level. Some of these include:

- the need to develop gender-neutral curricula;
- the need for safe and supportive learning environments, where all genders can participate and learn freely;
- that higher education institutions should ensure that all students are equitably included in learning, class discussions and participation, and are equally involved in the school's extracurricular activities;

- the need for co-operation between all educational stakeholders to ensure that girls and women are equally supported in pursuing their educational paths and careers, rather than conforming to traditional gender stereotypes and roles;
- that all stakeholders in the educational sector should provide girls and women with equal access to technology and digital training; stakeholders must also develop policies to ensure safety on online learning platforms;
- that higher learning institutions should support girls and women to be as technologically competitive as their male counterparts, to bridge the digital divide and minimise learning disruptions that may be caused by a lack of basic technological knowledge; and
- that higher learning institutions should include reproductive health rights and family planning methods in their curricula.

Chapter 7 explores the roles and practices of youth workers during the pandemic, given their position as non-school-based education providers. The chapter looks at the impact of the pandemic on youth work and how youth workers have adapted to deliver educational programmes. This chapter also highlights that, considering the challenges many young people have faced due to the massive disruptions to their educational, social and economic lives caused by COVID-19, youth work is perhaps more relevant and necessary than ever.

The chapter makes key recommendations the researchers feel need urgent attention. These include:

- The need to mainstream digital communications and online learning for youth worker training and development. Youth work practice should, where possible and where resources allow, include digital tools in training programmes, professional development courses, formal youth work degree programmes and other forms of youth work education.
- The need to bridge the digital divide between youth workers and youth.
- That youth workers must be trained on the ethics and professional boundaries of digital and online media use.
- That high-quality alternatives to digital learning should be provided for working with youth and families from under-resourced communities. These could include the use of phones, newsletters, printed educational materials and home visits.
- The need to prioritise self-determined learning. Learning strategies that focus on independent self-learning allow youth workers to

engage youth in meaningful learning, without having to have regular, direct contact with them.

- The need to prioritise financial and professional development support for youth workers.
- The need to facilitate sharing of COVID-19 experiences and best practice among youth workers globally.
- The study also recommends that further country-specific research be carried out, that greater recognition of youth work be provided, and that there should be support for youth workers in their role as agents of change.

Section 3 Innovative solutions

Section 3 then looks to some possible innovative solutions to the challenges and issues identified in the preceding chapters.

Chapter 8, on harnessing information and communication technology (ICT) and innovative digital low-cost solutions, addresses the perceptions of parents, teachers and students on the effectiveness of emergency remote teaching during the pandemic. It examines the perceived success of low-cost ICT solutions in ensuring continuity of educational provision in underserved and remote communities. It then explores policy measures, technology solutions, and other factors or elements to support teachers to ensure universal access to educational provision for these communities.

The chapter identifies some priority issues for governments and authorities to address:

- Formal education is not designed to be adaptable to the medium of delivery or to the financial means of the family. Some families cannot afford television sets while for others internet connectivity is still a major hurdle. Governments should ensure equity prevails in terms of access to educational services and digital technology.
- Curricula have not been adequately designed and customised for remote teaching or for broadcast media. There is therefore a need to either rethink the curriculum or design an alternative model that can be activated when remote teaching is needed.
- Teachers should be trained in remote teaching and have access to teaching technologies. Teachers should also be appropriately equipped in terms of facilities (for example, computers and internet connectivity).

- Governments should have policies on how to include parents more in the education of their children, including appropriate financial support, especially for those in underserved areas.
- Technology-enabled learning should be assessed to ensure that in addition to promoting better learning experiences, it contributes to the resilience of the educational system to expand learning beyond the classroom.

Chapter 9 investigates the potential of innovative financing mechanisms to address education challenges that existed before and during the COVID-19 pandemic, and which will persist when the pandemic is over. It explores how one of these mechanisms, results-based financing (RBF), could be employed to improve efficiencies and effectiveness in the education system.

A key message arising from this chapter is that, although the global community rallied quickly in the wake of the pandemic and mobilised emergency funding to meet the urgent requirements of education systems worldwide, these forms of funding can only meet short-term needs. Such funding is unable to deliver on long-term requirements for recovery and strengthening of weak education systems. The needs of education systems have also now expanded to include various aspects of health and psychosocial support. Meanwhile, the near future will also likely see greater demands for: free basic education and tuition-free forms of higher education; learner nutrition programmes; catch-up programmes to redress loss of learning opportunities; strengthening of remote modes of teaching to cater for out-of-school children who fail to return to school; and re-enrolment of the most vulnerable groups, especially girls.

As a result, long-term financing will be necessary to augment shrinking conventional forms of funding. The chapter highlights a diverse range of innovative financing mechanisms in this regard, but in particular recommends that governments explore the use of results-based financing (RBF) instruments. This is because such mechanisms enable governments to assess their capacity to raise additional capital, while at the same time improving the effectiveness and efficiency of education systems via a clear focus on well-defined outcomes.

Section 4 Adaptation and well-being in challenging times and environments

Section 4 addresses the importance of adaptation and well-being in challenging times such as the pandemic.

Chapter 10 looks at how non-state actors in education – such as civil society non-profit organisations – have leveraged adaptive leadership principles

and practices to position and prepare themselves for the mid- to long-term impacts of COVID-19.

The chapter uses a number of case studies of work carried out by non-governmental organisations (NGOs) and civil society organisations (CSOs) to illustrate how these organisations have been impacted by, and have responded to, the global pandemic. It demonstrates how the principles of adaptive leadership – such as openness and transparency about learning, the use of collective decision-making processes, and the building of trust with communities and individuals – have allowed some actors not only to survive COVID-19, but to thrive in the midst of the complexities it has brought.

Key messages arising out of the chapter are that successful leaders:

- adapt and embrace changes in programme delivery, programme evaluation and even resource allocation, so that they are able to leverage networks with other actors, stakeholders, parents and government;
- have made sure their organisations are intentionally rooted in local communities and have an excellent understanding of context; and
- are willing to address complexity rather than ignore it or wait for it to end.

Therefore, a recommendation of this chapter is the need for an increased focus on leadership development within the civil society and non-state education sector.

Finally, Chapter 11 provides a synthesis of the literature and other documents on well-being among school-age children in the African context. It draws on ways in which structural inequalities affect individual ability to access key resources, systems of support and opportunity. It juxtaposes intersectional inequalities against a critical review of well-being interventions or programmes, as well as exploring the potential use of using intersectional lenses within investigations of well-being.

The chapter concludes that understanding of and interventions related to well-being within the school system remain *ad hoc*, uncoordinated, sparse and largely addressing perceived vulnerable groups, which are mostly outside of the school system. The researchers note that efforts at enhancing the well-being of school-age children in Africa remain inadvertently limited by the lack of both data and co-ordination of existing interventions.

Therefore, the chapter's key message is the urgent need to expand explorations of well-being, taking into consideration multi-dimensional aspects of well-being and the engagement of other sectors within this effort. Critical stakeholders should include the health, educational and community development sectors.

Biographies of Team Leads

Dr Talia Esnard holds a doctorate in sociology. She is a lecturer and current Head/Chair of the Department of Behavioural Sciences, at the University of the West Indies, St. Augustine campus, Trinidad and Tobago. As a lecturer at the UWI, St. Augustine campus, she has taught a range of courses in both qualitative and quantitative research, as well as, in development theory and praxis; both at the undergraduate and graduate levels. As a researcher, she focuses on issues of women, work, and organisations, particularly within entrepreneurial and educational spheres.

Dr Denise Gaspard-Richards is the Director of the Academic Programming and Delivery Division at the University of the West Indies, Open Campus. Dr. Gaspard-Richards has over twenty years' experience as an educator having worked in capacities that span teaching in both face to face and online modes, strategic planning and institutional research in higher education, academic programme coordination, and the design, development and delivery of online and distance education programmes and courses. Dr Gaspard-Richards is also formally trained and has worked in the area of demography and population studies in the Caribbean.

Professor Ismi Arif Ismail is the Head of Professional Development and Continuing Education Department at the Universiti of Putra Malaysia. He has been widely published, as author or co-author of a book, book chapters, monographs, proceedings, and scores of scholarly papers, abstracts and related materials in areas such as continuing education, extension education, leadership, youth development and human resource development.

Deborah Kimathi is a senior development practitioner with 19 years' experience in the fields of education and child protection in East Africa. As Dignitas' Executive Director, Deborah leads organisational strategy and growth. Dignitas partners with 340 schools across Kenya to improve 100,000 children's achievement and well-being. Dignitas is a 2020 WISE Award winner, and a featured education innovation on HundrED's Global Collection 2020 and 2021. Deborah is also the Kenya country lead of the Regional Education Learning Initiative (RELI) which brings together education actors from across East Africa focused on improving learning outcomes for children furthest behind.

Professor Steven Eric Krauss is a professor with the Department of Professional Development and Continuing Education, Faculty of Educational Studies, at the Universiti of Putra Malaysia, and a Research Associate with the Institute for Social Science Studies (IPSAS). His teaching and scholarship

center around youth development, human resource development and qualitative research methods. His current research and scholarship focus on the role of youth-adult partnerships within the field of youth development and education. His work has been published widely in both local and international academic journals, books and book chapters.

Dr Monica Mawoyo is an independent research consultant in the fields of schooling, higher education and skills development. Her work in success issues includes assisting universities in Nigeria, Ghana, Kenya, Tanzania, Mozambique and Uganda to conceptualise and implement projects using technology to solve teaching and learning challenges and conducting evidence-based research to explore factors influencing technology uptake in seven universities in these six countries.

Professor Veronica McKay is currently the Executive Dean of the College of Education (CEDU), University of South Africa and UNESCO (UIL) Fellow. She does research in Teaching Methods, Educational Assessment and Adult Education. Her current research involves looking at the impacts, and optimising the impacts, of adult literacy. She is also engaged in research into resource-based education. She uses a range of "mixed methods" to explore and enhance impacts of education of the marginalised.

Professor Richard Rose is Emeritus Professor of Inclusive Education at the University of Northampton (UK), supporting PhD students in the UK and India, and providing mentoring in research for novice researchers in both countries and in Cambodia. He has previously held posts as a teacher, head teacher and inspector in various parts of England. He has conducted research for National Governments, Research Councils, NGOs and UN agencies and organisations including UNICEF, UNESCO and Sightsavers both in the UK and internationally.

Professor Ian Rowlands is a professor in the School of Environment, Resources and Sustainability at the University of Waterloo (Canada). During a sabbatical from Waterloo in 2020, he was affiliated with the Association of Commonwealth Universities as a Special Advisor. Dr Rowlands has research interests in the areas of energy management strategies, sustainability, and international education.

Dr Mohammad Santally is an active researcher in the field of Education Technology and e-Learning. He has worked on innovative learning methodologies to help educators and practitioners to develop their own e-learning and interactive materials without high-end ICT skills. In collaboration with Microsoft and the Commonwealth of Learning, he has conducted a series of capacity-building workshops in South Africa, Swaziland, Uganda, India, Seychelles, Mauritius and Rodrigues.

Dr Marcia A. Stewart is the retired manager of the Joint Board of Teacher education (JBTE), University of the West Indies (UWI), Mona, Jamaica. The JBTE, Mona, has the responsibility of quality assuring teacher education in the Western Caribbean. Dr Stewart is Adjunct Faculty in the School of Education, UWI, Mona and is chair of the CARICOM Technical Working Group responsible for developing regional standards for the teaching profession. Her research has been centered on the areas of teacher development and higher education quality assurance with a focus on Caribbean issues.

Dr Nick Taylor was a high school teacher in maths and science and subject advisor for fourteen years before joining the University of the Witwatersrand (South Africa) as policy researcher. He led the President's Education Initiative in 1999) and worked on large scale School Improvement Programs. On secondment to the Ministry of Basic Education, he was Chief Executive Officer of the National Education Evaluation and Development Unit (NEEDU). He works on the Primary Teacher Evaluation Project, a five-year program that aims to develop curricula for primary school teachers in training, and led by the Dept of Higher Education and Training of South Africa.

Introduction

Pandemics

Several major pandemics have affected humans and economies. These include influenza, smallpox, plague, acquired immune deficiency syndrome (AIDS), cholera, dengue, West Nile disease, severe acute respiratory syndrome (SARS) and tuberculosis (TB). Influenza pandemics are unpredictable but cyclical events that can have serious effects on societies worldwide. Every century since the 1500s (or roughly every 10–50 years), influenza pandemics have struck about three times. In the twentieth century, there were three influenza pandemics: Spanish flu in 1918–1919, Asian flu in 1957–1958 and Hong Kong flu in 1968–1969. Each pandemic affected human life and economic development.

In the twenty-first century, influenza H1N1 2009 virus (A/2009/H1N1) was the first pandemic influenza to affect the globe. It resulted in more than 18,000 deaths (Rewar et al. 2015). According to World Bank calculations, Ebola killed over 11,000 people and cost the world more than US\$2 billion (Maurice 2016). The Zika virus outbreak in 2016 spread and threatened the health of people in 34 countries (Troncoso 2016). Scientists and governments became more concerned about the devastation of these outbreaks on the world's economies and education.

In December 2019, the coronavirus disease (COVID-19) spread from Wuhan province, China, to various parts of the world (WHO 2020). COVID-19 has revealed how a pandemic can be exacerbated by the prevalence of poverty, weak health systems and a lack of global co-operation. It has also seriously impacted on the delivery of education.

By the end of July 2020 approximately 17,000,000 cases of COVID-19 had been reported worldwide with more than 660,000 deaths, placing the health systems in many nations under severe pressure. In addition, the pandemic caused major disruption to global social and economic structures, leading to the greatest global recession since the 1930s.

Responses to COVID-19

National governments have responded in a variety of ways to the pandemic, making policy decisions and taking actions in response to both health and economic demands. Measures taken have included the imposition of 'lockdowns' in which businesses, schools and commercial outlets have been closed and individuals advised to remain at home, except for essential services

such as purchasing food or receiving medical attention. Social distancing and wearing face masks have been implemented as either a compulsory or a recommended action in many countries.

The closure of schools, universities and other educational establishments as a result of this pandemic has impacted the lives of more than 60 per cent of the student population internationally. According to the UN Educational, Scientific and Cultural Organization (UNESCO), the number of students affected by school and university closures in 138 countries has nearly quadrupled to 1.37 billion, representing more than three out of four children and youth worldwide. In addition, at the time of writing this report, nearly 60.2 million teachers were no longer in the classroom (UNESCO 2020). National governments have responded by providing additional support for digital learning and increasing the use of broadcast media, though the extent to which this has been accessed and effective in supporting learning is unknown.

In April 2020, the United Nations warned that the pandemic was becoming a major human rights issue in which the most marginalised and poorest members of society were likely to be most affected. The potential long-term damage to the educational, social and economic welfare of these individuals and groups could be catastrophic. The reaction of governments and education policy managers has understandably had to be swift and, as a result, may not necessarily have been well thought out. The closure of schools is widely seen to have been a sensible precaution, though because of the haste with which decisions were taken, there was little time for effective planning to provide support for school-age children learning at home. Two leading economists from the University of Bristol have stated:

Teaching is moving online, on an untested and unprecedented scale. Student assessments are also moving online, with a lot of trial and error and uncertainty for everyone. Many assessments have simply been cancelled. Importantly, these interruptions will not just be a short-term issue, but can also have long-term consequences for the affected cohorts and are likely to increase inequality (Burgess and Sievertsen 2020).

The need to monitor this situation, both now and in the long term, is important if we are to address the possible negative impact on school-age learners. Research such as that reported in the chapters that follow can make a small contribution to our appreciation of the challenges being faced by individuals, communities and schools.

Impact of the pandemic and school closures on education

Education plays a critical role in the fulfilment of all 17 UN Sustainable Development Goals (Global University Network for Innovation 2019).

COVID-19 cannot be addressed without linking it to Sustainable Development Goal 4 (SDG 4) – ‘Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all’.

The evidence that has emerged from the broader impact of the crisis in this area is alarming. UNESCO estimates that about 1.25 billion students have been affected by the pandemic, presenting a critical challenge to the achievement of SDG 4 (Solberg and Akufo-Addo 2020). Suzanne Grant, director of the International Institute for Education Policy (IIEP), meanwhile, emphasises the need to attend to the gender dimension of the COVID-19 school closures, as evidence suggests that both education and gender are neglected with any disease outbreak (UNESCO 2020). The threat of inequality leads to the dereliction of rights and detracts from the quality of life. Education has a direct impact on a state’s economy and on an individual’s quality of life (Ozturk 2008).

The closure of schools around the world has affected all levels of education. Globally, by 10 March 2020, one in five students was staying away from school as a result of the COVID-19 pandemic, while another one in four were barred from higher education institutions (UNESCO 2020). On 13 March 2020, governments in 49 countries announced or implemented school closures, including 39 countries which closed schools nationwide and 22 countries with localised school closures (ibid). According to UNESCO, this figure had increased from 49 to 73 countries by 16 March 2020.

By 19 March 2020, 50 per cent of students worldwide were affected by school closures as part of measures put in place to enable virus containment and spread reduction, resulting in nationwide closures in 102 countries and local closures in 11 countries, which affected 850 million students (ibid). By 20 March 2020, more than 70 per cent of the world’s learners were affected by school closures, with 124 countrywide school closures reported (ibid).

Research into impact of COVID-19 on education systems

The research studies that feature in the chapters that follow derived from an initial project, which aimed to contribute to thinking about the implications that COVID-19 was having on the education sector in South Africa and initiated in March 2020 by JET Education Services (JET), a non-governmental organisation. The project brought together several early career researchers (ECRs) and established experts to execute short-term, real-time research studies of how societies’ educational strategies should respond in light of the global COVID-19 pandemic: these studies were branded as ‘Researchers Bootcamps’ to #OpenupYourThinking. At the time of

publication of this report, these initiatives were either already complete (JET 2020a) or nearly complete (JET 2020b).

The online methodology developed during the South Africa-based project, drawing on a combination of volunteers supported by a credible research experience, held the potential to be used in other contexts. The Commonwealth Secretariat, in collaboration with JET, applied a similar approach across Commonwealth countries impacted by the COVID-19 pandemic, with focus on macro-, meso- and micro-levels. The 'Commonwealth Researchers in Pursuit' initiative (JET 2020c) was thus established on 5 June 2020.

The methodology had sufficient flexibility to enable participants to work from their homes, and the potential to contribute to national, international and regional debates and decisions through the effective use of online and social media platforms.

The studies reported in the following chapters resulted from deliberations by the Commonwealth Secretariat, JET Education Services in consultation with partners including the Association of Commonwealth Universities (ACU). They had the following aims, scope and desired outcomes.

Aims:

- Provide solutions to pressures being placed on education systems by the COVID-19 pandemic using an evidence-based approach.
- Allow real-time inputs to be made into education processes and systems in member countries during the pandemic.
- Keep a group of young researchers engaged meaningfully during lockdown periods, while giving them an opportunity to develop by working under the guidance of experienced researchers.

Scope and target participants:

- Young people (below 35 years) with an activist orientation and an interest in educational research (including university students, teachers, postgraduate students and others).
- Researchers who were experienced enough to guide a research team to conduct credible scientific research in a short period of time.
- Well-established researchers and policy-makers who were able to act as peer reviewers and could potentially incorporate the emerging findings into key national and international processes.

Desired outcomes:

- Agile research outputs that influence and support decision-making during and after the COVID-19 pandemic.

- Capacity building of young researchers who would leave the project with a passion for education and an ability to contribute in their future careers.

It was planned that the research results would not only feed into individual Commonwealth countries' decision-making processes, but also into the next Conference of Commonwealth Education Ministers scheduled to be held in 2022 (tbc).

How the report is organised

After this introduction, there follows a brief outline of common approaches to the studies that follow, including sampling, data collection and limitations. Thereafter, the report has 11 chapters organised under four broad sections.

Methods

This section looks at the methods most used in the research studies in the chapters that follow.

Each research team comprised between four and twelve early career researchers (ECRs), peer reviewers, support co-ordinators, and one or two team leads.

All the studies took a mixed methodology approach. This allowed a level of flexibility to accommodate the different areas of study and for convenience of data gathering in the circumstances of different regions. The principal methods used for data gathering were the formulation of between two and six main study or research questions and then the collection of data (primary and secondary) via a desk or literature review of existing documents and other online sources, in combination with interviews, a survey or questionnaire as well as focus group discussions, all usually conducted online.

Research design/approach

The studies undertaken were generally exploratory (Given 2008). An exploratory approach is appropriate for investigating new phenomena, such as the effects of COVID-19, as it investigates a problem which is not yet clearly defined. It aims to contribute to a better understanding of the existing problem – but will not provide conclusive results. As such, the research team starts with a general idea and uses the research as a means to identify relevant issues and explore the phenomenon under investigation at its preliminary stages. Exploratory research is most often used as a precursor to more systematic studies.

Study population and sampling

For the interviews and surveys, most of the studies followed a convenience sampling technique. As such, participants were selected based on ease of access and perceived applicability of the views of the participants in relation to the purpose of the study. This meant the research teams mainly relied on their own networks and contacts to source study participants and generate responses. For example, where schools were selected by means of convenience sampling, the researchers chose to work in schools they were familiar with or had access to.

This saved time, but inevitably led to a skewed set of respondents. The researchers themselves were relatively well-educated and therefore their networks were also likely to possess relatively high levels of cultural capital, and so on through the network. It was thus logical that many of the study participants would be biased to relatively well-educated and well-connected individuals.

This is important in considering the value of the research findings. If the respondents were relatively advantaged, then they were more likely to have access to the electronic technology and cultural networks required to facilitate remote learning (for example). In other words, the knowledge, skills and attitudes displayed by these respondents often represented something of a 'best case scenario'. It is from this perspective that the research findings should be viewed.

Data collection methods

The data (both primary and secondary) used for these studies were mainly generated through online, virtual methods. This was necessary because the COVID-19 pandemic resulted in the closure of schools, limits on travel and social distancing rules. Therefore, online questionnaires, online focus group discussions and online interviews were some of the virtual methods used for data collection.

The development of an online questionnaire involves attention to processes that control coverage, non-response and sampling error risks (Vicente and Reis 2020). A questionnaire is a self-completion data collection device, completed by research respondents to gather information about their beliefs, thoughts, perceptions, attitudes, values, and both interactive and personal aims (Johnson and Christensen 2012).

Questionnaires are often arranged in segments that emulate the rationality of the sampling strategy and usually consist of an introduction, demographic background questions, practical questions and a few post-participation matters. The main benefits of surveys are their low costs and potential for swift data collection.

Ethics

In terms of ethics, the researchers clearly explained the purpose and nature of the study to participants. The researchers obtained informed consent from them prior to participation. Voluntary participation was adhered to, with participants told they were under no obligation to take part in the study. The benefits and risks of taking part in the study were well explained and

confidentiality of data ensured. Respondents were kept anonymous to avoid causing any undue harm.

Limitations

The following limitations to the study should be noted:

- The COVID-19 lockdown and protocols such as school closure, social distancing and travel restrictions usually prevented any form of physical visits and contact with the research subjects, thus leaving the researchers with the option of a virtual contact only.
- The ‘Commonwealth Researchers in Pursuit’ project aimed at developing young researchers; therefore, the researchers were ‘in training’ and not necessarily fully-fledged experts.
- The Commonwealth is diverse in linguistic terms and also in terms of education system, economies and politics. This imposed some inherent constraints on analysis of data from such diversity and trying to give a common meaning and interpretation of the data.
- The call for applications was of brief duration; therefore, a limited number of applications for participation were received from researchers. This reduced the number of eligible researchers and the number of countries that could be covered in depth.
- The timeframe of the research was short because research findings were needed quickly to make sense of the COVID-19 situation and to inform appropriate key messages, policies and recommendations suitable for crisis situations pandemic.

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Section I

Systemic Response
and Education Sector
Resilience

Chapter 1

Preparedness and Resilience of Education Systems to Address Multiple Threats: Pandemics, Hurricanes, Drought, Food Insecurity

Denise Gaspard-Richards with Albert Banunle (Ghana), Nancy Kuttoh (Kenya), Peter Mndalasini (Malawi), Olayinka Osuolale (Nigeria), Kopano Sebape (Malaysia), Parth Shah (India), Jhannel Tomlinson (Jamaica), Chloe Walker (Barbados) and Davies Wambwa (Zambia)

1.1 Background and Introduction

Since the first cases of the Coronavirus Disease 2019 (COVID-19) were confirmed in Asia in late December 2019, the virus has spread rapidly across the globe. It has impacted social and economic life in ways that have given new meaning to the expression ‘new normal’. Countries continued to feel the impact of the spread of the disease, with schools in 22 countries on three different continents closing their doors by mid-March 2020. This resulted in more than 290 million students not having access to education in physical classroom environments (UNESCO 2020).

Most national ministries of education quickly pivoted to emergency remote instruction for business continuity during the early phase of the pandemic, but questions have been raised about preparedness and whether teachers, school administrators, students and their parents were equipped for this move to online instruction (RAND Corporation 2020; UNESCO 2020c). Questions have pointed to the need for a unique skill set for educators and parents to transition successfully from teaching and learning in a face-to-face mode, given that pedagogical practices cannot transfer seamlessly to remote instruction.

Schools from early childhood to the secondary level have been impacted across many countries globally. While restrictions on movement continue to be gradually lifted in most countries, public education systems, in which classrooms are not designed for the three to six feet (1–2 metre) of physical distancing recommended as one of the measures to stop the spread of the virus, have been slow to respond. Hence remote instruction is likely to continue as the virus continues to spread. Some countries have provided the tools needed for students to succeed, including internet-enabled devices and emergency or ‘just in time’ training for teachers. However, without a robust online learning

platform or a co-ordinated and coherent professional development training programme in place, the results have been mixed. While research to assess the level of success is ongoing, recommendations are needed to assist the preparedness of national governments and civil society for their roles in the education system, to adequately address the threats faced in these countries.

Beyond the effects of the COVID-19 pandemic, the consequences of global warming and climate change have resulted in increasing vulnerability to the impact of severe weather systems and extreme events, such as Category 5 hurricanes. For example, the Caribbean country of the Commonwealth of Dominica was devastated by such a weather system in 2017, with the International Monetary Fund estimating the damage at 226 per cent of the country's gross domestic product (GDP) (Muñoz and Ötoker 2018).

The Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD), UN Children's Fund (UNICEF), World Food Programme (WFP) and WHO (2019) note that moderate or severe food insecurity is mainly evident in countries with low and middle incomes, and in every continent the prevalence rate is slightly higher among women than men. In the Caribbean, the state of food security has been described as precarious, given the region's location risk for tropical storms, hurricanes, earthquakes and droughts. When combined with high dependence on food imports, disaster risk and climate change impacts also affect nutrition when decreased levels of local production results in a tendency to consume processed foods. Given this impact, Ewing-Chow (2019) notes that the Caribbean must develop a strategic agenda toward improving agricultural climate resilience through modernisation, production, efficiency, scale and consistency. This includes provisions for technology use, strengthened infrastructure and innovation. The Ewing-Chow report notes the need for incentives and advocacy, along with initiatives in the education system, to encourage young people to join the agricultural sector. The FAO, IFAD, UNICEF, WFP and WHO report (2019) calls for action on economic and social policies in Africa and other Commonwealth countries, including guaranteeing funding of social safety nets and ensuring universal access to health and education. It calls for action, as well, to tackle inequalities at all levels through multisectoral policies in these societies.

The aim of the research that is the focus of this chapter was to identify ways to facilitate and support (in the first instance) the continuation of teaching and learning at the early childhood, primary and secondary education levels during the pandemic, and ultimately to meet the many threats that the education system faces from hurricanes, experiences of drought and other natural disasters. What do we need to know and do to ensure continuity of teaching and learning and the resilience of our education systems through the impacts of a natural disaster? What do we

need to know and do to minimise the impact of climate change and natural disasters on food security?

The physical, social and economic risks of natural disasters require adequate preparation to minimise their impact and increase resilience of the education system and sustainability of our environment to meet our physical needs.

The research objectives/key research questions were as follows:

- How can countries with common experiences develop the skill sets needed to manage physical and human resources effectively to mitigate or minimise adverse outcomes of natural hazards, and by extension build capacity for resilience?
- What are the mitigation strategies required to produce a cadre of persons who are able to lead and service programmes in the education system in the context of disaster risk management?
- How can countries with common experiences build awareness for the development of legislation, systems, policies and practices to adequately prepare for disasters, as well as response frameworks to strengthen resilience to meet such events?
- How can we best apply lessons learned from the impact of COVID-19 to education systems in the context of contingency planning?
- How can we use knowledge of best practice for the implementation and monitoring of resilience programmes at the community level?

1.2 Survey methodology and findings

1.2.1 Research design and methodology

For the purpose of this study, a mixed methods approach was used. This allowed a level of flexibility to accommodate the different areas of study and for convenience of data gathering in the circumstances of different regions. The principal methods used for data gathering were a review of existing documents and other online sources, and an online survey.

The document review utilised official reports on government websites, newspaper reports, statements by education experts and officials, and documents and other sources that provided accounts of action plans, contingency measures or other information on the mitigation of COVID-19 in the education system. Documents were sourced for five Commonwealth countries, namely Ghana, Jamaica, Kenya, Malaysia and Nigeria. The selection of these countries was based on the fact that the researchers resided in these countries and were familiar with the available sources, for ease of access to information.

The following groups were targeted for the online survey:

- parents (early childhood, primary and secondary);
- teachers; and
- education experts and researchers.

The selection of participants for the survey was made using a non-probability combination of convenience and purposive sampling techniques. As such, participants were selected on the basis of ease of access and perceived applicability of the views of the participants in relation to the purpose of the study. This approach was adopted due to the limited time available for this study.

The sampling process involved sending invitations through contacts to representatives of the key groups – parents, teachers and education experts and researchers. A concept note detailing the background to the study and key questions related to the research objectives was sent to all potential participants. Any parent, education expert or researcher who accepted the invitation to participate in the study was included in the sample.

Data for the study were collected from both primary and secondary sources. Secondary data for the study were obtained from national records, including government sources of published and unpublished reports, press briefings and statements, as well as policy documents regarding the COVID-19 pandemic, response measures, and impact on and resilience of education systems of the study countries. Secondary data were collected via document analysis and a desk review of reports. Primary data, on the other hand, included data on the views of education stakeholders on the response of education systems to the COVID-19 pandemic. The survey utilised semi-structured questionnaires disseminated to participants using Survey Monkey. Consent was obtained from participants for the use of data.

This study was limited by constraints on the timeframe allowed for research to be conducted. Furthermore, the changing frames of reference as the COVID-19 pandemic moved through its phases and impacted countries with varying levels of severity may limit the call to action for immediate responses.

1.2.2 Literature review

Background

The notion of ‘education in emergencies’ (EiE) may encompass a wide range of human-made crises and natural events, including global emergencies such as the COVID-19 pandemic. International agencies such as the Inter-agency Network for Education in Emergencies (INEE), the World Bank and the

United Nations, typically play a major role in the recovery process, as local governments often lack available resources. The provision of education in emergencies is premised on the universal right to education for all persons (UN 1948), as well as several international law provisions which guarantee the right to education in crises (Anderson et al. 2011). Emergency situations intensify the challenges of providing quality education and often exacerbate existing inequalities for vulnerable groups, including girls, the economically disadvantaged, rural communities, refugees, and those with disabilities. The ongoing COVID-19 pandemic has led to unprecedented disruptions to formal education systems across the globe, with up to 1.5 billion students, or 91 per cent of students, forced to be out of school during the month of April 2020 (UNESCO 2020a). There is an immediate need systematically to assess the successes and limitations of previous responses to crises, while simultaneously building resources and knowledge on the best way forward. It is imperative that we can prepare global education systems at all levels to better meet the needs of learners, families and educators in the next crisis.

Past emergencies/crises

Access to quality education is one of the human rights for all, aimed at improving everyone's opportunity to make the most of their lives (Krafft 2012; UNESCO 2013). School enrolment is vulnerable to significant negative impacts from natural disasters, particularly for the poor and those in developing countries (Kousky 2016). Preparations based on previous crises caused by natural disasters are key to the attainment of education for all. These include standardised provision for school facilities; hazard-specific water and sanitation facilities; and child protection (Castro Osorio and Culma 2018). Winthrop (2020) notes the response of education systems in past crises and advocates the following strategies as good practice for education in emergencies: *mobilisation of education networks to disseminate life-saving public health messages; planning for school closures to last months, not weeks; considering unintended consequences and finding ways to mitigate these; building schools back better.*

Developing skills to minimise effects of crises

Government ministries and education departments ensure the development of skills necessary to minimise the effects of crises on education, especially those that may require specialised skills in the management of the impact of natural occurrences (Haraldseid-Driftland et al. 2019). School management and teachers are trained in lifesaving skills, social and emotional learning, and psychosocial activities (Bouck 2010), with the goal of achieving holistic development of children's social, emotional, cognitive and physical needs (Kofinti et al. 2020). Also, community training and sensitisation on child

protection is carried out to enable responsible individuals and the public to meet the needs of the education sector (Pareek and Rao 2005).

Strategies for capacity building

Governments and non-governmental organisations develop strategies for capacity development to deal with the impact of natural occurrences and disasters (Sandanam et al. 2018). This aims at enabling the state and organisations to manage human resources, teaching methods and finances during and after disasters (Ofei-Manu and Didham 2017). In most cases, capacity issues and priorities depend on a country's own level and path of development (Winkler and Rajamani 2014).

Building awareness

Strengthening community involvement and participation in developing legislation and policies represent a strategy that states and NGOs use in managing education systems in regions that are prone to natural disasters (Prasad et al. 2015). Creating disaster risk management committees and developing skills to provide technical and political assistance to disaster managers are also necessary. Other stakeholders also provide a framework to enable state and community to work together (Britton 2007; Kim and Sohn 2017). Building public information and social mobilisation involve planning activities and gathering data on the vulnerability of departments within the education sector. The examination of existing policies pertaining to education systems is also useful (Keim 2011). Participatory appraisal also reviews existing plans, the role of teachers and students in disaster management, and the development of the school curriculum as it relates to disaster preparedness (Sujata 2010).

Distance learning, best practice and lessons learned

Although appropriate responses to education in emergencies are highly context-dependent, there are several broad approaches which may be applied across regions and different types of disaster risk. Some of these include prioritising support to teachers, community-based schools and psychosocial interventions (Burde et al. 2017); flexible teacher training programmes (Joyner 1996); Inter-agency Network for Education in Emergencies' (INEE) minimum standards; and UNICEF's 'School in a Box' initiative. Burde et al. (2019) also recommend a focus on access to vulnerable groups, quality of learning and well-being as the three core pillars of education in immediate post-emergency situations. Most notably, the INEE's minimum standards outline 19 standards across five domains, namely, *foundational standards*, *access and learning environment*, *teaching and learning*, *teachers and other educational personnel*, and *educational policy* (INEE 2010).

In a recent report, UNESCO (2020b) listed several lessons learned from the current crisis and past emergencies. These include managing the 'distance' created by remote learning processes; adjusting and increasing formative assessments as a form of continuous monitoring and evaluation; training teachers in distance learning pedagogies; supporting vulnerable and disadvantaged groups; increasing the technical and technological capabilities of distance learning; supporting open access to educational resources; adjusting the curriculum to promote the psychosocial needs of learners; ensuring data and inclusion; and protecting the data of students and educators. UNESCO (2020a) also suggests several distance learning solutions that could help to support learners disrupted by COVID-19 and other crises.

However, there are also challenges. Saavedra (2020) in an Education for Global Development blog noted the immediate impacts on children and youth. These include the loss of learning opportunity, increased school drop-out rates and the possibility of children having to miss their most important meal of the day because of not being in school. Some countries have worked to ensure that negative impacts do not become entrenched. UNICEF (2020) identified Nigeria as one of the countries that had transformed to support children in remote learning. Jamaica's efforts at all education levels have also been highlighted for that country's use of national public television, radio, online platforms and WhatsApp to ensure that students at all levels have access to learning.

Monitoring and evaluation

Monitoring and evaluation (M&E) is used by governments across the world to improve school systems and educational results, and to play an integral role in holistic education transformation coupled with building the resilience of education systems to natural disasters (Oromaner 2018). States and development partners in the education sector use well-developed M&E systems to measure not only the outputs, but also the outcomes of the education sector (Holvoet and Inberg 2014).

1.2.3 Findings

Findings – secondary sources

As stakeholders in the education system cope with the COVID-19 crisis, the response had eased at the time of writing, from total lockdown to attempts at reducing loss of learning and re-opening in limited ways to facilitate promotional examinations. The documents reviewed indicated several mitigation strategies in effect in the country studies, for short- and medium-term recovery, and the ultimate sustainability of the sector in terms of risk management. Strategies to close the inequality gap and allow all children

access to the same opportunities in the education system, building resilience in the process, were evident in the four main themes that emerged from the document review. The themes that emerged were as follows:

- focus on capacity-building strategies;
- contingency planning;
- systems and policy development for disaster preparation; and
- strengthening resilience.

In addition, the review identified best practice for implementation of resilience programmes across the country studies. The findings and discussion provide insights into applying lessons learned that can inform a way forward.

Capacity building and contingency planning

In **Ghana**, the Ministry of Education developed a COVID-19 Coordinated Education Response Plan (2020). The plan presented three strategies to address school closure, as follows:

- Strategy 1: Closure of schools to meet the immediate and short-term need – four to eight weeks;
- Strategy 2: Closure of schools over the medium term – three to nine months; and
- Strategy 3: Closure of schools over the long term – 2021 and beyond.

The ministry also reviewed existing infrastructure to assess its ability to deliver content and facilitate distance and remote learning via various modes to as many students as possible across the grade levels in primary and secondary schools. The ministry determined that radio, television and the internet would best serve the needs of students. The strategy for leveraging these different media included partnering with other government agencies, such as the Centre for National Distance Learning and Open Schooling (CENDLOS), to provide access to content and an appropriate learning management system. The plan identified the need for strategies to support the poorest and most marginalised children, to ensure that ‘no child was left behind’. Importantly, the plan also prioritised learning for the most vulnerable children and those with special needs, including the provision of learning devices/equipment and connectivity where possible, accessibility of instruction/language of instruction (sign language, subtitles, sending of recorded lessons), and supporting caregivers/parental engagement to encourage learning as well as help plan the structure and routine to facilitate learning. The informal sector, where out-of-school children are engaged in learning, was also to be considered for inclusion by the ministry.

In **Jamaica**, the government has been actively pursuing capacity-building and planning strategies to develop resources and promote services to mitigate the impact of the present crisis that will also be sustainable in the event of any other crisis. These strategies, which are sector specific, included the following:

- the Jamaica Teaching Council partnered with a private educational services provider to train teachers using webinars to familiarise them with use of online platforms for learning continuity;
- the Ministry of Education, Youth and Information (MOEYI) developed an e-instruction monitoring toolkit to ensure schools could function efficiently while offering opportunities for remote learning; training was also provided for teachers on e-leadership, e-teaching and e-testing;
- students without internet service have been provided with access to a learning management system through a zero-rated data service plan;
- the ministry pre-recorded content for use by the national public broadcasting company to ensure broadcast of materials in line with the national curriculum; and
- the national Early Childhood Commission developed a dedicated webpage for children 0–5 years old (<https://ecc.gov.jm/covid-19-corner/>) with lesson plans, storytelling and tips for parents.

In **Kenya**, the Ministry of Education developed a three-pronged approach to ensure uninterrupted learning with adherence to COVID-19 prevention guidelines. The three approaches entailed digital learning, the introduction of radio and television programmes for primary and secondary school students and improving water and sanitation infrastructure and knowledge on health and hygiene. In a June 2020 presentation, Grace Maina outlined the role of the Kenya Institute of Curriculum Development (KICD) in strengthening the Kenyan Education Cloud and the development of online content to revamp the lessons delivered via television and radio through the KICD EDU channel. There were also enhanced media partnerships to ensure the long-term transmission of educational programmes. A gender-sensitive COVID-19 response plan was developed by the ministry that recognised the need to focus on the most vulnerable learners, including children living in remote places, situations of hardship, those in poor urban informal settlements, ethnic minorities, the internally displaced, children and youth living with special needs, and children in refugee camps. According to Maina's presentation on the work of KICD, a technology company provided tablets for children in informal settlements and UNICEF offered support to children in refugee camps.

Proposed interventions for Kenya post-COVID-19 involve the following:

- building the capacity of teachers to use remote learning methodologies;
- supporting decentralised access to connectivity;
- establishing linkages with line ministries to ensure provision of electricity and renewable energy in rural areas;
- refurbishing school facilities and enforcing compliance with safety and security standards of school infrastructure;
- providing psychosocial support to manage the psychological impact of COVID-19 and future crises;
- lobbying community support for girl-child education and providing support to vulnerable learners, including those with special needs; and
- recruitment of additional teachers, including those serving on contract terms in understaffed schools.

With the declaration of a pandemic and the importation and spread of the coronavirus disease, **Nigeria** developed an Education Sector COVID-19 Contingency Plan (2020). The plan presented three scenarios and attendant strategies to address school closure, as follows:

- Scenario 1: Closure of schools for a period of one month during which teaching and learning would continue via homework or take-home assignments;
- Scenario 2: Closure of schools for a period of one to three months, with teaching and learning continuing via online and audio-visual methods; and
- Scenario 3: Closure of schools for more than three months, during which there would be digitisation of curricula, radio, TV and provision of self-learning instructional materials based on the national curriculum.

The plan also identified the need for parents and teachers to be reoriented to access resources for teaching and learning. However, the authors of the plan identified challenges, including the inability of parents and the community to provide adequate support for learning if they were not well equipped. Moreover, rural areas were at a disadvantage.

Given the challenges, individual states in Nigeria introduced mitigation strategies, while also building capacity for long-term sustainability in the event of any future disaster or crisis. In an April 2020 article in *The Guardian* newspaper, Omiko Awa discussed measures taken by the Lagos

State government to ensure learning continuity (Awa 2020). The state used radio and television as the main platform for education officials to reduce the effects of learning loss for students in some of the schools in Lagos. To supplement this measure for children who were unable to access learning via radio and television, WhatsApp could be used to receive instructional content. This method involved parents receiving the educational content via their phones, for delivery to their children.

Business entities also contributed to capacity building in Nigeria, through the distribution of smartphones, along with the installation of solar panels at central locations within villages and communities. The solar panels provided a measure of sustainability, charging smart phones across the state of Lagos so helping children continue their education during the COVID-19 lockdown period. This strategy was also planned to supplement and enhance learning when schools were able to reopen (Leung 2020). This initiative, a tripartite arrangement between the technology company KaiOS Technologies, an innovative Nigerian research and development company (Robert and John Ltd), and the Lagos State government, demonstrated best practice for capacity building, meeting the needs of low-income families and building resilience in communities.

Systems and policy development

In **Jamaica**, the Ministry of Education, Youth and Information led the systems development process for transition to remote teaching and online learning as part of its crisis response to COVID-19. The ministry instituted a national timetabling system for mixed-mode teaching strategies, which included a schedule for delivery of educational content via television and radio programmes. The core subject areas of emphasis were English language and literature, mathematics, science, social studies, and history. The ministry also started digitising some of its processes, including the registration of new students at the Grade 1 level, attendance and accountability measures; and the implementation of a learning management system for all schools to support teaching and learning. To complement the initiatives, teacher training to further build the skill sets needed for digital transformation was due to continue into 2021 (IDB 2020).

Stakeholder engagement is an important and critical input driver for systems and policy development in any country, irrespective of the existence of a crisis. In **Kenya**, different educational bodies and stakeholders in the health sector embarked on country-wide consultations on how best to adjust nationally to the 'new normal' of living with the effects of COVID-19. The result of these consultations was a call on government to preserve employment, prioritise teachers' and learners' health and safety, and provide sufficient professional support and training to ensure continuous learning. As

a result of the surge in numbers of COVID-19 cases, especially in the months of June and July 2020, the need to safeguard learners drove the Ministry of Education, in consultation with the Ministry of Health and other education stakeholders, to declare the 2020 school calendar null and void. The reopening of primary and secondary schools had been postponed at the time of this study to 2021, with a phased reopening of colleges and universities. Learners would remain in their current classes in 2021, a move that was supported by teachers' unions and parents' associations (KNUT, KHRC, UASU and KMPDU 2020).

Kenya's experience of systems and policy development also highlights a role for parents in the Competency Based Curriculum (CBC). The CBC, which was launched in 2017, emphasises the development of skills and their application to real-life situations. Even before the COVID-19 pandemic, Kenya had made headway in implementing this approach to delivery of instructional content. The CBC offers opportunities for resilience building, by helping learners 'own' their learning, and enhances the role of the parent in learning. In this context, parents were considered a primary target in embracing online teaching and the use of multimedia elements in learning as part of the 'new normal'. When coupled with the CBC, this approach has potential to harness the time at home to equip learners with non-academic skills that contribute to holistic development (eLimu 2020).

In **Malaysia**, where the pandemic affected the administration of promotion and final examinations, the Ministry of Education postponed the examinations to late 2020 or early 2021 in some instances. The Deputy Director for Research and Development at Strengthening Human Right and Peace Research- South East Asia (SHAPE-SEA), Mariam Othman, in an online op-ed (2020) noted consideration for use of an alternative assessment tool. In common with most countries in this study, the ministry developed and promoted the use of e-learning platforms so that teaching and learning could continue.

All these measures were intended to support teachers and to ensure that no student was left behind.

Best practice for resilience

The strategies adopted by the countries show similarities, such as the rapid expansion of access to remote learning via radio, television and use of online learning management systems, with focus on communities with unequal access. Also noted among measures and strategies were collaborations between education ministries, private service providers and NGOs to provide access to smart devices, wireless networks (such as Wi-Fi), and solar energy sources within villages and communities in an effort to ensure learning

continuity; provision of teacher training opportunities for delivery of instruction in multiple modalities; parental involvement; and monitoring and evaluation. In the context of best practice, these strategies have provided the countries with a recommended way forward for implementation of resilience programmes.

Looking ahead to a post COVID-19 era in **Nigeria**, the state Permanent Secretary for Lagos Education District 1 was reported on 25 June 2020 to have advised teachers to work on their mentoring skills and expertise. Furthermore, they should demonstrate endurance and tolerance when they returned to in-person teaching in schools, in order to cope with students who were lagging behind because they could not access the opportunities provided through online teaching (Akoni 2020). In a report of the webinar proceedings, Permanent Secretary Barrister Solarin stressed the need for teachers to seek out relevant knowledge and skills acquisition to sharpen and broaden their expertise. The remarks point to the need for psychosocial support to teachers, and training to assist with the national response to build resilient programmes.

In regard to knowledge-based strategies for decision-making, an NGO in Nigeria, Sustainable Education and Enterprise Development (SEED), has been providing inclusive solutions to assist schools that serve children from low-income families to build lasting pathways to education quality. SEED conducted an overview of school resilience in Lagos State, with school owners/leaders using a strengths, weaknesses, opportunities, threats (SWOT) analysis to build a picture of what is at stake for most of the low-cost private schools in Lagos State that serve vulnerable children. The data assisted the entity to further develop its action plan for service and strategies to mitigate the effects of disruption of education on vulnerable children in the communities during and post-COVID-19. An anonymous comment in response to the strategies presented by SEED is noted below:

The analysis and recommendations here is a worthy cause for all stakeholders either private, public or international body. Most especially Nigerian private investors should see these recommendations as a clarion call to assist low-income education providers (SEED, 2020).

In a news briefing of 7 May 2020, the US Embassy and Consulate in Nigeria noted that UNICEF, in collaboration with USAID and the Bauchi State Education Board in Nigeria, had provided opportunities for continuing education through radio and television. Teaching resources were also being developed in the local languages/dialects. This was in keeping with the UNESCO recommendation for the use of distance learning programmes, open educational applications, and platforms by schools and teachers to reach learners remotely. Further, Northern

Education Initiative Plus (NEI Plus), a USAID-funded programme designed to strengthen the ability of Bauchi and Sokoto States to provide quality education and improve children's reading skills, presented a plan to further support the education system (Fugate 2020). The NEI Plus team was at the time of writing, producing interactive voice response (IVR) programmes focused on social-emotional learning for distribution over television, radio and cellphones. The programme is designed to build the interpersonal skills of parents and teachers and help them to recognise and deal appropriately with signs of stress that may be a result of the pandemic. These activities highlight the benefits of co-operation, collaboration and support from international partners that can promote resilience-building in communities where needed.

In **Kenya**, the COVID-19 pandemic has exposed the robustness of Kenya's education system's capacity to train and build skills and competencies. It has also highlighted monitoring and evaluation as an important measure for assessing the effectiveness of its mitigation strategies during the period of lockdown. In Grace Maina's June 2020 presentation, previously mentioned, she outlined the Kenya Institute of Curriculum Development (KICD) strategy for conducting an online survey to assess the uptake of education channel broadcasts among stakeholders. The findings suggested that many students were not accessing the lessons, either because they were out of broadcast range or they did not have the necessary equipment. The findings of the survey yielded important information for determining mitigation strategies to serve communities most in need.

In **Jamaica**, provision of social services was highlighted as being critical to building resilience during implementation of mitigation strategies. The Ministry of Education, Youth and Information used the education system to roll out a model of support to its Programme of Advancement through Health and Education (PATH), which is the government's flagship social protection programme. Support is provided to PATH beneficiaries (including preschool-age children) through cash transfers to purchase food. The National Parenting Support Commission also partnered with UNICEF to provide helplines to offer psychosocial care to parents across Jamaica and advice for protecting families and communities (IDB 2020).

In **Ghana**, the need for psychosocial support, protection and prevention/management of gender-based violence is presented in the COVID-19 Coordinated Education Response Plan (2020). However, the ministry noted the need for these support services to be provided via remote learning modalities. The plan discusses the use of tailored community engagement programmes delivered via radio and the Ghana Learning TV, with teachers and heads of schools obtaining materials via these means and through WhatsApp to prepare them to provide the support needed.

Findings – online survey

The survey instrument contained six open-ended questions on the following themes: i) infrastructure needs for government-run schools to adapt to the shift to online teaching and learning; ii) the skill sets required by educators to adapt to changing needs in the education system; iii) some of the short-term challenges that countries faced while implementing online teaching and learning; iv) best practice that could be adopted by countries for mitigating the adverse impact of natural disasters; v) key inclusions in national education policies or frameworks for resilience and effective response to natural disasters; and vi) the role(s) that international agencies, intergovernmental organisations and non-government organisations could play to support education systems globally, during times of crisis.

Infrastructure needs

Student respondents indicated the need for provision of reliable and affordable resources for access to the internet, and for technical and pedagogical support to teachers and students in the education system. An NGO administrator identified similar needs, while indicating the need for increased broadband capabilities which could be achieved through partnerships between government and telecommunications providers, especially in rural areas. A common theme among respondents was the need for accessible internet for the population.

Skill sets of educators

In providing responses on the skill sets required by educators to adjust to changing needs in the education system, student group respondents identified training of teachers in information and communication technology (ICT) and pedagogical skills to deliver the syllabus in an engaging manner in an online environment. The teachers who responded also identified ICT skills. Good communication and time management skills were also among skills needs identified by respondents.

Challenges to implementation of online teaching and learning in the short-term

The main challenges identified to implementation of online teaching and learning in the short term during the pandemic included inadequate internet service and IT infrastructure. The teacher group indicated accessibility as a major challenge, particularly among marginalised groups such as the rural poor, and the lack of resources such as computers. Some student group respondents identified the degree of readiness of students, and their inability to adjust to new ways of learning, as a challenge.

Best practice for mitigation of natural disasters

With regard to best practice for mitigating the adverse impact of natural disasters, both the student group and the teacher respondents indicated the need for adoption of practices that focus on population education and information about safety and disaster mitigation and management. Further, the student group suggested adoption of measures to improve food security and self-reliance, along with economic diversification, with the latter suggestion supported by the NGO administrator. In addition, the development of a stimulus package to help the population cope better with disasters was suggested by the student group and teacher respondents. Collectively, these two groups also advocated for the enforcement of policies and laws which positively impacted health and safety.

National education policies and frameworks – key inclusions

In the area of measures to be included in national education policies or frameworks to help build resilience and effectively respond to crises such as COVID-19, a common theme among respondents was the need for measures to allow for learning to continue remotely during disasters. These would include mandating IT infrastructure improvement and resources made available to implement these measures in an equitable way across the education system. Respondents also indicated that the improved education system must cater to the needs of all categories of students, including those with a disability. Further, the student group respondents indicated that policies and frameworks must contain measures to promote improved safety and hygiene practices throughout education systems, and countermeasures to limit the spread of disease.

Role of international agencies and NGOs in support of the education system globally

The importance of funding was underscored among the majority of respondents when asked about the role(s) of international agencies, intergovernmental organisations and non-government organisations in support of education systems during times of crisis. The NGO administrator indicated that these organisations were expected to play a role in the provision of educational resources and funding to implement their introduction. Further, the administrator indicated that these agencies could serve as ‘connectors’ for the stakeholder engagement required to inform the development of policy for the education system. The roles identified by both student group respondents and teachers included the need for technical support and expertise for the development of online learning resources, IT skills training and improvement in ICT infrastructure support in schools, especially in marginalised communities. Funding to deploy resources such as learning aids, hardware such as computers and other devices to reach the marginalised populations, were also indicated by the student group respondents.

1.3 Challenges and lessons learned

A way forward

From the literature review, it can be concluded that education systems must be prepared to face emergencies of different types. Disruptions caused to the lives of millions of children and their families necessitate proactive and decisive efforts from policymakers and key stakeholders. Education in emergencies is best mitigated by prior planning for any inevitable occurrence, and subsequently attending to particularly disadvantaged groups, students' psychological well-being, leveraging community low-cost and low-tech solutions, sustaining flexible teacher training, and introducing intensive monitoring strategies.

The challenges to moving forward include intensification of inequality in situations where children do not have essential tools, including learning resources, internet connectivity or supportive parents (Saavedra 2020). As stakeholders cope with the crisis, the literature reviewed here suggested that mitigation strategies must include consideration of recovery, and an understanding of how to close the gap that prevents all children from having equal opportunities in the education system.

Lessons learned from secondary sources

In **Jamaica**, The UNESCO Cluster Office for the Caribbean (2020) reported that the COVID-19 pandemic had resulted in unprecedented education disruption in the small island states of the Caribbean. The majority of governments in the English and Dutch Caribbean have temporarily closed their education institutions in an attempt to reduce the spread of the disease. Through partnerships with organisations such as UNESCO, support has been offered to Caribbean small island developing states in helping to facilitate learning continuity. Such partnerships have assisted in the creation and execution of webinars to guide governments, education institutions, schools and teachers on how to sustain education in these times, as well as to prepare stakeholders for the post-COVID-19 era.

Kenya has received WHO recognition for its COVID-19 status reporting. With daily updates of descriptive statistics of the disease, the country has had a steady information flow that has allowed adequate planning and decision-making in education systems. The importance of reliable data as part of knowledge management cannot be over-emphasised. To ensure that lessons learned during the COVID-19 pandemic led to sustainable development, the education system must infuse these lessons as part of day-to-day learning through the KICD. This should produce a cadre of persons who are able to lead contingency planning and disaster risk assessment and management from a position of knowledge.

Lessons from the **Kenyan** response, as highlighted in the June 2020 presentation on the KICD, show many opportunities for a way forward. Maina (2020) suggested the following:

- use of online, distance learning and multimedia elements as another ‘new normal’ approach to learning;
- including parents as the primary target and initiating strategies to support them;
- harnessing time at home to build non-academic skills in children for holistic development, for example, engaging in age-appropriate chores; and
- developing psychosocial programmes with sessions that include examples of resilience building, such as following a daily routine to help children ‘own’ their learning.

Despite the existence of systems that have been vital to mitigation strategies, some countries have no national disaster management plan in place. Such a plan has the potential to provide the legal platform for collaboration, participation and resource mobilisation that is necessary for management of disasters, risk assessment, early warning, harmonised command structures, incident protocols and information flow during disasters. This would complement existing systems and strengthen resilience.

Ministries of education in the countries studied have played a role in monitoring implementation plans that have responded to learning needs. However, these will need careful evaluation to improve the plans should the closure of schools last longer than expected. Monitoring and evaluation tools will need to be developed to evaluate the measures being implemented during and after the COVID-19 pandemic.

1.4 Discussion and recommendations

Insights emerging from the review of source documents supported the literature review, highlighting the need for proactive and decisive actions by policymakers and key stakeholders. There was support for the view that emergencies and crises that impacted the education system were best mitigated by preliminary planning for any inevitable occurrence. With such plans and resources in place, ministries of education could quickly pivot to measures and strategies to mitigate the impact of COVID-19 on disadvantaged groups.

The themes explored suggest the need for effective school management and training of teachers to facilitate support for the social and emotional learning needs and psychosocial activities of students. However, the type

of response in regard to capacity building depends on the country's level of, and path to, development. The issues identified were multidimensional and complex, and related as much to broader societal challenges and systemic issues as they did to training and skills development, and technology transfer in sustainable ways.

In the documents reviewed there was evidence of the need to:

- acknowledge and support students' socioemotional and psychological well-being;
- leverage communities by providing low-cost and low-tech solutions;
- engage stakeholder business entities, community groups and external donors for collaboration and partnerships to ensure access to scarce resources;
- ensure the sustainability of flexible teacher training opportunities;
- introduce intensive monitoring strategies; and
- intensify the response to inequality of opportunities in the education system.

As noted by Saavedra (2020), where children do not have the tools, learning resources, internet connectivity or supportive parents, consideration must be given to ways in which to close the gap of inequality in opportunity in the education system, among the mitigation strategies.

Stakeholder collaboration, local and international, has emerged as a viable means of providing support, and catering for the learning needs of students. However, sustainability explicitly needs stakeholder collaboration, with regional umbrella bodies collaborating with respective governments, to formulate policies and build systems that will be responsive to the needs of countries with common experiences. These umbrella bodies, in liaison with respective governments, can draw different skills, competences, and physical and human resources from member countries to mitigate the effects of natural hazards, emergencies and crises in these countries.

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Chapter 2

How Governments Positioned, Activated and Supported Public Institutions in Multi-Pronged Efforts to Contain COVID-19

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2.1 Introduction

This study investigated how the governments of India, Kenya, Nigeria, Sri Lanka, Tanzania and Zambia implemented mitigation measures to ensure the continuation of teaching and learning across the schooling system in attempts to contain the COVID-19 pandemic. It interrogated government policies by country and invited government officials to respond to open-ended questions. The study also surveyed teachers and parents.

2.2 Background and context

The COVID-19 pandemic and associated rapid spread of the virus compelled many governments to declare a national state of disaster. Some countries implemented a series of regulations and protocols to mitigate the spread of the virus. These regulations governed learner access across education sectors – both formal and non-formal – and cut across educational subsectors, from pre- to post-schooling.

With the protocols in place, the need for social distancing was paramount and required educational institutions to ensure they functioned optimally. A range of preparations ensured some form of functionality. Almost invariably, many national interventions relied on digital media, despite contexts where digital divides were prominent.

There is a class dimension to how severely COVID-19 has impacted teaching and learning, since many 'saving the school year' interventions relied on parents teaching their children at home, or on remote teaching. In the absence of parents having the necessary digital skills, or having low literacy/education levels, some parents were consequently unable to participate

in such interventions. The varied levels of teachers' digital skills also had a negative impact on children's learning.

Much of the literature on COVID-19's impact on education reports on the way in which socioeconomic problems present in the education sector pre-COVID-19 were exacerbated by the pandemic. The focus on the socioeconomic impacts of the pandemic stresses that, while being a significant health danger, the virus has also had social ramifications, making it more than only a medical (physical and mental) risk. This in turn emphasises socioeconomic implications which threaten international social cohesion and cohesion within societies themselves. The argument is that there have been high levels of social disruption – far greater than those recorded during the last great pandemic: the Asian flu outbreak of 1968. As the global experience with COVID-19 shows, no country was adequately prepared for the pandemic, regardless of their development level (OECD 2020; WHO 2020; Lopes and McKay 2020).

2.3 Survey methodology and findings

2.3.1 Survey methodology

Three digital surveys (using Google Forms) were developed for: 1) ministries of education, 2) teachers and 3) parents. The surveys contained a combination of qualitative and quantitative questions. The administration of digital surveys during the pandemic was considered a suitable method. To obtain participants' consent, the purpose of each survey was clearly stated prior to administration and electronic consent was required from all respondents. Respondents were aware that they could cease participation at any point. The administration of surveys to parents was conducted by telephone, with the researcher asking the questions in the target language. The researchers then completed the survey questions on Google Forms. This accommodated parents who could not read and compensated for translating the survey into the many respondent languages.

These two approaches were used to explore the research questions which follow. Key research questions:

- What impact has COVID-19 had on education from the pre- to the post-schooling sectors?
- What mitigation strategies have been put in place to keep the education subsectors functional? What are the achievements and challenges of such interventions?
- In what way will the lifting of the lockdown (in countries that utilised lockdown) need to be managed across educational

institutions as learners return to the various educational institutions? What auxiliary services need to be put in place to make this happen (e.g. school transport, socio-psycho support)?

- What training needs to be put in place for all role players engaged in the return-to-institutions to assist education recovery?

The study commenced with a research team representing two continents from six Commonwealth countries: India, Kenya, Nigeria, Sri Lanka, Tanzania and Zambia. The team was established on 16 June 2020, when the researchers were introduced and informed of the research plan. The team consisted of seven researchers, two peer reviewers, one support co-ordinator and the lead researcher. All team interactions and fieldwork were conducted virtually. Two main methods of research were employed: desk studies to explore the policy context in each of the countries and digital surveys.

2.3.2 Literature review

Through a review of policy-related literature, the researchers identified models and policies in place in the six countries with regard to education during the pandemic. They were thus able to provide a backdrop to how governments and educational institutions are endeavouring to save the academic/school year in line with government regulations.

2.3.3 Findings

The following section presents a review of the education ministries' strategies for dealing with COVID-19 in India, Kenya, Nigeria, Sri Lanka, Tanzania and Zambia and the findings of the surveys conducted in each country. Each country study refers to a policy analysis of what was done in each of the countries. This analysis is followed by the survey findings conducted with officials from the various ministries of education, teachers and parents. A total of 12 ministry of education responses, 24 teacher responses and 36 parent responses were received.

India

The first COVID-19 case in India was detected on 30 January 2020 (Reid 2020). Government declared a 'notified disaster' on 14 March 2020 (UNICEF 2020). A 21-day national lockdown to control the spread of COVID-19 infections was imposed from 25 March 2020. The lockdown meant the interim closure of educational institutions (schools, universities and training institutes) across the country. Although introduced as an interim measure, educational institutions remained closed at the time of the survey and this continued to impact the learning of an estimated 320 million students (UNESCO 2020).

Besides the disruption to learning, the spread of COVID-19 caused the postponement or cancellation of high-stake examinations required for progress and promotion of students at critical stages of learning (KPMG 2020).

Private schools were permitted not to collect school fees during the lockdown period, as families were under financial distress due to economic downturn caused by the pandemic (The Hindu 2020a). Due to school closures and lack of income from over-time, several private low-budget schools feared permanent closure – putting a large number of teachers and support staff at the risk of unemployment (Baruah 2020). To respond to these issues, the government launched digital education initiatives and policy measures providing relief to students, parents, teachers and other stakeholders.

Mitigation strategies and challenges

To mitigate the impact of COVID-19, the Ministry of Human Resources and Development (MHRD) launched *PM e-Vidya*, a comprehensive digital campaign aimed at bringing together all online, digital and on-air education (The Times of India 2020a). Under the banner of the *Aatmanirbhar* (self-reliant) campaign launched in response to the pandemic (My Gov 2020a; Government of India 2020), key features of the education sector initiatives¹ are highlighted below.

1. *Diksha*, one nation one digital platform, is a repository of over 80,000 content pieces for different grades, curricula and subjects. Available in 18 languages, the platform provides QR coded energised textbooks for all grades, a massive open online course (MOOC) and content for student assessments and professional teacher development (Diksha 2020)
2. *Swayam Prabha*, one class one channel, provides content through 32 channels via direct to home (DTH) services throughout the country (Swayam Prabha 2020). With a focus on providing one channel per grade from Standard 1 to Standard 12, the aim is reaching stakeholders who have Internet access (MHRD 2020).
3. The extensive use of radio, community radio and podcasts to provide educational content.
4. Specialised e-content for the visually impaired and/or hearing impaired provided through the National Institute of Open Schooling (NIOS) via content developed in Indian sign language and audio books.
5. The top 100 universities were to start online courses by 30 May 2020.

In addition, *Manodarpan*, an initiative to support the mental well-being of students, teachers and families was also launched (MHRD 2020). In terms

of learning outcomes, a new national curriculum framework (NCF), a pedagogical framework to develop and attain twenty-first-century skills and the national foundational literacy and numeracy mission to attain learning levels and outcomes in Standard 5 were launched.

States and union territories were expected to modify and develop these resources to suit local needs.

To support digital initiatives across educational institutions, the central government launched *Pragyata*, a document providing guidelines for digital education and taking into account households that did and did not have access to digital infrastructure and suggesting suitable modes of teaching-learning (MHRD 2020).

The move toward digital learning demonstrated the digital divide (which includes inequality in terms of physical access to technology as well as the lack of skills and resources required to engage in learning) that exists within Indian society. The lack of access to resources like physical devices such as computers, smartphones and electricity prevents students in lower socioeconomic sectors from benefiting from online learning (The Economic Times 2020; Kulkarni 2020; Muneer 2020). Only 24 percent of Indian households have access to the Internet and that number drops to 12.5 percent when it is a household with students (Kaur and Jain 2020).

Private schools and universities began conducting online classes through various digital platforms such as Zoom, Google Meet and Microsoft Teams (Sharma 2020c) before the launch of the *PM e-Vidya* campaign. This indicated how students from higher socioeconomic backgrounds were able to access and engage in digital learning in comparison to their counterparts in government or low-budget private institutions, who initially had no access to teaching and learning content until the launch and promotion of government initiatives.

Due to the digital divide, there was some resistance to online or digital learning among education stakeholders such as teachers, parents, and policymakers as it seems to widen the divide and weakens the constitutional purpose of providing access to quality education. It has also been a learning curve for teachers expected to prepare and deliver classes through online platforms. The teachers faced numerous issues in terms of controlling students, poor attendance, incomplete formative tasks and connectivity issues (The New Indian Express 2020a).

Although various digital initiatives to support student learning exist, India's large population is characterised by diverse sociocultural and economic backgrounds and the country must provide better digital infrastructure to support its young growing population.

Next steps

The MHRD was at the time of the survey, preparing guidelines for the reopening of educational institutions. State and union territories were to adapt and modify these guidelines based on their local situation. The MHRD had informed the state and union territories' education secretaries to seek parents' opinion about when they will be comfortable with schools reopening, as well as their expectations from institutions once they begin to function (Sharma 2020a). Suggested measures included no assembly sessions or large gatherings in schools and universities, wearing reusable masks and using sanitisers as/when required, maintaining a distance of at least one metre from others at all times, and a staggered attendance of students (Sharma 2020b; My Gov 2020b).

More than half the states and union territories had not yet decided on an opening date for schools and some of them were awaiting guidelines (Jeberaj 2020). Because of the pandemic's long-term impact, the central government curriculum was reduced by 30 per cent for Standards 9 to 12 for the 2020–21 academic year to reduce students' workload (The Times of India 2020b). Higher education institutions such as colleges had begun online admission for the next academic year (2020–21) to avoid large gatherings (The New Indian Express 2020b).

Kenya

The COVID-19 pandemic had disrupted learning for over 18 million Kenyan learners and trainees (MoE 2020). This disruption threatened achievement of Sustainable Development Goal 4 (SDG 4 or Global Goal 4), which focuses on access to quality, equitable and inclusive education (ibid). The Constitution of Kenya (2010) stipulates the right to education for all children.

Kenya confirmed its first case of COVID-19 on 13 March 2020 and cases continued to rise steadily and spread across the country (MoH 2020). To address the impact of this crisis, the Ministry of Education (MoE) put together a co-ordination team comprising both state and non-state actors in education (including development partners). The Ministry of Education worked collaboratively with the co-ordination team to put in place various initiatives to mitigate the effects of the pandemic on education, including delivering lessons through television, radio and the education cloud.

The Ministry of Education also worked collaboratively with the COVID-19 co-ordination team to develop the COVID-19 Response and Recovery Plan (Ministry of Education 2020). The plan aimed to ensure continued learning and promote the health, safety and well-being of learners, teachers and education officials during and after the COVID-19 crisis (ibid).

COVID-19 challenges and Kenya's education system

Kenya's economic growth had been negatively impacted by COVID-19, with direct and indirect consequences especially to poor, vulnerable and

marginalised households which rely on informal employment and businesses. Their ability to finance school-related expenditure, such as school kits, meals and learning materials, had been compromised (ibid).

With the government adopting remote teaching to support distance learning and online education delivered through radio, television and the Internet, it was recognised that learners from poor, vulnerable and marginalised households might not have access to these materials – further widening the gaps in equity and access to and quality of education (ibid).

Schools play an important role in the protection of children, especially girls in poverty-stricken, vulnerable and marginalised communities (ibid). More than 90,000 schools were closed, leading to more than 18 million pre-primary, primary and secondary school learners and over 150,000 refugees confined to their homes (ibid). These learners required home-based teaching, which proved challenging due to a lack of parental engagement, low levels of untrained teacher (UT) literacy, poor access to devices and competing priorities in the household (ibid).

The MoE noted that school closures and restricted movement presented acute challenges in the household, exacerbating cases of exposure to pornographic materials, drug and substance abuse, rape and gender-based violence (GBV) (this included the defilement of children). Children with disabilities and special needs faced additional challenges because they encounter significantly higher rates of neglect, abuse and segregation, leading to loneliness. This predisposed the children to psychosocial challenges, including depression (Ministry of Education 2020).

Low-income households often depend on schools for meals and sanitary towels provided by the government and its partners. School closures mean that children who rely on schools to meet these basic needs experience hygiene challenges with detrimental nutritional effects (MoH 2020). The interruption of learning had also further increased anxiety and uncertainty regarding national examinations (Ministry of Education 2020).

The prolonged closure of schools could lead to increased child labour, school dropouts, child pregnancies and early marriages. Job and income losses for some non-teaching staff, and board of management (BoM) teachers, as well as those from private institutions, were recorded. A high economic dependence ratio, where those who work (including education staff and teachers) support the wider community and relatives, meant that all these people were affected by those who lost their income due to the pandemic (Ministry of Education 2020).

The likelihood of discrimination against and stigmatisation of learners who were affected and/or infected by COVID-19 was also a consideration. According to the National 2019 Novel Coronavirus Contingency Plan (2020),

the World Health Organization Office for Africa identified Kenya as a high-risk country for the existence of COVID-19.

As government continued monitoring the COVID-19 spread (MoH 2020), a taskforce was put in place to provide guidance on schools reopening. The taskforce acknowledged that there were likely to be challenges in reopening learning institutions, due to inadequate hand washing facilities, large class sizes that make physical distancing impractical, poor sanitation, and schools that may have been used for other purposes during closures, as well as the anxiety of teachers (Ministry of Education 2020). There were also concerns about the safety of parents and learners when they returned to school and a lack of school nurses, among others.

Nigeria

Nigeria recorded its first COVID-19 case on 27 February 2020. This figure had increased to over 19,000 by 20 June 2020. The pandemic's effect was being felt across different sectors of the country. The education sector suffered the consequences of the virus, and, following the announcement by the Federal Government, closed schools from 26 March 2020 (Nlebem 2020).

The country's school age population is 78 million (UNESCO Institute of Statistics 2020). This represents 39 per cent of the country's population of 200 million (United Nations Department of Economic and Social Affairs 2019, 24). Under Nigeria's federal structure, the education sector is jointly administered by the central and state governments, with the former providing the overarching guidelines on the sector's operation, particularly at tertiary level (Federal Ministry of Education 2020a).

Educational institutions are owned by private entities as well as by the state and federal governments.

Education sector's coping strategies

Nigeria's education sector's response strategy to the pandemic involved the collaboration of various critical stakeholders. Under the co-ordination of the Federal Ministry of Education (FME) and Universal Basic Education Commission (UBEC), the stakeholders included other relevant government agencies, departments and ministries, private sector organisations and the United Nations Children's Fund (UNICEF). The country's policy response for the continuation of learning by students was encapsulated under the Learn-at-Home Programme (LHP)(Federal Ministry of Education 2020b).

The goals of Nigeria's education sector's COVID-19 response strategy included the continuation of learning in a risk-free environment, recovery of the education sector, normalisation of the educational cycle, as well as the institutionalisation of the lessons and capacity developed from the sector's

response to COVID-19 for sustainable development. The achievement of these goals was based on specific principles and approaches, such as collaboration among stakeholders, multisectoral approach, sustainability, innovativeness, multimedia communication, and the documentation of learning and experience.

Radio and television broadcasts remained a major learning avenue for basic and post-basic education during the pandemic. Different subjects were being taught via these channels in accordance with schedules specified on the FME's website (Federal Ministry of Education 2020c). The website also provided links to subscription-free e-learning portals for basic and post-basic education students.

A special strategy was provided for the north-east region of the country currently battling with an insurgency crisis. The COVID-19 response for the education sector in the region (particularly the Borno, Adamawa and Yobe states) were co-ordinated by the Nigeria Education in Emergency Working Group (NEiEWG 2020), which comprised representatives from UNICEF and Save the Children, in collaboration with the federal and state education authorities. The team's primary task was mitigating the effects of COVID-19 among the internally displaced population (IDP) by preventing the spread of the virus and ensuring the smooth return to learning post-COVID. To achieve this, advocacy efforts were made via TV, radio and posters to ensure awareness about the virus. There was also a focus on developing the capacity of students and teachers through various means, including radio, the internet, laptops and smartphones. Providing psychosocial support to teachers and students, as well as financial and material support for teachers and students, were also imperative.

Policy response

The Nigerian government recognised the importance of embracing e-learning platforms to mitigate the consequences of the pandemic on the education sector.

Learning at basic and post-basic levels continued on radio, television and via the Internet. This policy response, however, failed to cater to the requirements of special needs students, who are at a disadvantage in terms of the current LHP.

Important determinants in the success or failure of e-learning include infrastructure (particularly power supply and Internet access) and the skills of teachers, students and parents/guardians. E-learning had exacerbated inequality in Nigeria's education sector due to the high level of poverty, especially among the rural population. Fifty-two (52) per cent of the rural population live on less than ₦137,430 (US\$354.70) a year (National Bureau of

Statistics 2020, 6). Other challenges included unstable power supply, erratic telecommunications networks and internet access, as well as the high costs of smartphones and laptops.

Sri Lanka

Sri Lanka's Ministry of Education closed public schools on 12 March 2020 as a preventive measure for the COVID-19 pandemic. On 20 April 2020, the Ministry of Education introduced a TV channel named *Guru Gedara* to provide continuous education to school students. On 29 April 2020, the ministry introduced guidelines for schools and other educational institutes to prepare them for the challenges of the pandemic. On 11 May, the Ministry of Education issued Circular No. 15/2020 to education administrators to provide information on preparation mechanisms for schools and educational institutes to prevent COVID-19.

In the second week of June 2020, the ministry announced that public schools in Sri Lanka would start in four stages. Academic staff and non-academic staff were to report to work on 29 June 2020. Schools reopened for Grade 13, Grade 11 and Grade 5 students on 6 July 2020. Schools reopened for Grades 10 and 12 on 20 July 2020. Grades 3, 4, 6, 7, 8 and 9 started on 27 July 2020. The ministry postponed the Advanced Level examination and Grade 5 scholarship examination scheduled to be held in August 2020.

Tanzania

Tanzania confirmed the first COVID-19 case on 16 March 2020 in Arusha. From then, 509 cases were officially reported as of June 2020, along with 21 confirmed deaths. The Government of Tanzania (GoT) responded to the first confirmed case by introducing several preventive measures, including banning public events and gatherings, closing educational institutions from pre-school to tertiary level, and suspending sporting and social events.

However, the government did not impose a total lockdown or curfews to curb the virus. Instead, citizens were urged to observe health guidelines and protocols like wearing masks, washing their hands, and regularly practicing social distancing as they went on with their normal lives.

Measures minimising impacts of COVID-19 on Tanzania's education system

During the battle against the pandemic and pursuant to Article 11 of the Constitution of the United Republic of Tanzania (CURT), which speaks to the right to education, the government – through the Ministry of Education, Science and Technology – made arrangements aimed at ensuring students continued learning during the pandemic. In doing so, the government developed an Education Sector COVID-19 Response and Recovery Plan. The

plan was developed with the support of and collaboration with development partners, civil society organisations (CSOs) and the private sector.

To implement the education plan, the government – through the Tanzania Institute of Education (TIE) – had been broadcasting lessons on TV, radio, as well as online. The TIE (which is primarily responsible for basic education), provided public and private schools with access to its digital library, which contains textbooks and educational videos. TIE also fast-tracked approval for existing online learning sites from community partners and immediately began gathering existing radio/TV lessons, while preparing new content for radio, TV and short message service (SMS) platforms.

The government mobilised development partners (DPs), CSOs and private sector support for TIE to design content and air quality programmes on different platforms. Several DPs, including the United Nations Children's Fund (UNICEF), the Department for International Development (DFID), Canada, the Swedish International Development Cooperation Agency (SIDA), the Korea International Cooperation Agency (KOICA) and the United States Agency for International Development (USAID) provide financial and/or technical support to TIE's distance learning content. In addition to TIE's work, the National Examinations Council of Tanzania (NECTA) prepared TV/video lessons designed to address test preparation and examination classes.

Private sector support had come from TV stations offering airtime, mobile companies offering free SMS platforms and the National Bank of Commerce (NBC) donating funds to cover airtime for radio and TV education programmes.

The Global Partnership for Education (GPE) had allocated COVID-19 accelerated funding to Tanzania's Education Sector Program Implementation Grant (ESPIG). The GPE COVID-19 accelerated funding was earmarked to support key interventions within basic education (pre-primary, primary and secondary education). The programme was to be implemented during and after the reopening of schools.

In March 2020, Tanzania's UNICEF office received a grant to support the Ministry of Education in planning its response to the pandemic, remedial programmes, the distribution of learning materials to students attending examination classes, printed materials to facilitate learning continuity for the most vulnerable students (with a focus on girls), and a back-to-school campaign to sensitise caregivers about the importance of ensuring their children (especially girls) returned to school. An awareness campaign to disseminate messages about girls' safety and help prevent gender-based violence, pregnancy and early marriage was also launched.

To support the response rates to the campaign, the Government of Tanzania urged parental guidance on child protection, as well as the sensitisation of

learners to home learning. The government had been circulating messages (digitally) to the wider community. It urged parents to ensure their children used the opportunity to learn during the pandemic, so they could cope with their school syllabuses.

Methods of learning during COVID-19 have included: online classes and radio and television broadcasts; platforms such as Smart Class Tanzania, Shule Direct, Zoom, WhatsApp and Telegram groups for e-learning; delivering hard copy materials and stationery or having parents collect them for their children; and peer teaching, especially in families where there are children at different educational levels.

Obstacles to learning during the pandemic included: teachers' lack of experience in providing online lessons; lack of access to e-learning material because of lack of access to devices; that e-learning and other remote teaching arrangements can exclude learners with disabilities and special needs; parents not being able to afford the cost of internet/mobile data; lack of participatory approaches (especially for radio, TV classes) and learners becoming disengaged; and some teachers delivered lessons that did not follow the syllabus.

Teachers and non-academic staff in some schools were forced to take unpaid leave indefinitely as their employers struggled to meet operational costs without the fees paid by parents and guardians. Unplanned pregnancies, especially in rural areas, as a result of school closure was another consequence of the pandemic.

Tanzania reopened universities and high schools on 1 June 2020, while primary and secondary schools opened on 29 June 2020. Despite the reopening of universities and schools, the education response plan had been effective, because it was able to manage the immediate and long-term effects of the pandemic on education. Other education programmes were being implemented too – for example, a back-to-school campaign supported by UNICEF.

The GoT also issued COVID-19 prevention guidelines to ensure learning continued amid the ongoing battle against the pandemic. Among others, the guidelines require school and college management to ensure availability of essential equipment and facilities for curbing the spread of the virus.

Zambia

Zambia recorded its first case of COVID-19 on 18 March 2020. On 20 March 2020, the Minister of Health ordered the closure of all schools, colleges and universities to curtail large congregations at one time and in one place. This affected more than 4.2 million children and adolescents.

The longer children stay out of school, the higher the risk that vulnerable children will not return. Staying away from school means that children,

especially girls, are at increased risk of teenage pregnancy, sexual abuse, child marriage and other dangers. These risks are likely to be significantly higher for children from poor households (MoGe 2020).

The Government of the Republic of Zambia had scaled up its response to the pandemic and put preventive measures in place to stop further spread of the virus. The Ministry of Health, through the Zambia National Public Health Institute, had launched a multisectoral response involving all government line ministries, co-operating partners, non-governmental organisations, civil society, the private sector and all statutory boards under the Ministry of Health (NHRA 2020).

Education sector response to COVID-19

The Ministries of General Education and Higher Education developed a response plan with which all activities were aligned. This plan was two-fold and was to be delivered in phases. The first phase focused on the response plan to ensure learning continued during the stay-home period. The second phase was a recovery plan, which prepared schools for reopening after the pandemic was under control and put in place measures which supported a sustainably safe school environment. It also ensured that learning would continue in the event of another emergency of this nature (MoGe 2020).

The key interventions to mitigate the impact of school closures included: implementing continuity of learning through diverse platforms; developing relevant content, identifying appropriate platforms and providing teaching and learning materials for children with special educational needs; empowering teachers to provide remote learner support via structured lessons delivered through multiple platforms and provide guidance on self-directed learning; strategies to monitor coverage and access to continuity learning programmes; psychosocial support to teachers, learners and parents; and supporting feeding programmes through alternative mechanisms focusing on learners from drought/flood affected districts.

When schools reopened there was planned to be a critical phase in which a return to normalcy would depend on the interventions laid down during the recovery phase. An early recovery plan was developed by the Ministry of Education. The following key interventions were proposed for the early recovery phase:

- A back-to-school campaign and community outreach programme to ensure that no child drops out of school due to the effects of the pandemic.
- Conducting an assessment to identify learning gaps and inform remedial programming and learning opportunities so that all children catch up to the appropriate grade level.

- Remedial/catch up lessons for high stake examination classes and learners lagging behind.
- Utilising ICT platforms and creating a depository of teaching and learning materials learners can use in their own time.
- Implementing accelerated learning based on the revised school calendar.
- Providing school grants for safe and protective learning environments.
- Providing school feeding – targeting districts with the worst economic shocks.
- Providing psychosocial support to teachers and learners.
- Strengthening prevention efforts and/or reducing future effects of similar or related outbreaks through improved water, sanitation and hygiene facilities and management in schools.

In support of government efforts, UN agencies and other education partners were providing technical and implementation aid to the sector strategy areas (UN 2020). Special consideration and attention were to be given to the most disadvantaged and vulnerable population groups, such as children living in poverty, rural/remote areas, people with disabilities, people living in disaster-stricken (drought, floods and others) areas, refugees, migrants and minorities.

Zambian higher learning institutions were putting measures into place to save the academic year. All learning institutions closed on the 18 March 2020 and students were sent home. Since then, all higher learning institutions have shifted to online/digital platforms, and staff members unfamiliar with the systems have been trained on how to use them.

Private schools have also been providing e-learning classes through platforms such as Google Classroom and Zoom. Some public schools have been using platforms such as WhatsApp, while most public schools remain inactive.

On 1 June 2020, all primary and secondary schools reopened with only pupils in examination classes (Grades 7, 9 and 12) allowed to attend. For tertiary institutions, only final year/graduating students could return on 1 July 2020. All other students remained at home and continue with e-learning.

Health and safety guidelines are being followed strictly. All students and members of staff were to wear masks at all times, use hand sanitisers and wash their hands frequently at various hand washing stations on the premises. Additionally, social distancing would be maintained, with only a specified number of students allowed in each lecture theatre.

Ministries of education survey findings

The instrument for the ministries of education comprises biographical questions and a series of open-ended questions on the nature and types of interventions to mitigate COVID-19, while endeavouring to support teaching and learning.

Interventions to mitigate COVID-19

Many of the respondents emphasised that one of the main objectives of the COVID-19 interventions in the education sector was safeguarding students and staff from the health hazards created by the pandemic. Another objective was ensuring that learning continued in the 'new normal'. Some respondents also listed the need to support students and staff psychologically during this time.

All the respondents indicated that some of main support strategies in place included introducing alternative methods of teaching (such as online learning), providing education through *electronic media platforms* (such as television and radio), as well as *social media platforms* (such as YouTube and WhatsApp) and facilitating *virtual learning methods* using LMSs. Another strategy ministries of education adopted was providing personal protective equipment (PPE) such as sanitisers, face masks and thermometers to safeguard the health of students and staff at educational institutions. Informing parents, learners and teachers about the necessary safety precautions, such as the importance of social distancing, wearing face masks and measures to be taken when one falls ill, was carried out concurrently.

These strategies were co-ordinated through the regional level public offices, such as provincial offices, district offices and zonal offices and, in some countries, through non-governmental organisations (NGOs). To provide organisational conduits that could reach communities, some countries established special committees for the educational sector during the pandemic. For example, Kenya's Ministry of Education formed the COVID-19 Emergency Response Committee, while Sri Lanka established the Special Taskforce on Education. Ministries of education implemented strategies through those offices and committees with the help of the heads of educational institutes and teachers.

According to the respondents, a major achievement of the strategies was that many teachers and students were able to utilise virtual resources in the teaching-learning process and that teaching and learning using the electronic media, such as television and radio, had increased. Another achievement was that the strategies helped to raise awareness about health guidelines and safety precautions.

When asked about the challenges faced by the ministries of education in implementing interventions, respondents highlighted the following:

- The lack of digital devices and the lack of digital infrastructure to conduct virtual education.
- Teachers and students adapting to online methods of learning.
- Learners with no access to electronic media and Internet facilities in their communities, which means they are unable to participate in distance and online education.

Changes relating to the financing of educational activities

Changes have occurred in the financing of educational activities due to COVID-19 disruptions in some countries. One main change was that some ministries of education allocated financial resources to developing health facilities in educational institutions and to buying health equipment and products such as thermometers and sanitisers.

Not all schools were prioritised for reopening. For most countries in this study, the ministries of education prioritised secondary or high school level. Of the respondents, 27 per cent stated that they had also prioritised tertiary institutions, while 9 per cent prioritised primary education institutions.

Strategies suggested for reopening institutions

Several strategies were highlighted by the 12 respondents such as infrastructure facilities, health guidelines and financial resources.

Infrastructure facilities were provided by many Ministries of Education before the reopening of learning institutions to ensure the teaching–learning process was carried out in a healthy and safe environment with social distancing measures in place. Learning institutions in most countries were sanitised before their reopening. Sick room and hand washing facilities were also provided in some countries.

The partial opening of schools was a method used in some countries. Students who were due to sit for competitive examinations later in the year were given priority to mitigate the issue of a lack of space to maintain social distancing.

All respondents referred to the **provision of teacher training** to enable engagement with online teaching in an effective and efficient manner. Many countries provided **health guidelines** for the reopening of learning institutions, with the wearing of face masks and maintaining social distancing being compulsory requirements. Furthermore, all respondents referred to the provision of **hand washing facilities and sanitisers** at the entrances to and within institutions.

Most of the countries in this study provided **financial resources** to learning institutions for the purchase of safety equipment and health products such

as sanitisers before they reopened. Some respondents mention ministries of education availing **additional budgets** to build infrastructure for hand washing and upgrading sick room facilities. Private and non-governmental organisations also provided assistance.

Respondents mentioned the need for **counselling** for teachers and learners because of the psychological impact of COVID-19. In some countries, teachers were trained and required to provide psychological assistance to students before and after schools reopen.

To make up for lost learning time, some respondents reported that **school hours were extended**. Others mentioned the cancellation of term tests.

Countries used many **structures to manage school** reopening during the pandemic. The ministries of education in many countries utilised their regional, district or zonal offices to manage this. In some countries, school health committees were empowered to implement safety measures, while medical experts were appointed to monitor whether schools followed health guidelines in others.

There were some **envisaged challenges in reopening** learning institutions. These included: difficulties maintaining social distancing, managing transport facilities for students and dealing with students' psychological needs.

All the countries surveyed had **adapted their policies** to ensure learners' health and wellbeing.

Teachers survey findings

Following the onset of the COVID-19 outbreak and during the resulting school closures, many teachers across all levels continued to teach via video conferencing/e-learning platforms (especially those interviewed from Nigeria, Sri Lanka and Tanzania). However, others (for example, in India, Kenya) did not teach at all. Teachers mentioned how limited access to digital devices (like smartphones) and infrastructure (such as a stable internet connection) were major challenges for them. Teachers from urban areas (as, for example, in Zambia) were more likely to have continued teaching online.

While schools were closed, teachers kept in contact with learners and their parents via telephone, SMSs or WhatsApp – usually once or twice a week.

E-learning challenges

Most teachers cited problems with technology, lack of internet access, connectivity problems, data issues and unreliable power supply as major challenges for teaching and learning via online classes. The major issue, however, was households on low incomes, living in poverty and those in rural

areas that had no digital access at all, i.e., no televisions or radios. The digital divide was a major challenge in the countries surveyed.

Teachers indicated that limited parental awareness about online learning was another concern and parents often struggled to help their children. Sometimes parental support for children's learning was also limited.

Teachers highlighted their own lack of knowledge, skills and experience as they taught online. For teachers based in rural areas, it was often not possible to use online methods. Lack of adequate learning materials and proper guidelines among learners also made it difficult for teachers using e-learning platforms.

Teachers in Tanzania mentioned problems of learner dropouts (especially girls), unplanned pregnancies and early marriages, especially in rural areas. Other challenges included COVID-related anxiety, the lack of social interaction and that students were unable to receive individual feedback from teachers on their work.

Interventions to mitigate COVID-19

In response to these challenges, teachers suggested improving access through the provision of better digital infrastructure/internet connections and equipment such as low-cost smartphones and tablets. Internet facilities should be provided in rural areas. They also recommended greater use of other media, such as television and radio, to reach a larger number of students in the poorer sectors of society. These interventions would have to be supported by necessary awareness raising and training for teachers and parents on the significance of online learning. Improving computer literacy and internet usage among people more generally would also help address challenges.

Teachers also recommended improved parental support for learners, with parents and guardians spending more time with their children and ensuring they have the necessary learning materials.

Some positive impacts

The pandemic had brought some positive impacts. Online lessons had been valuable, and teachers suggested continuing with them when schools reopened during weekends to make up for lost teaching time. Online teaching was an area they thought government should further develop.

Teachers who were able to teach during the pandemic also reported benefits from learning and working with new technology, and becoming familiar with online teaching. They also gained skills from adapting content for online teaching platforms.

Another common theme was the opportunity for teachers to interact with individual learners more as classes were smaller. Learners' understanding, meanwhile, was demonstrated through their improved reading abilities and readiness to take assessments.

Strategies for reopening schools

Teachers were generally apprehensive about schools reopening. Many did not believe governments/ ministries of education were adequately prepared. Some teachers felt governments should only consider reopening schools once numbers of infections were reduced and vaccine programmes implemented. Others supported decisions to reopen, believing it was important to move forward. It was suggested that an assessment of which was more damaging – school closures or schools remaining open during the pandemic – needed to be made to guide the decision on when to reopen schools.

For schools to reopen successfully, teachers suggested various health and safety measures, such as sanitising the premises, the provision of handwashing facilities, wearing masks, and adequate/regular testing for COVID-19 on school premises. Many highlighted the importance of teachers, staff and students being about to maintain social/ physical distancing. Parents and students had to be made aware of all relevant health and safety measures.

These measures would likely prove challenging given the large student population. Teachers cited building extra classrooms and employing more teachers as possible solutions to problems of social distancing.

Teachers recommended that once schools opened, students must be eased into the teaching–learning process by completing key components of the curriculum rather than rushing to complete the entire curriculum. A balance of curricular and extracurricular activities, combined with different approaches to learning, would protect students' mental well-being.

Teachers were worried that those students who had been unable to participate in online learning activities would find it difficult to catch up. They stated that they would work hard to help students catch up and prepare for examinations. Some felt that there should be no break for learners immediately after their examinations. Other teachers suggested an increase in lecture/class hours and that schools should include weekend online classes.

Parents survey findings

The parent survey was conducted via telephone. Researchers completed the Google Form for all 36 respondents across the six countries in Africa and Asia. This compensated for the language differences (the instrument was only developed in English) and for parents who were illiterate.

The majority of the study's respondents resided in urban areas (67%), with 14 per cent living in rural areas. Hence, the study had a strong urban bias. All respondents lived above the poverty line, with 22 parents paying for private school education. Thus, a non-poverty bias was one of the study's major limitations.

The study showed that most parents understood the implications of COVID-19 (35 of 36), the lockdown measures implemented (27 of 36) and school shutdowns in their communities (29 of 36).

Means and efficacy of e-learning during lockdown

Most parents (26) indicated that their children continued learning during lockdown and that the children were familiar with e-learning systems (22). This underscored the importance of e-learning in this unusual period across the world.

Various means were used for learning during lockdown. Computer applications/websites and mobile phone applications dominated e-learning. Other means of e-learning included television, radio, print media, home schooling and the use of past examination papers.

The study showed that learning occurred two or more times a week. This indicated that educational systems in the countries explored had mitigated the adverse effects of lockdown measures on education. This is also evident in parents' responses to the subjects offered: most respondents (79%) indicated that students were taught all subjects, even when schools were shut. For students who could not study all subjects, emphasis was placed on the most important – mathematics, English and science.

To measure parents' perception of e-learning's efficiency, questions around e-learning objectives, preferences for the new learning model, and awareness of and compliance with the e-learning schedule were asked.

The majority of the parents believed e-learning was not a viable alternative to in-school learning. This raised questions about the long-term feasibility of e-learning across the world. The weaknesses of e-learning as an education means are evident in the inability of all the parents to conclude that e-learning was tailored toward specific sets of identifiable goals and objectives. In spite of this, however, half of the parents responded positively to making an effort to ensure that students complied with the e-learning schedule.

E-learning challenges during lockdown

The study showed that most of the parents were able to provide the requirements for e-learning, such as power/electricity, internet access and devices. Other challenges determining how successful e-learning was

included teachers' capabilities, the availability of psychosocial support for students, monitoring of students' learning and accommodating special needs students.

The post-lockdown learning environment

The majority of parents (24) agreed that e-learning represented a stopgap means of learning that would cease with the lifting of lockdown measures. Less than half (17) of the parents surveyed were comfortable with their children returning to school when schools reopened, with many (18) believing that schools were incapable of assuring students' health.

Most parents recognised that continuing learning when schools reopened would be challenging for the students. To resolve this challenge, they recommended that schools continue learning from where it ceased before stay-at-home measures were introduced and/or before the regulatory school shutdowns.

2.4 Lessons and challenges

This study showed the widespread implementation of e-learning in different countries during lockdown. The educational sector has been able to provide alternative learning options via various means, such as computer applications, websites, mobile phone applications, television, radio, print media, home schooling and the use of past examination papers. Furthermore, class frequency and the variety of subjects covered showed that the educational systems surveyed have responded positively to the adverse effects of COVID-19.

Parents have contributed to the successes by ensuring that students comply with their learning schedules. However, the high socioeconomic standard of the sample must be noted.

The study also showed that e-learning remained a makeshift alternative to the conventional physical schooling experience. Therefore, the potential of e-learning as an alternative to students attending physical schools is unrealistic given the challenges identified. Policy-makers must identify clear, identifiable goals and objectives for e-learning if they are to increase its effectiveness and acceptance among stakeholders.

Other e-learning challenges, such as teachers' capabilities, psychosocial support for students, considering special needs students, and student monitoring and compliance, among others, must be addressed to improve e-learning systems.

There is also a need to improve educational institutions' capacity to safeguard students' health in preparation for their return to the classroom.

2.5 Recommendations

Accelerating SDG 4 in the COVID-19 context and beyond

The study showed that low-income households and children from urban slums and pockets of poverty often depend upon schools for meals and sanitary towels that are provided by government and government partners. School closures thus resulted in negative outcomes for children who relied on schools for these basic needs. This study acknowledged the efforts of governments, teachers and parents in responding to the challenges arising from the COVID-19 pandemic and for their roles in the planned educational recovery.

Recovery endeavours and our commitment to the 2030 Agenda for Sustainable Development as well, as SDG 4, require our renewed commitment ‘to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all’.

The pandemic has affected or infected teachers, children, parents and school communities, posing threats to *education*. The education sector thus needs to lead response and recovery interventions to ensure continued access to quality, equitable and inclusive education during and after the pandemic.

This study showed the disparate practices across countries and schools in response to the pandemic. Returning to the ‘old’ normal is unlikely and countries need to ensure that learning continues, while complying with health and social distancing requirements.

The teachers in every country surveyed were apprehensive regarding the reopening of schools. They believed that schools should not open until there was a vaccine or until it was completely safe for the students and teachers to return. Many teachers anticipated a resurgence of the virus. Teachers suggested that schools should reopen in stages and that this be supplemented with a reduction in student strength per class (the number of students allocated per class), an increased appointment of teachers and provision for online teaching in the interim. The teachers unanimously agreed that education ministries were not adequately prepared to reopen schools.

1. *Adhering to health protocols*

In terms of reopening schools, teachers stated that several factors were crucial. Key factors included physical distancing, sanitising the school or college premises, following a shift system, forming institutional standard operating procedures, adopting and implementing other mediums of teaching, and adhering to government protocols.

All government officials interviewed spoke of reopening education institutions and stated that their plans were inclusive and targeted

the disadvantaged. Ensuring that institutions open in accordance with health protocols that prioritise the health and safety of learners and educators was emphasised.

With the gradual reopening of schools, teachers need to learn how to maximise both indoor and outdoor space to ensure social distancing.

There is also a need to improve the capacity of educational institutions in terms of safeguarding children's health in preparation for their return to the classroom. Governments will thus need to ensure that masks, sanitisers, and water and sanitation infrastructure are provided and in place.

2. *Harnessing broad-based support*

Government responses showed how limited we are in preparing for social catastrophes and, in times like these, how important the role of civil society organisations and multisectoral partnerships become in responding to education needs. For example, telecom provider partnerships are central to education, especially for those unable to continue with learning due to the lack of affordable data and the general digital divide.

3. *Socioeconomic crisis*

The COVID-19 crisis has exacerbated pre-existing inequalities and disproportionately impacted vulnerable communities and learners, and persons with disabilities (especially those living in poverty). In reopening schools, all services targeting learners living in poverty, including school feeding, safe transport, sanitation and protection, need to be re-established and adequately funded. This requires local and international aid for education to be aligned with national COVID-19 response and recovery plans, readjusting national budgets for education, and implementing measures to help with financial burden on families.

4. *Poverty-focused interventions*

Each country's national recovery requirements will include the need for specific support measures to address the learning loss of marginalised students and the socio-psycho impact that disrupted their learning.

To ensure that learners return to school, countries will need to establish (re-)enrolment campaigns and offer targeted support, especially for those living in poverty and learners with disabilities.

5. *Learners with special needs*

The policy responses across all countries in this study have failed to incorporate the unique nature of special needs students. Special

needs students are at a disadvantage in the implementation of remote learning programmes and require that teachers visit their homes to enhance their learn-at-home programmes.

6. *Providing adequate learning materials*

Many parents did not or could not assist their children with learning. Parents should be briefed on the importance of supervising their children's learning. The development and distribution of structured school workbooks, with weekly predesigned lessons in conjunction with TV programmes, would help provide structured learning opportunities.

7. *Extending learning after lockdown*

Teachers suggested adjusting the school calendar to maximise teaching time after lockdown. There should be no holidays or breaks to make up for the lost teaching and learning time. The academic year could thus be extended into the summer holidays and longer school days could compensate for learning losses. Teachers can prepare special after-school classes to help learners catch up on core subjects. They can also condense curricula to focus on core themes. In addition, schools could make funding available for any technical and human resources that may be needed.

8. *Teaching capacity*

Governments should plan for teacher mobilisation, prioritising regions that have been worst hit by the crisis. They can also explore the emergency deployment of teachers to areas affected by high teacher mortality rates. Providing support to teachers, so that they in turn can support distressed learners, is also an important consideration.

9. *Teacher development*

The need to support *all* teachers and education personnel (as frontline workers) is crucial in ensuring their safety, well-being and decent working conditions. Training teachers to monitor children and identify those experiencing particular difficulties when they are back in school is important.

Teachers' professional development needs to include digital and pedagogical skills for learner-centred quality education, to ensure inclusive recovery.

The need for social distancing is likely to continue for a long time. The need to reduce the digital divide in education, develop high-quality open education resources and build digital commons to complement contact classroom-based learning is essential.

Narrowing the digital divide relies on enabling inclusive and equitable technology-supported learning.

Teachers require the skills to teach remotely, with distance education being a requirement of all initial and continuous teacher development. This will enable teachers to use computer applications, websites, mobile phone applications, television, radio and print media.

National television needs to be used more widely to show parents how they can support learners with home-learning.

10. *Infrastructure*

Determining the safety of school buildings and their surroundings before reopening aligns with national criteria stipulating conditions that must be met before schools reopen. This will lessen the probability of a new outbreak and boost the confidence of parents, students and teachers in terms of school safety. It is also important for institutions to renovate, improve or install (as necessary) hygiene facilities like washrooms, toilets and bathrooms. Institutions should also guarantee that handwashing stations are available and provide running water, as well as soap, sanitiser and disposable hand towels.

11. *Communicate, consult and co-ordinate*

Regular communication with teachers, parents, students and communities on, for example, the dates and conditions of reopening is crucial. Institutions should communicate clearly and transparently with all education stakeholders as parents may be reluctant to send their children to school after the crisis. Schools should also correct any misinformation and put to rest any public doubt or fear.

Note

1. The first and second initiative i.e. *Diksha* and *Swayam Prabha* were launched earlier in 2017 as part of the Digital India movement (India Today 2020; Financial Express 2017). These initiatives were brought together under the umbrella of the *PM e-Vidya* scheme.

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Chapter 3

The Impact and Implications of COVID-19 on the Teaching Profession

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3.1 Introduction and background

Before COVID-19, the teaching profession was already considered fragile and had numerous challenges. UNESCO's *Rethinking Education: Towards a Global Common Good?* (2015) describes some of these challenges as a process of de-professionalisation, marked by the influx of unqualified teachers, casualisation of teachers, reduction in professional autonomy, erosion of quality of the teaching profession, poor remuneration of teachers and the encroachment, within educational institutions, of private management techniques (UNESCO 2015, 54). According to the UNESCO Institute for Statistics (2016), in sub-Saharan Africa, 70 per cent of countries face acute shortages of teachers, rising to 90 per cent at the secondary level; and sub-Saharan Africa requires 17 million teachers (6.3 million and 10.8 million teachers for the primary and secondary schools, respectively) to meet the SDG 4 targets of inclusive and equitable quality education.

On the part of the learners, UNESCO's *Education Transforms Lives* (2017) mentioned specifically the growing number of out-of-school children and adolescents in countries affected by conflict and natural disasters. Therefore, it called for 'emergency preparedness and recovery and the development of international standards and legal mechanisms' (UNESCO 2017, 15) and planning for disaster risk reduction and strategies for overcoming post-conflict challenges.

With the COVID-19 pandemic, the challenges for the teaching profession have become worse. The World Bank Education Global Practice (2020) observed that while the world was already going through a learning crisis indicated by 'high levels of learning poverty', with the pandemic, more than 160 countries had closed schools, affecting about 1.6 billion children and out-of-school youth. The World Bank feared that the COVID-19-induced education crisis may cause not only loss in learning, but also a long-term loss of human capital.

In April 2020, UNESCO released information titled *COVID-19: A global crisis for teaching and learning* (UNESCO 2020a), while the UNESCO

Institute for Statistics (2020) released the following statistics to underscore the magnitude of that problem: classroom learning had been interrupted for 90 per cent of children worldwide; 191 countries closed their schools at all levels, halting schooling for 1.5 billion students; meanwhile, about half of the affected students had no access to online learning while the schools remained closed. The scenario was alarming for sub-Saharan Africa:

- 89 per cent of learners (216 million) did not have a household computer;
- 82 per cent of learners (199 million) did not have household internet;
- 26 million learners (or 11%) were not covered by mobile networks; and
- 64 per cent of primary and 50 per cent of secondary teachers had received minimal training, which frequently did not include basic ICT skills (UNESCO 2020, 1–2).

In reaction to the closure of schools following recognition of the COVID-19 pandemic, various international authorities issued guidelines to teachers and other stakeholders. Among these authorities were UNESCO (UNESCO 2020b; 2020c), International Task Force on Teachers (2020), the Commonwealth Secretariat (The Commonwealth Education Hub 2020), the African Union/ UNICEF (2020) and UNESCO International Institute for Capacity Building in Africa (2020).

3.2 Survey methodology and findings

This research took place over the period 24 July to 15 August 2020. At the time, schools were still in a state of total or partial lockdown in many countries across the world. The main focus of the study, therefore, was to understand how teachers were coping under these abnormal conditions. At the same time, most countries were contemplating a return to schooling in some form, and the study looked forward to how this could occur and what schools and teachers would require for a successful return to face-to-face teaching and learning. The research objectives were:

1. to map activities, programmes and projects of teachers in Commonwealth countries that contributed towards the teaching of pupils and students during the COVID-19 pandemic and resumption of schools;
2. to investigate factors that limited teachers' ability to teach during the pandemic and resumption of schools;
3. to record strategies (short-, medium-, and long-term) devised to ensure that teachers were able to continue teaching effectively during emergencies and pandemics; and

4. to consider the roles that teachers could play as professional leaders at the micro (class), meso (school), and macro (community/society) levels in pandemics and emergencies to ensure continuity of inclusive and quality teaching and learning.

The study was designed to be sensitive to geographical and other contextual realities. While it was particularly focused on teacher voices and their perspectives on the crisis, it also looked at the role of other stakeholders in supporting teaching and learning.

The study investigated the following questions:

1. To what extent were teachers in Commonwealth countries able to teach during COVID-19 school closures?
2. What factors made it possible for teaching to take place and what factors made this difficult?
3. How can continuity of teaching and learning be strengthened during emergency situations such as that posed by the COVID-19 pandemic?
4. To what extent has the teaching profession been affected by the COVID-19 pandemic?
5. What do teachers need for successful resumption of schooling?

3.2.1 Literature review

The purpose of the literature review was to briefly examine the crisis of poor learning outcomes in the teaching profession prior to the COVID-19 pandemic, as well as the effects of the pandemic on already-struggling schools and learners. The review also undertook a survey of international frameworks on education and teaching which, explain the vision of the teaching profession. A third element collated information on steps taken by teachers, principals and head teachers, education authorities, communities, states, provinces, countries and other stakeholders during COVID-19, to meet the specifications of the international agenda on the pandemic. Lastly, emerging evidence on the overall impact and implications of the COVID-19 pandemic on the teaching profession was reviewed.

It was clear that even before the advent of COVID-19, the education sector was faced with numerous challenges. With respect to the teaching profession, there was a shortage of teachers, and an increase in the proportion of unqualified teachers. Additional problems included poor remuneration in many countries, high teacher–student ratios and inadequate teacher training. All these factors had led to the problem of de-professionalisation of the teaching profession. In terms of learning outcomes, poverty tends to impact negatively on learning outcomes as most children leaving school tend to

lack the basic skills of reading, writing and mathematics. Conflicts, natural disasters and other emergencies also tend to contribute to increasing the numbers of out-of-school children, thereby affecting learning outcomes.

Different international agendas and frameworks were reviewed for explanation of the vision of the teaching profession and learning outcomes. Notable among the international frameworks were the Incheon Declaration for Education 2030 (UNESCO IITE 2016) and the Commonwealth Education Policy Framework (Commonwealth Secretariat 2017). These international frameworks were aligned to the SDG 4 education goals. International frameworks and guidelines on the expectations of teaching and learning during COVID-19 and other emergencies stipulated the need for an emergency response in education and continued learning in times of emergency or crisis, given that education provides stability, security and hope, which could provide a degree of psychosocial support for children and adolescents affected by trauma.

The literature reviews also outlined steps taken by education stakeholders during the COVID-19 pandemic to meet international agenda requirements. An example is the DOTSS approach (African Union/UNICEF 2020), which stands for:

- digital connectivity of schools through internet connectivity and access;
- online learning through the use of radio, TV, e-learning and online materials;
- teachers as teaching facilitators and learning motivators through the use of available online technologies;
- safety online and offline to avoid pupils/students accessing non-educational sites with undesirable content; and
- skills-focused learning by applying methods that would improve the skills of learners. International agendas should serve as a guide to ensure continuous learning.

Most countries responded to the pandemic by shutting down schools, which disrupted teaching and learning activities, examinations, assessments, grading and promotions. This also led to poor nutrition for children who depend on school meals, high drop-out rates, as well as parents unprepared for distance and home-schooling, among other impacts. Teaching methods were affected, as most schools attempted to embrace online teaching and learning. However, these attempts met with many difficulties, such as poor network connections and insufficient numbers of computers. The coronavirus pandemic thus had a profound impact on the teaching profession, as well as on teaching activities.

3.2.2 Approach and methodology

The approach to the research for the current study was exploratory (Given 2008). The study used a mixed methodology, consisting of a combination of quantitative and qualitative techniques (Johnson et al. 2007; Almalki 2016). Quantitative data was collected by means of a survey distributed to teachers across 12 Commonwealth countries, while a case study method with semi-structured interviews and focus group discussions was used to investigate issues in more detail in Kenya, Nigeria and South Africa.

The first data collection activity employed in the study was a quantitative survey. The sampling methodology for the survey was non-random. Teachers in the researchers' personal and professional circles were targeted for participation. Each researcher contacted two to four schools in their locality, or schools where a friend or family member worked, with the hope that these people were seen as trusted members of the community so that schools and teachers would be more amenable to participation. Thereafter a snowball sampling approach was employed, with all teachers participating in the survey being asked to forward it to teachers in their personal and professional circles. Social media networks, such as Linked In, whose members were mainly teachers, were also used.

The survey was administered between 24 July and 16 August 2020, with standardised questionnaires for teachers in all Commonwealth countries. A total of 400 teachers were targeted using the survey method through an online questionnaire using Google Forms, with approximately 100 respondents from each country targeted for case study. The online survey was also sent out to teachers more broadly in all Commonwealth countries to obtain additional responses.

For the three countries targeted for in-depth qualitative study, namely Kenya, Nigeria and South Africa, primary data was collected using semi-structured interviews over the period 24 July to 7 August 2020. Interviews were conducted with school principals and teachers in primary and secondary schools in these countries. Four schools in each of the three countries were targeted for online meetings, using Zoom and Skype platforms. In addition, a focus group discussion (FGD) consisting of four to six teachers was conducted at each school. For each country, a total of four principal interviews and four FGDs were intended to be held through the Zoom online meeting platform. A total of 12 principal interviews and 12 FGDs were targeted for the three countries, yielding a total of 12 principals and 48 teacher participants.

Secondary data was collected through organisational records, reviews of similar research and institutional websites available to the public within the selected countries. The data (both primary and secondary) used for this

study were generated through online, virtual methods. This was necessary because the COVID-19 pandemic resulted in the closure of schools and social distancing rules. Therefore, online questionnaires, online focus group discussions and online interviews were some of the virtual methods that were used for data collection.

A descriptive analysis of quantitative data from the surveys was undertaken. Data were disaggregated by country with a focus on the overall pattern across all responding countries, with particular focus on the three case-study countries.

Qualitative data collected for this research were initially analysed through content analysis, conceptualising, coding and categorising. Subsequent to completing the coding of qualitative data and compilation of descriptive statistics, the data were triangulated. This entails a process of combining data from different sources to develop a consolidated picture and validating the research findings.

The convenience sampling technique followed in this study, starting with the research team and relying on their networks to generate responses, saves time but inevitably leads to a skewed set of respondents. The researchers themselves are relatively well-educated. It was inevitable therefore that the sample would be biased to relatively well-educated and connected individuals. As our respondents were relatively advantaged, they were more likely to have access to the electronic technology and cultural networks required to facilitate remote learning. It is from this perspective that the research findings should be viewed.

The schools were also selected by means of convenience sampling, with members of the research team choosing to work in schools they were familiar with or had access to. The numbers of participants are summarised in Table 3.1.

Four of the five South African case study schools charge fees. This was unusual in a country in which at least 60 per cent of schools, serving the poorest families, are not permitted to charge fees, although the high school indicated that if learners are unable to pay the fees, they do not, but many parents try to make some payment. Two were religious private schools and three were public schools in townships. The exception was a school formerly serving middle class children, but which now admitted learners from the nearby township (see Textbox 3.2). All five schools in Kenya and Nigeria were public institutions situated in poor neighbourhoods and serving poor children: two were rural (in Kenya) and three were in towns.

The study offered the following promises:

- Though there were constraints, researchers adopted strategies to avoid these impacting significantly on the work.

Table 3.1 Participants in the case studies

Country	Number of schools involved		Learner community*		No. principal interviews	No. in principal interviews	Number of teacher FGDs	Number in teacher FGDs
	Prim	Sec	Prim	Sec				
Kenya	1	1	P	P	2	4	2	10
Nigeria	2	1	P	P	3	3	2	10
SA	4	1	4F	P	3	4	5	16
Total achieved	7	3	4F, 2P	4P	8	11	9	36
Total targeted	12				12	12	12	48

* P: poor; F: fee paying

- The study was exploratory and achieved its purpose of contributing to a better understanding of the impact on the teaching profession of COVID-19 and country responses to the pandemic.
- The study, a ‘bootcamp’ for young researchers, achieved its aim of providing an opportunity for development of research skills (JET 2020).
- The research was conducted rapidly and at the height of the pandemic. As such, an unusual insight was given into teachers and teaching in crisis, with potential for responsive influence on teacher professional policies and future research in this regard.

However, the following limitations to the study should be noted:

- The COVID-19 lockdown and protocols such as school closure, social distancing and travel restriction prevented any form of physical visits and contact with the research subjects, thus leaving the researchers with the option of a virtual contact only.
- The bootcamp was aimed at developing young researchers; therefore, the researchers in this case were emerging researchers as well as fledged experts.
- The Commonwealth is diverse in linguistic terms and also in terms of education system, economy and politics. This imposes inherent constraints on analysis of data from such diversity, and trying to give a common meaning and interpretation of the data.
- A limited number of applications for participation were received from researchers, which reduced the number of researchers and the number of countries covered in depth.

- The time frame of the research was short because research findings were needed quickly to make sense of the COVID-19 situation in order to inform appropriate teacher professional polices suitable for the emergencies created by the pandemic.

3.2.3 Findings

In making sense of the findings, the two caveats described in the previous section [section on research methods] should be applied. First, it must be borne in mind that the findings reflect a more optimistic scenario than is likely to pertain in most schools in the case study countries. In other words, the challenges faced under lockdown conditions by most schools in the countries studied are probably more difficult than those described below. Second, data should, as far as possible, be triangulated in order to explore the possibility of socially acceptable responses (the ‘right answer’) predominating over reality.

Demographics of respondents

A total of 220 teachers across 12 countries completed the survey (Table 3.2).

While the sample contained significant numbers of subjects from the three case study countries, the numbers for most other countries were very small. The data therefore provided little reliable information on practices in all but the case study countries. Furthermore, it was clear that the teachers sampled in these three countries were by no means representative of those jurisdictions. For example, only 3 per cent of South African teachers

Table 3.2 Teachers who completed the survey

Country	Number	Percentage
Antigua and Barbuda	1	0.5
Cameroon	1	0.5
Ghana	22	10.0
Guyana	3	1.4
Jamaica	1	0.5
Kenya	48	21.8
Namibia	15	6.8
Nigeria	58	26.4
South Africa	60	27.3
Uganda	1	0.5
United Kingdom	6	2.7
Zambia	4	1.8
Grand total	220	100%

Table 3.3 Types of schools in which teachers in the sample worked

Type of school	Kenya		Nigeria		South Africa		Other		Grand Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
No-fee school	0	0	0	0	2	3	0	0	2	1
Private/ international	27	56	24	41	2	3	2	4	55	25
Public	13	27	27	47	52	87	51	94	143	65
Semi-private/ low fee	3	6	1	2	4	7	0	0	8	4
Religious/ NGO/NPO	5	10	6	10	0	0	1	2	12	5%
Grand total	48	100%	58	100%	60	100%	54	100%	220	100%

sampled worked in no-fee schools, while at least 60 per cent of the nation's schools charge no fees. Thus, teachers sampled from South Africa, while mostly working in public schools (87%), represented a relatively privileged group: almost all (97%) taught in schools which charged fees and were predominantly situated in urban areas (60%). Similarly, the samples from Kenya and Nigeria were also not representative of those countries, as indicated by the high proportion of teachers working in private or international schools, at 56 per cent and 41 per cent, respectively.

The average age of respondents in all three case study countries was relatively young, at 42 years for South Africa, 39 for Nigeria and 33 for Kenya. However, the gender balance was very different across the countries, with females predominating only in South Africa (78%), compared to 50 per cent in Nigeria, 44 per cent in Kenya and 35 per cent across the remaining countries. Teachers in the sample were evenly spread across the primary (46%) and secondary (51%) levels, with just a few working in early childhood development (3%). More than half (57%) of all respondents held bachelor's degrees, with only Kenya, at 38 per cent, significantly below the mean.

Teaching and learning before and during lockdown

Schools were closed at short notice in most countries, and thus there was little time for planning, distribution of resources and the preparation of teachers, learners and families for the lockdown to come. This was confirmed by the responses of teachers in the sample when asked about the provision of online or offline electronic resources, printed materials, and communication channels (Table 3.4).

There were expectations among teachers in most schools that the government should have supplied electronic resources for the maintenance of remote learning (see). This was unrealistic and remains so for the foreseeable future.

Table 3.4 Preparations made for lockdown

Preparation for lockdown	Kenya		Nigeria		South Africa		Other		Grand Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Teachers were not provided with adequate resources for the use of online teaching (e.g. data, laptops, tablets, access to platforms, etc.)	8	17	7	12	7	12	5	9	27	12
Teachers were not provided with adequate resources for the use of offline teaching (e.g. recording devices, access to platforms, etc.)	15	31	12	21	10	17	5	9	42	19
Teachers were not provided with printed resources for learners before school disruptions (e.g. worksheets, workbooks, etc.)	27	56	22	38	17	28	6	11	72	33
Effective communication was hampered between teachers and students during lockdown	19	40	16	28	19	32	11	20	65	30
No communication protocol was put in place for management and teachers	28	58	27	47	37	62	30	56	122	55
No communication protocol was put in place for teachers and parents/learners	31	65	24	41	26	43	20	37	101	46

Table 3.5 Teaching activity during lockdown

Currently engaged in teaching activity	Kenya		Nigeria		South Africa		Other		Grand Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
No	21	44	28	48	13	22	6	11	68	31
Yes	27	56	30	52	47	78	48	89	152	69

Of greater concern was that only one-third of teachers surveyed had printed materials to distribute to learners. Almost as disturbing was that fewer than half the surveyed educators said that their schools had protocols in place for communicating with parents.

When asked whether teaching was occurring under lockdown, more than two-thirds of the sample indicated that this was so (Table 3.5).

This was one instance in which the data could be triangulated against both common sense and other information that was available, in order to test for the effects of the idiosyncrasies of the sample and the presence of ‘socially acceptable’ answers. When viewed in this light, the South African result, which indicated that 78 per cent of teachers were teaching during the lockdown, seemed inordinately high. On the one hand, this may be a sample effect, with four of the five schools in the South African sample serving well-resourced middle-class communities, and the fifth South African school, serving very poor children, being the only one of the total ten schools which maintained effective instruction for poor children under the lockdown. However, on the other hand this may have been due to varying interpretations of what teaching under lockdown constitutes. For example, in one of the South African high schools, the principal said teaching did happen, but close observation revealed that it really only happened for metrics; Grades 8 and 9 received instruction on work to complete in workbooks in large part, while for much of the lockdown, Grades 10 and 11 received almost no support because they did not have workbooks. They were instead directed via chat groups to the available television lessons.

A further caution is that the observation that four of the five South African schools served well-resourced communities must also be qualified, noting that while the schools themselves may be well-resourced, the communities they served covered a range of socioeconomic groupings, some of which are very poor and disadvantaged. Children in these communities would be most unlikely to have access to online learning technology.

The data in Table 3.5 also gives pause for reflection: the average of 18 hours per week spent teaching, in a 25–30-hour school week seems very low. In any

Table 3.6 Time spent teaching before and during lockdown

Hours per week, spent on lesson delivery	Kenya	Nigeria	Other	South Africa	Grand Total
Pre-lockdown	22	13	16	21	18
During-lockdown	7	4	9	16	9

event, what Table 3.5 clearly indicates is that the mean time spent teaching during lockdown was half of teachers' normal workload.

The sense that less teaching occurred under lockdown than is reported in Table 3.5 is strengthened by data derived through the case studies. For example, in the sample of two primary and one high school in the South-South and South-East Regions of Nigeria, all ten respondents interviewed, across five separate interviews in three different schools, said that no teaching occurred in their schools during the lockdown period. The situation was described as follows by the principal at the high school studied:

Learning was accessible to those who can afford private tutors, in some private schools and as well as radio and television broadcasts. Schools did not engage in learning, examinations and grading, as teachers were not involved in virtual learning. [School principal: Nigeria]

Leadership

Principals and teachers in these interviews generally ascribed the lack of teaching to the fact that they possessed neither the electronic means (hardware, connectivity, data) nor the skills to provide online teaching. According to the interviewees, the government should have taken responsibility for this situation. Indeed, throughout the five interviews in one secondary and two primary schools in Nigeria, the government was roundly blamed for a number of problems, including the inability of schools to effect meaningful learning under the lockdown, and also for a lack of policy direction and resource provision (Textbox 3.1).

These findings regarding government leadership were mirrored in both the Kenyan and South African schools in the study, with the following comment from a school principal aptly summing up the South African experience:

The majority of the schools feel as though they were left to figure things out for themselves, without guidance from the department. Phrases such as 'thrown in the deep end', 'fumbling in the dark', 'survival of the fittest' and 'wing it' describe the overall feeling – or in most cases in this interview pool – about the level of support given/not given, by the Department of Education. [School principal, South Africa]

Textbox 3.1 Nigerian interviewees: challenges and concerns

Causes of the failure to maintain online learning

- The failure of schools to conduct online classes was due to the background of the students, as most students in the schools were from rural communities with limited access to electronic gadgets (such as laptops, phones, tablets) while data also was expensive.
- The schools and teachers were not able to deal with COVID-19 because they were not technologically inclined.
- Schools and teachers were not directed by the government to conduct online classes, or indeed any classes at all.
- Government should provide equipment to enhance learning, such as computers, tablets or android phones, which should be provided for both teachers and students. It should provide well-equipped ICT centres and laboratories, training of teachers, and provision of e-learning facilities for teachers and students.
- No specific strategy was set up by the national education department in response to COVID-19, and schools were left with their existing capacities to address educational requirements.
- Schools depended on the directives from the Ministry of Education.

Health measures

No specific health facilities were put in place by the government to ensure the safety of teachers and students, and no training was provided on the COVID-19 response.

Basic services

Although effective teaching and learning provision via radio and television was set up by the government and education department, poor electricity provision and the consequent inability to connect to the radio or television learning channels meant that the government's education response to COVID-19 was ineffective.

The above comment reflects a strong sense of passivity on the part of educators and schools, and their blind dependence on government for any plan of action. Why, for example, should schools require a directive from government to run any form of educational programme during the lockdown, even if this consists only of distributing printed resources and guidelines to parents and learners? However, many teachers were resentful that they had received the news of the lockdown on television, at the same time as their learners, and there was a level of frustration that there had been no time to put a strategy in place.

The question must be asked whether, under normal conditions, schools maintain any form of communication with students and their parents outside of school hours. For example, one interviewee said that the school

Table 3.7 Teaching mode during lockdown

	Kenya		Nigeria		South Africa		Other		Grand Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Online platform (Zoom, Google Meet, etc.)	18	67	17	29	7	12	10	19	52	24
Offline platform (videos, resource packs)	2	4	5	9	12	20	14	26	33	15
School communication platform (e.g. Moodle, Blackboard, WhatsApp, etc.)	11	23	9	16	25	42	13	24	58	26
Various face-to-face options (e.g. home visits, platooning)	1	2	5	9	23	38	24	44	53	24
Other (WhatsApp, etc.)	1	2	3	5	2	3	1	2	7	3

communicated effectively with students, but this was clearly not very direct, consisting of passing information to them through the community head; communication only occasionally took place directly with parents. Every school should establish and maintain effective communication networks with parents, consisting of regular written notices, cellphone chat groups and the like.

Schools which managed to overcome this feeling of helplessness and get on with the job of schooling were, with only one exception, well-resourced schools, both public and private, predominantly serving middle-class families. These were largely the schools which made use of innovative modes of teaching during lockdown (Table 3.7).

As commonly observed, schools reflect their society. The downside of this truism is that schools reproduce the class divisions in their society, rather than ameliorate them; under conditions of duress, such as those precipitated by COVID-19, they may even exacerbate inequalities. One school in the case study sample of ten, which attempted to provide learning opportunities for the poorest learners, was a school which formerly served middle-class children in South Africa, but whose enrolment for a number of years had come exclusively from surrounding townships and squatter camps (Textbox 3.2).

Another noteworthy initiative, made in another South African school with half of its learner population coming from a local informal settlement, saw

Textbox 3.2 Making the best of a difficult situation

The high school that attempted to provide learning for poor children under lockdown was situated in a middle-class suburb in one of South Africa's racially divided ethnic communities, one which was maintained by arguably the best of the 19 education departments existing under apartheid before 1994.

Leadership and community support

The principal and deputy principal felt that they received very little direction from a department that was not aligned with the teachers and schools on the ground, and the school exercised its own initiative in getting as much learning going as possible. The school relied on the dedication of its teachers, a good relationship between leadership and teachers, and close co-operation from the community.

The school had very good community support, despite the fact that 92 per cent of learners came from single-parent households and 100 per cent of learners were on social grants. The socioeconomic status of the community was low, but their pride and fierce protection of the school had been demonstrated by their assistance with situations such as maintaining the school infrastructure and ensuring that the feeding scheme provided a meal for learners every day, despite delays from the government. Parents became more involved. Every day one or two parents would show up to see if the school was clean, to reassure themselves of its ability to keep the children safe. All the school governing bodies in the community put aside their differences and came together as one, which was something that people had been aspiring to for a long time.

The community forum partnered with a local radio station. Teachers would go into the radio station studio and provide lessons that way. A large advocacy programme was launched to encourage parents to tune in to the lessons being broadcast.

Communication

The school's teachers had been highly active on WhatsApp, and lessons were forwarded to learners in this way. Because of the low socioeconomic status and high unemployment rate among parents, online learning was not feasible – more than 80 per cent of learners did not have the necessary data or devices. The school also sent parents the schedule of the educational television programmes on the public broadcasting channels, as well as on the pay-television broadcasting channels on DSTv, although not all parents had access to this.

Books

The school had access to resources such as textbooks, stationery, etc. and was one of the top-five schools in the district and the only no-fee school in the top twenty. Before the lockdown in March, the school gave learners (mainly Grades 8 and 9) workbooks which they had received from the Department of Education two years previously. Before the most recent four-week closure, the school assigned learners many activities to complete.

Technology

Because ICT resources were limited, WhatsApp was the main platform used to deliver lessons and activities. However, this was a one-sided approach, as learners lacked the necessary data to return completed activities to their

(Continued)

Textbox 3.2 Making the best of a difficult situation (Continued)

teachers for assessment. Teachers were therefore unable to provide feedback and assistance.

The government provided televised and radio lessons, and links to certain websites, which learners were directed to. However, the quality of these lessons was criticised. Some teachers were upset that celebrities were given the task of presenting some of this, instead of actual teachers. Nevertheless, teachers tried to curate this strategy; however, learners received little assistance to access data. Many learners who lived in the nearby informal settlement did not have access to TV, or they lived with a large number of people and therefore were not always able to watch or listen to the televised or radio-broadcast lessons.

Overall, little teaching and learning took place during the lockdown for the majority of learners (apart from those in Grade 12). Amid the confusion about when schools should open, teachers ensured that Grade 12 learners were being taught in a socially distanced manner. In addition, weekend teaching and learning for Grade 12 learners had been taking place to ensure that they completed the curriculum.

Health

Standard operating procedures (SOPs) and personal protective equipment (PPE) were received from the government. The management of social distancing and general COVID-19 protocols were followed, using the recommendations in the SOP. Information from the national Department of Education and the district office was received by the principal and the School Management Team (SMT), who then arranged training for teachers to inform them of relevant requirements such as personal hygiene, sanitation for learners, social distancing rules, what to do in the event of a teacher or learner becoming sick, etc. Most of the support provided came from the school, based on the limited resources received from the Department of Education.

The school had tried to protect vulnerable and at-risk teachers by allowing those who were elderly, pregnant and/or suffering from co-morbidities to avoid close contacts or in-person teaching. Teachers from other grades had instead stepped in and helped fill the gap left by these teachers.

the school leveraging the efforts of the better-off parents to deliver food to learners during the height of the lockdown.

Technology

Noting teacher perceptions and expectations regarding technology, the following observations applied to a minority of schools across the sample. Schools in which the respondents taught were generally poorly equipped with both electronic and printed materials (Table 3.8). South Africa was something of an outlier in the provision of printed matter, although, given the fact that all but one of the South African schools in the case study charged fees, not much could be ascribed to this difference.

It seems that, across the board, education departments did make some effort to provide additional support to teachers during the lockdown, but generally

Table 3.8 Resources in schools pre- and during lockdown

	Kenya		Nigeria		South Africa		Other		Grand Total	
	% Pre	% During	% Pre	% During	% Pre	% During	% Pre	% During	% Pre	% During
Virtual classroom	2	29	10	26	5	7	6	20	6	20
ICT resources	29	23	24	21	15	8	31	24	25	19
Printed materials	2		16		72		59		39	

Table 3.9 Resources provided to support teaching and learning during the pandemic

	Kenya		Nigeria		South Africa		Other		Grand Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Radio	30	63	29	50	28	47	21	39	108	49
Resource packs	0	0	0	0	9	15	10	19	19	9
Television	26	54	15	26	29	48	23	43	93	42
Websites	25	52	11	19	29	48	19	35	84	38
Other: WhatsApp, etc.	12	25	3	5	23	38	12	22	50	23

this was done in a minority of schools, as shown in Table 3.9. Of particular concern is the very low priority that was accorded to the distribution of resource packs. In situations of little access to electronic resources, the provision of printed materials – a medium with which learners are most familiar – would be the best option for keeping learners active at home.

When asked what forms of support would be most useful during the lockdown, the following were rated highly by the majority of respondents (more than 70%): lesson plans, webinars, videos of online lessons, and how to manage assessment tasks remotely.

Although teacher training in the use of online teaching modalities did improve during the lockdown, strongly so in the cases of Kenya and Nigeria, on average fewer than one-third of respondents reported receiving support in this regard during lockdown (Table 3.10).

Table 3.10 Training on online/remote learning pre- and during lockdown

	Kenya (%)		Nigeria (%)		South Africa (%)		Other (%)		Grand total (%)	
	Pre	During	Pre	During	Pre	During	Pre	During	Pre	During
No	88	60	83	62	85	78	87	80	85	70
Yes	13	40	17	38	15	22	13	20	15	30

Printed materials

Print materials remain the most used and reliable form of teaching and learning resources around the world, yet Table 3.8 indicates that they were not widely available in the schools in which the respondents work. This was a problem which pre-dated the pandemic and to which learners and teachers returned when the lockdown was lifted.

Here too, the South African school that gave Grade 8 and 9 learners workbooks to work in at home set a pattern that could fruitfully be followed by other schools serving the poor, should schools be provided with printed material. The school ensured that learners took books home at the start of the lockdown, which made it easier for teachers to support learners using voice notes and messages via cellphone to give regular instructions concerning their use, without the need for too much data. The use of the workbooks for these grades particularly revealed the gap in support for Grades 10 and 11 learners at this school.

This strategy was also used in private schools where access to electronic resources was not available to all children. For example, one of the schools in the South African case study had developed and printed paper-based resource packs. The resource packs included lessons, worksheets and content which was sufficient for 4–8 weeks. Learners collected the packs, which were available for all subjects. The design of the packs allowed learners to complete the activities on the worksheets themselves, eliminating the need to upload documents via WhatsApp. In addition to the paper-based packs, learners were also given a blank notebook and some stationery. This approach accommodated parents who often did not have the data to visit apps or upload and download content, and most of whom did not have access to printing facilities.

Service conditions and teacher wellness

In light of the severe economic disruption precipitated across the world by the pandemic and the consequent closing of thousands of businesses and loss of livelihood by millions,¹ teachers seemed to fare rather better, albeit with some loss of income. Thus, of the teachers surveyed, 21 per cent had lost their jobs (Table 3.11). This figure varied greatly, from only 5 per cent in South Africa to 54 per cent in Kenya.

Table 3.11 Job losses in schools as a result of the pandemic

	Kenya		Nigeria		South Africa		Other		Grand Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
No	22	46	44	76	57	95	51	94	174	79
Yes	26	54	14	24	3	5	3	6	46	21

Table 3.12 Proportion of salary received

Proportion of salary received	Kenya		Nigeria		South Africa		Other		Grand total	
	No.	%	No.	%	No.	%	No.	%	No.	%
0–25%	20	42	16	28	4	7	3	6	43	20
26–50%	13	27	9	16	0	0	0	0	22	10
51–75%	0	0	4	7	0	0	0	0	4	2
76–99%	0	0	7	12	1	2	0	0	8	4
100%	15	31	22	38	55	92	51	94	143	65
Grand total	48	100%	58	100%	60	100%	54	100%	220	100%

In terms of salary lost as a result of the lockdown, there was also a wide variation across the case study countries, ranging from only 31 per cent of Kenyan teachers who continued to receive full salaries, compared to 92 per cent in South Africa (Table 3.12).

COVID-19 had spread fear among the populations of all countries, particularly among vulnerable groups. This applied no less to teachers, and one survey question probed the extent to which the well-being of teachers was being catered for. The results are summarised in Table 3.13; it is clear that health and psychosocial services were provided to no more than 20–30 per cent of the teachers in schools in which respondents taught in the case study countries.

Table 3.13 Support for teacher well-being during the pandemic

	Kenya		Nigeria		South Africa		Other		Grand Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Vulnerable and at-risk groups of teachers protected	15	31	14	24	26	43	30	56	85	39
Resources available for teachers to receive psychological and social emotional support	9	19	7	12	13	22	17	31	46	21
Appropriate measures to combat discrimination and stigmatisation	13	27	19	33	19	32	25	46	76	35

Lifting the lockdown

At the time of writing (early September 2020), all three case study countries, and a number of other countries in the sample, were discussing a return to school. Table 3.14 reveals much uncertainty among respondents concerning

Table 3.14 Are all learners expected back at school this year?

	Kenya		Nigeria		South Africa		Other		Grand Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes, all are returning	8	17	7	12	6	10	18	33	39	18
They are returning in phases	9	19	14	24	48	80	21	39	92	42
Don't know	12	25	6	10	1	2	3	6	22	10

plans for the remainder of the year, with fewer than one in five certain that all grades would return to school in 2020.

As could be expected in the unique situation precipitated by COVID-19, there was a great deal of uncertainty regarding plans for completion of the curriculum for the year among teachers (39%) at the time of the survey (Table 3.15). Only one-tenth of respondents thought that the curriculum could be completed without additional time.

Other concerns raised by teachers in regard to lifting the lockdowns included the following:

- Teachers expressed uncertainty about whether vulnerable learners (such as those prone to abuse or at risk of early pregnancy, etc.) would return to school at all, and whether their condition would affect teaching and learning as the lockdown was lifted.
- Ways in which teaching and learning could be optimised during lower levels of lockdown. Teachers observed low levels of interaction from learners due to masks, social distancing and other safety measures. They expressed concern for detecting learners' problems and confusion with difficult content during lessons, which they were normally able to address. However, adequate communication would be hampered by the safety measures.

3.3 Discussion, lessons and challenges

A constrained timeframe for this study, and the restrictions on communication and travel imposed by COVID-19, led to the adoption of a convenience sampling technique and exploratory design. The idiosyncratic nature of the resulting sample precluded the study from drawing general conclusions about individual countries, let alone the Commonwealth as a whole. Instead, it describes practices adopted by some teachers and schools in three sub-Saharan countries in response to the worldwide shutdown of education from around April to July 2020.

Table 3.15 Teacher views on curriculum coverage during 2020

Do you anticipate covering the curriculum this year?	Kenya		Nigeria		South Africa		Other		Grand Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
No, we are unsure about the 2020 academic year	20	42	20	34	21	35	25	46	86	39
No, we will not complete the curriculum even with adjusted timelines	8	17	7	12	20	33	11	20	46	21
Yes, we will complete the curriculum as usual	5	10	9	16	7	12	3	6	24	11
Yes, we will complete the curriculum in the adjusted timelines	9	19	10	17	12	20	11	20	42	19

Exploratory research cannot produce generalisable lessons, but serves rather to identify issues requiring further investigation. It generates hypotheses. The study described above, when taken with other research on schooling under COVID-19, suggested at least three hypotheses requiring attention, regarding inequality, communication with parents and the deployment of resources.

At the time of writing (early August 2020), most countries in the world had either partially returned to face-to-face schooling or were involved in intense discussions about when and how best to do that. To some extent, therefore, it was too late to make recommendations to improve schooling under lockdown in response to the pandemic. It was true that schooling was likely to remain constrained for some months yet, and most schools could do with advice on how to optimise learning. But the larger lessons from the experience of the pandemic were those which would lead to improved schooling for poor learners under all conditions, both normal and emergency.

3.3.1 Leadership and the question of inequality

The outstanding feature of the sample of ten schools studied was not a new hypothesis but a question arising from a very strong hypothesis, confirmed many times by a host of studies: under most conditions, schooling reproduces class divides in society. The most important question therefore is how schools can reverse the trend and provide quality educational opportunities to poor children.

The majority of the ten schools studied in some detail responded passively to the lockdown precipitated by the pandemic, providing little or no education

to their learners for three months or more. The majority of respondents in all three countries criticised the government for not providing clearer direction or sufficient resources to schools in order to deliver remote instruction. Unrealistic expectations were widespread among respondents: for example, that the government should provide hardware and training to enable schools to connect electronically with families. While waiting for direction from government, many schools provided very little, if any, education for their learners.

Where remote instruction did occur, it was carried out, with only one exception, by schools serving middle-class families. Here it was enabled by tech-savvy teachers and the availability of electronic hardware, software and unlimited connectivity. But even in these schools, remote instruction places limitations on key educational activities, particularly with respect to assessment and full learner participation.

As could have been predicted, inequalities between schools pre-dating the pandemic were exacerbated during the lockdown. The children of parents who could afford to pay continued their schooling, while children of the poor largely languished idly at home. The one school in the sample which continued with educational support for its learners provided an important outlier (see Textbox 3.2). The activities of this school seem to answer the question about how schools can maintain excellent education for children from the poorest families. The starting point lies in the fact that the school community – school management, teachers, governors and parents together – decided that government was not providing adequate leadership and took responsibility themselves for optimising the educational experiences of learners. The important question is, how this particular institutional culture, characterised by a sense of responsibility, a strong feeling of teamwork, the prioritisation of teaching and learning, and the exercise of initiative in getting activities and materials to learners, arose in the school, whether purely as an accident of serendipity, or deliberately brought about by the school governors and managers. These are questions that require further exploration, in addition to questions as to how widespread this institutional culture is in the system.

Whatever its origins and extent, the culture observed in this school was manifest through two main types of activity: communication with learners and their parents, and the deployment of resources.

3.3.2 Communication between school and home

Fee-paying schools made use of a variety of media to maintain remote instruction and communicate with learners and parents, including email, Zoom, Google Classroom etc. Although some respondents working in

disadvantaged schools claimed to be in contact with the families of their learners, the descriptions they gave were not convincing of systematic communication between homes and schools.

It is possible that in all three countries that provided case studies, the large majority of learners spent the better part of four or five months with no communication from their schools. This is an issue that requires further investigation. If it is true that most schools do not maintain regular communication with their learners' homes, then the establishment of such networks can only have beneficial effects on learning once arrangements return to normal, and will facilitate some form of schooling to continue should pandemic conditions, or any other emergency, return.

Internet-based forms of communication were largely not available to teachers at the sampled school that carried on delivering education. However, cellphone use was widespread, even in the very poor communities served by the school. Teachers used this technology to communicate frequently with learners and their parents on a host of topics, including health and safety advice, ways in which parents can support their children, and details concerning learning activities.

3.3.3 Resources

There were widespread expectations among respondents that governments should roll out the necessary hard- and software, connectivity and training required to maintain remote learning. In countries which struggle to maintain a regular power supply, this is an unrealistic expectation, although the responsibility for this provision clearly lies with government.

In all three case study countries, the governments did institute or extend television and radio broadcasts of educational material and messages. The extent to which these were used by learners was not clear, nor the degree to which they were presented as a systematic educational programme. Some teachers commented that many learners could not access the broadcasts because their homes did not possess the necessary equipment.

Zeraki Learning is a free cellphone app in Kenya which offers video lessons and assessment tests across the curriculum. This sounds like a promising initiative, but the accessibility, use and efficacy of any such technology need to be thoroughly evaluated under field conditions before investing money, time and expectations in its rollout.

Print materials are the most obvious resources to use to keep learners productively busy. Unfortunately, it seems that these were not widely available in two of the case study countries, Kenya and Nigeria (Table 3.8). South Africa was something of an outlier in this regard, with the one noted

school making good use – although not in all grades, making sure that learners took books home prior to the lockdown and used them to pursue systematic learning activities.

Note

1. Estimated at over 3 million jobs lost in South Africa by July 2020 (NIDS-CAM Survey 2020).

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Chapter 4

Commonwealth Universities and the Global Pandemic: Early Career Researchers' Review of Responses and Prospects

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4.1 Introduction

The COVID-19 pandemic has had a profound impact upon virtually all sectors of society. Universities are no exception. With restrictions introduced upon large gatherings and international travel in almost every country of the world, much of the core work of universities – learning/teaching and research/scholarship activities, in particular – had to be transformed practically overnight.

Within a month of the World Health Organization (WHO) declaring a global pandemic on 11 March 2020 (2020a), universities and other tertiary education institutions were closed in 175 countries and communities. Moreover, more than 220 million post-secondary students – 13 per cent of the total number of students affected globally – had their studies ended or significantly disrupted due to COVID-19 (World Bank 2020a). Given that approximately one-quarter of the world's universities are located in Commonwealth countries, the impact upon individuals in these countries was also significant.

Initially, actions on the part of universities were primarily 'reactive' – critical, given the need for a rapid response. Soon after, however, at least two realisations emerged: that communities – universities included – would have to continue to live with the virus, at least for the short term; and that in responding to the virus, universities had the opportunity to reflect upon their priorities and preferences, in any case.

Thus, there soon became a widespread acceptance that a dual approach – that of being both reactive (to new challenges that the pandemic would inevitably continue to present) and proactive (to ensure that all responses would be as integrated, collaborative and sustainable as possible) – would be critical. Such

an approach would ensure that universities continued to be a highly effective partner in societies' responses going forward.

This chapter investigates the ways in which universities across the Commonwealth have responded to the global COVID-19 pandemic. It does this by identifying and describing universities' activities across multiple areas: learning/teaching, research/scholarship and service/community. It presents both general themes and illustrative examples.

The study that is the focus of this chapter involved contributions from several early career researchers (ECRs), supported by a team of mentors, referees and other higher educational professionals from across the Commonwealth. Hence the activities that developed the study also served to provide young people with opportunities for learning, for contribution and for networking during a time of global lockdown.

4.2 Background and context

The Association of Commonwealth Universities (ACU) is an international organisation dedicated to building a better world through higher education. With more than 500 member universities across the Commonwealth, the ACU connects, co-ordinates and convenes its members and others in order to build capacity, to inspire action and to advance innovation. Universities worldwide have a key role to play in advancing the UN's Sustainable Development Goals (SDGs), and collective action taken by organisations like the ACU is a critical means to advance fulfilment of the goals (ACU 2020a).

Like other international organisations in higher education, the ACU has had to adapt its operations in the wake of the global pandemic. An immediate pivot to online activities in March 2020 allowed many of its already scheduled initiatives – for instance, network conferences (ACU 2020b) and summer schools (ACU 2020c) – to be executed virtually. Its cadre of international scholarship recipients, moreover, were given immediate support as they adapted their academic commitments to the changed conditions (ACU 2020d). Finally, the ACU took several strategic initiatives, responding to members' new needs by offering multiple online workshops, by supporting academic services offices, and by highlighting the importance of a range of issues including equity and inclusiveness in various global fora (ACU 2020e; Times Higher Education 2020a).

This study on which this chapter reports, had two key purposes:

- The first purpose was to investigate the ways in which universities across the Commonwealth had responded – and were continuing to respond – to the global pandemic. It did this by identifying and

describing universities' activities across multiple areas: learning/teaching, research/scholarship and service/community.

- The second purpose was to provide several ECRs across the Commonwealth with opportunities to deepen their understanding of the roles of universities in the world, to contribute meaningfully to the ongoing debate around the role of higher education in promoting the SDGs, to develop their research skills further through in-depth engagement with experienced international practitioners, and to continue to build their own professional networks.

4.3 Methodology and findings

4.3.1 Methodology

Following the purposes laid out above, the ACU Leadership Team developed three research questions to define further the report's focus. They were:

- i. What have universities done in response to the global pandemic?
- ii. What are the key challenges and opportunities facing universities in a post-pandemic world?
- iii. What are peoples' expectations of universities in a post-pandemic world?

Attention then turned to finalisation of the membership of the team that would produce the report. Central to the activity would be the work of the youth from across the Commonwealth. These ten individuals had responded to a call for talented and motivated ECRs that had been issued by the Commonwealth Secretariat and JET earlier. They were subsequently selected by the Commonwealth Secretariat and JET via a competitive process.

Having reviewed the ten ECRs' applications, the ACU Leadership Team introduced themselves and asked the ECRs for more information about their respective interests, skills and aspirations. The aim, on the part of the ACU Leadership Team, was to try to find particular research tasks that would work well for individual ECRs.

Mentors and referees, also important parts of the team, were recruited. Individual mentors were expected to work with two or three ECRs as they developed their research project, offering, for instance, advice, direction, information and inspiration – all in real time. Referees were kept apprised of – and engaged in – the project's development from start to finish. Each referee were assigned a particular part of the broader task (more specifically, a research project developed by two or three ECRs). Towards the end of the project, the referees provided expert reviews of their assigned project, often having at least one 'back-and-forth' with their respective ECRs.

To recruit mentors and referees, the ACU Leadership Team advertised the opportunities to its member universities, requesting a CV and a one-page statement of interest from interested applicants. Selection was made on the basis of expertise, experience, motivation and ‘match’ with the specific research tasks anticipated.

With the entire team in place, and with information about ECRs’ mentors’ and referees’ abilities and interests in hand, the ACU Leadership Team made personnel assignments across five specific research tasks. These five tasks followed from the three research questions, with the specific abilities and interests of the ECRs being particularly influential in determining the exact foci of the tasks. These five tasks were:

- i. Analysis of media releases and sector statements on universities’ reactions to the pandemic
- ii. Analysis of survey responses regarding university actions during the pandemic (data had already been collected by ACU)
- iii. Analysis of statements, media releases and/or speeches by individual universities’ leaders and leaders of national and international associations of universities during the pandemic
- iv. Development of an interview script and/or focus group session with Commonwealth youth regarding their perspectives on the pandemic
- v. Analysis of media releases and other statements by governments, civil society and businesses regarding the purpose of universities in a post-pandemic world

In all, the team consisted of ten ECRs (from seven different Commonwealth countries), three mentors (Prof Eno Akpabio (Namibia), Dr Debra Morgan (UK) and Dr Anuradha Tiwary (India)), three referees (Professor Likius Daniel (Namibia), Dr Cristina Devecchi (UK), and Professor Godfrey Steele (Trinidad and Tobago)), and three members of the ACU Leadership Team (Prof Ian Rowlands (Canada); Dr Faye Taylor and George Lakey (UK)). Thus, 19 individuals from 12 different Commonwealth countries (Botswana, Brunei Darussalam, Cameroon, Canada, Fiji, India, Malawi, Namibia, Nigeria, Trinidad and Tobago, Uganda, United Kingdom, – across the Commonwealth’s five regions – made up the team.

The ACU Leadership Team presented a number of principles and priorities to all participants at the outset of the exercise:

- The importance of validity and reliability (as for any research endeavour).
- A proposed approach for the research process, as follows: determine task/articulate research question (in parallel with confirming data availability); collect and analyse data (results);

develop discussion (response to the ‘so what?’ question); arrive at conclusions and recommendations.

- Because of the short time line, ECRs had to make their tasks as manageable as possible (it was posited that it was better to take a more focused task through to completion, than it was to complete only the introduction of a larger task).
- Document/reference/cite all material, as appropriate.
- Be transparent – not only for the sake of the ‘reliability requirement’ (noted above), but also for both the reader (to make the research more comprehensible) and the other ECRs (to allow them to share relevant information among themselves more easily).
- The ACU Leadership Team acknowledged that the research process was a ‘living method’ – given that it was ‘still being built in real time’, the team committed to engage on issues promptly as they arose.

After the project was launched in mid-June, the ACU Leadership Team held an ‘all-team’ meeting once a week (to which all team members were invited). A brief agenda was sent out in advance, with the main purposes of the meeting to provide updates regarding progress made during the previous week and to indicate plans for the coming week. These meetings also served as an opportunity to share experiences and offer encouragement to all participants.

As noted above, at the conclusion of the exercise (in mid-July 2020), the ECRs presented their work to the referees, who offered comments (sometimes on revised versions as well). All materials – ECRs’ research projects and referees’ reports – were then used by the ACU Leadership Team, along with other materials known to the members of the ACU Leadership Team, to prepare this chapter.

4.3.2 Findings

The results are divided into two main sections. The first section reviews universities’ responses to the global pandemic. The second broadens the focus to discuss societies’ expectations of universities (including universities’ expectations of themselves) going forward towards a post-pandemic world. Both the findings and discussion sections draw upon the research reports completed by the ECRs and other sources.

Universities’ responses to the global pandemic

Like other institutions in society, universities have had to respond to the global pandemic. This has required action on multiple time horizons: short-term reactions to meet stakeholders’ immediate needs, to satisfy regulatory requirements and to respond to other pressures, as well as longer-term plans

in the light of various possible futures. It has also necessitated action across all parts of universities' missions (learning/teaching, research/scholarship and service/outreach) and engaging at different levels of governance (for example, the university itself, the local community, the subnational and/or national regulatory body/ies, and transnational alliances and other groupings).

Our selection of responses is intended to be illustrative, rather than necessarily representative, illuminating the breadth and depth of actions that have been taken – and that continue to be taken – by universities across the Commonwealth. We also intentionally point to others who have effectively aggregated information about universities' responses to the global pandemic.

Universities' reports on their activities

Individual universities

Several universities have regularly reported upon their actions in response to the global pandemic.

The University of the West Indies (UWI), for example, established a task force with the aim of leveraging the UWI's knowledge and experts 'to assist the Caribbean in its readiness and response to the virus outbreak, mindful that the region's best defence is a co-ordinated and collaborative approach' (UWI 2020).

The Indian Institute of Technology (IIT) Indore also established a task force, focusing on all issues related to campus reopening after completion of the national lockdown (IIT Indore 2020). IIT Indore also initiated 'a series of research projects to develop tools to combat spreading of Covid-19 and help in its effective diagnosis'. Areas of work included sensors, detectors, and a sterilisation chamber (The Times of India 2020).

The University of Colombo in Sri Lanka gathered much of its most relevant pandemic-related information onto one webpage, including health and safety information, an e-learning module, and stories of research and innovation (University of Colombo 2020). As but one example of the University of Colombo's impact, a team of researchers developed an 'app named "Swaraksha" to be used for COVID-19 prevention activities' (Ceylon Today 2020).

In Malaysia, moreover, many public universities responded promptly and energetically, addressing the needs of their members, as well as the needs of their stakeholders more broadly. At Universiti Putra Malaysia, for instance, 'a team of experts and volunteers [were] producing 5,000 face shields for frontliners at hospitals near the campus' (New Strait Times 2020).

Finally, the University of Melbourne in Australia presented the multiple dimensions of its response on its webpages. It had, for example, information

for students – given the impacts upon teaching/learning and research – in a series of documents (University of Melbourne 2020a). The university had also brought together a number of pandemic-related research stories and opinion pieces on another part of its website (University of Melbourne 2020b).

Subnational and national associations of universities

A number of subnational and national associations of universities have also developed virtual repositories that reflect responses as reported from across their respective memberships.

In the United Kingdom, for instance, Universities UK gathered information on how its 138 members were ‘supporting the national effort’ (Universities UK 2020), recounting initiatives across a variety of areas. By contrast, a collection of reports focused upon the research response to the global pandemic came from the U15 Group of Canadian Research Universities (U15), which is an organisation representing that country’s most research-intensive universities (U15 2020).

Australia, meanwhile, offered examples from both broader and narrower university membership organisations: Universities Australia – the broad-based membership organisation (consisting of 39 member universities) – collected many updates regarding the university sector’s responses in that country (Universities Australia 2020); and the Group of Eight – the organisation representing the most research-intensive universities in Australia – issued a report charting a so-called ‘Roadmap to Recovery’ (Group of Eight 2020).

Finally, Universities South Africa – which brings together that country’s 26 public universities – offered a range of resources with three primary ‘fluid documents’ focusing, respectively, on research on COVID-19 solutions, engagement with stakeholders in response, and emergency teaching and learning during the pandemic (Universities South Africa 2020).

International alliances and groupings of universities

Continuing to ‘scale up’ with respect to universities’ responses, a number of different alliances and other groupings of universities across international borders have presented their members’ responses in a co-ordinated fashion.

The Association of Pacific Rim Universities (APRU) – a collection of 55 universities (including 11 in five Commonwealth countries and Hong Kong) – collected in one place resources documenting individual members’ responses (APRU 2020). Universitas 21 (U21) – a similar kind of association of like-minded universities, though this one has 27 members (including 12 in

seven Commonwealth countries) – did the same, focusing on how members ‘are meeting the challenges of COVID-19 in research, in teaching and learning, and in student experience’ (U21 2020).

Larger membership university associations were also active in response to the global pandemic. The Agence Universitaire de la Francophonie (AUF), which has more than 1,000 members across 119 countries (including 16 Commonwealth countries), contributed financial resources (1 million euros) to support 92 student initiatives in its member institutions across 44 countries (AUF 2020). This is but one example from its portfolio of responses.

Moreover, the ACU highlighted the activities of its members – for instance, those ‘spearheading vital medical research into a possible vaccine, providing much-needed breathing aids, developing diagnostic tools, researching genome sequencing and more.’ Seven weeks into the global pandemic, the ACU highlighted the actions of 33 universities across 12 countries (ACU 2020f). Throughout May 2020 and beyond, it continued to highlight the contributions of its members to global efforts (for example, in Pakistan, the National University of Sciences and Technology’s [NUST’s] development of a bilingual app for COVID-19 screening [ACU 2020g; NUST 2020]). The ACU also made critical contributions in convening its members to share best practice in areas as diverse as moving assessments online, managing a research office in lockdown, providing university library services during lockdown, and strategies for successfully moving courses online (ACU 2020e).

Two case studies

Early career researchers involved in this exercise contributed two case studies regarding universities’ and university associations’ responses to the global pandemic: 1) African universities’ responses and 2) Fiji and New Zealand universities’ perspectives.

African universities’ responses

Inspired by multilevel consideration of universities’ activities, a team of ECRs focused on Commonwealth countries in Africa to uncover examples of impact and inspiration. Table 4.1 presents examples from five individual universities. The Association of African Universities (AAU) created a resource page to support its 387 members and, indeed, all tertiary educational institutions on the continent. Experiences to share, resources to deploy, and positions to advance are among the pieces of information presented there (AAU 2020a).

Table 4.1 Illustrative examples of responses by Commonwealth African universities to the pandemic

University	Country	Response	Reference
Kenyatta University	Kenya	Student uses 3-D printers to develop improved nasal swabs	Kenyatta University 2020
Makerere University	Uganda	University develops COVID-19 resource centre for national stakeholders	Makerere University 2020
University of Botswana	Botswana	Professors lead development of a ventilation hood and face mask for COVID-19 patients	University of Botswana 2020
University of Namibia	Namibia	Scientists work with local industry to produce hand sanitizers	United Nations Namibia 2020
University of Rwanda	Rwanda	University mobilises to support the need in its local community by providing food and other supplies	University of Rwanda 2020

Fiji and New Zealand universities' perspectives

Another team of ECRs compared and contrasted the statements and media releases of university leaders and their universities in two Commonwealth countries – Fiji Islands and New Zealand. The universities studied were: Fiji National University, the University of the South Pacific and the University of Fiji (all Fiji); and the University of Auckland, University of Otago and Victoria University of Wellington (all New Zealand). Universities New Zealand, a national consortium of universities, was also considered.

Online research was used to source media releases, vice-chancellor updates and other statements, and online news reports by media organisations. This approach provided quick and reliable access to information within a short period. It also enabled prompt production of a research report (which was critical, given the time constraints of this exercise).

Challenges for the ECRs in their efforts to complete a high-quality report in a timely manner included the lack of regularly updated information on websites and the occasional lack of statements and comments made available to the public, especially in the case of Fiji. This latter challenge led to the use of manual searches on the part of the researchers through online search engines.

The experience was, nevertheless, revealing to the ECRs, raising two points: first, with an increased importance of an effective online presence during the pandemic, those universities that were not as active online were made even more conspicuous by their relative 'quietness' during this period; and second, there were, thus, varying levels of transparency and attention in sharing messages about COVID-19.

Table 4.2 Themes arising from Fiji and New Zealand universities' statements

Focus area	Themes arising in Fiji universities*	Themes arising in New Zealand universities*
Mode of teaching	Transitioning from face-to-face and blended learning to complete online delivery; extended break (from scheduled classes) to make the transition; impacts on final examinations and field trips	Movement to online delivery; technological challenges for some staff; working from home transitions; offering some academic courses to non-students in the community; changes to scheduling and assessments
International travel restrictions	Ban on international travel for university business instituted	Supporting 'stranded' international students; managing future international student arrivals
Social distancing and social gathering	Discouraging gatherings above and beyond national and other regulatory requirements	Strategies still deployed even in the light of campus reopening; equity impacts of on-campus and off-campus modes of work and study
Financial impact	Not explicitly disclosed in reviewed materials	Recognition of impact upon the institution, as well as impact upon individual members' personal finances; mitigation options presented
Research and recognition	No specific attention in reviewed materials	Research into COVID-19 responses, including vaccine development, citizens' attitudes and experiences, and appropriate sector-specific reactions; production of hand sanitizers and availability of academic experts to answer the public's questions were amongst the community contributions
<p>* Note: The identification of a theme recognises that it was noted in documents pertaining to at least one – but not necessarily more than one – of the institutions in the particular country. It recognises, as well, that the list of 'themes arising' is not necessarily exhaustive nor representative but indicative instead.</p>		

Drawing upon multiple statements across the seven institutions,² five focus areas emerged. These are laid out in Table 4.2, along with key themes arising from each of the two countries. There existed similarities and differences between these two countries, as well as between them and other countries reviewed above. And while there were clearly limitations from this kind of investigation (for instance, one's search will necessarily generate only a subset of the global population of university statements), it can still illuminate some evident themes, which may be worthy of further study.

Universities' survey responses in light of the pandemic

Much of the material above focuses on universities' outward-facing communications, oftentimes sourced from leadership offices within those same universities. Those messages are, of course, important because they usually reflect institutional positions. Another perspective, however, involves so-called 'internal perspectives' – that is, the experiences and attitudes of those who are employed by universities and/or those who are studying at universities. Reactions and intentions of these individuals are key determinants of the ongoing performance of universities and their prospects. Fortunately, much work has also been carried out in this regard.

Broad-based understanding

The International Association of Universities (IAU) is an international, non-governmental organisation representing higher education institutions from more than 130 countries. Acting as the global voice of higher education to the United Nations Educational, Scientific and Cultural Organization (UNESCO), the IAU gathered a range of resources related to the pandemic under the following headings: 'Recommendations', 'Monitoring Impact', 'Distance Education Support', 'Global News', and 'Calls and Webinars' (IAU 2020a).

Additionally, the IAU took the initiative to conduct an online survey in late March 2020 and early April 2020. Collecting 576 responses from 424 higher education institutions in 111 countries and territories, the survey provided an insightful snapshot of the impacts that these institutions felt – and how they responded – during the early stage of the pandemic. From the responses, it is clear that there were consequences and reactions across universities' multiple portfolios (learning and teaching, mobility, assessment, research, external stakeholder partnerships, community engagement, institutional planning, etc.) around the world. Two additional surveys by the IAU, with similar approaches, were scheduled to be completed later in 2020 and in 2021 (IAU 2020b).

Double digital divides in universities

Coming out of the above-mentioned IAU work – as well as other survey work done during the pandemic³ – the critical importance of information and

communication technologies (ICT) has become evident. The extent to which academic material can be communicated effectively by electronic means, the quality of the ways in which interpersonal connections can be made, and the level of quality of remote task management have ‘virtually’ all contributed to the effectiveness of the work of universities, particularly during ‘lockdown periods’ of the pandemic.

Investigating this issue in more detail, the ACU undertook a survey of 258 staff and students across 33 countries, asking respondents about their level of digital engagement, their changing attitudes and behaviours resulting from COVID-19, and the challenges associated with online education, research and remote working. The ECRs who were involved in this exercise completed their own investigation of the data.⁴ Survey results suggest that there is a ‘double digital divide’ in place globally.

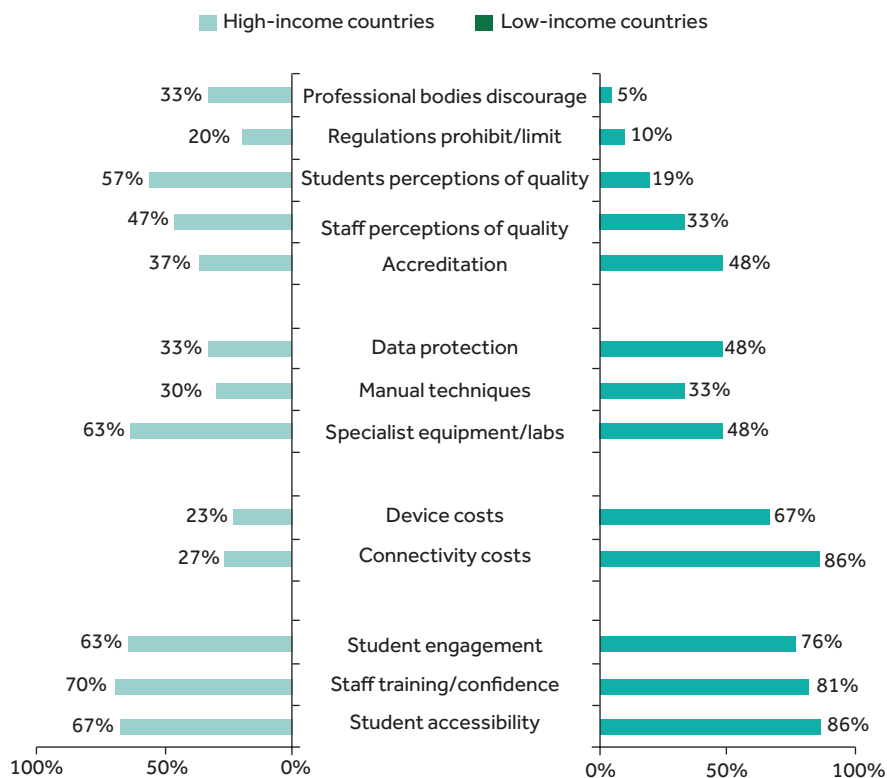
For one, there are differences in ICT capabilities across countries: with respect to internet access, for instance, 83 per cent of survey respondents from high-income countries had access to broadband when working remotely. Equivalent figures for respondents from upper middle-income countries, lower middle-income countries and low-income countries were 63 per cent, 38 per cent and 19 per cent, respectively. Not only did respondents from lower-income contexts also note challenges for remote working – most notably data costs, internet speed and internet reliability – but they were also less likely to receive institutional support in the form of contributions to data costs and devices.

Additionally, however, survey results also highlighted a divergence in attitudes and behaviours within institutions, across students, academics, professional services staff and senior leaders. Across all respondents, senior leaders were most likely to have access to broadband when working remotely (74%), followed by professional services staff (52%), academics (38%) and students (30%). And senior leaders and professional services staff were more likely than academics or students to report institutional contributions towards data costs and devices.

With a focus on parts of the core mission of universities, Figures 4.1 and 4.2 present, respectively, challenges for online learning and impacts upon online research activity and collaborations.

However, many of the survey respondents also revealed optimism – more than 80 per cent thought the quality of online learning and teaching had improved during the previous six months. Many believed that, with the right support, the pandemic could provide a window of opportunity for universities to advance their missions even better in the future – potentially in ways that were more inclusive, more equitable and more resilient. The ACU report concludes with a series of recommendations as to how

Figure 4.1 Challenges for online learning by national income level (ACU 2020h)

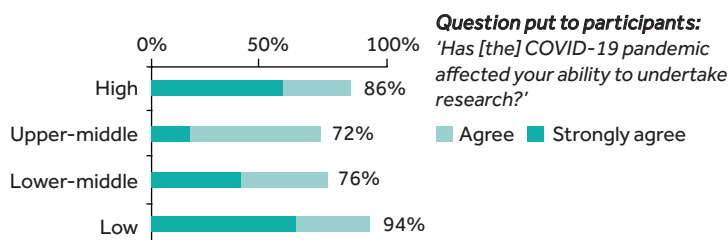


governments and policy-makers across the Commonwealth can create the conditions for success (for example, supporting digital transformation initiatives in universities [ACU 2020h]). Others have also investigated this issue independently (for example, World Bank 2020b).

4.3.2.5 Youth perspectives

While not strictly a university constituency (as would be, say, ‘students’), ‘youth’ is nevertheless a critical stakeholder for this report’s consideration. A number of organisations are aware not only of how the global pandemic

Figure 4.2 Pandemic’s impact upon online research activity and collaborations by national income level (ACU 2020h)



has affected, continues to affect, and will affect in the future this set of stakeholders, while also recognising that those under 30 years of age have critical input to provide to societal responses. As a result, they have facilitated youth engagement in a variety of ways.

The Commonwealth, for example, has been a leader in promoting youth engagement. Already central to its planned activities, the impact of the pandemic upon young people highlighted the need for a virtual space in which young people could ‘meet and discuss their challenges and pool their ingenuity and resources.’ A monthly webinar series was thus convened (July to December 2020) covering issues such as employment, climate change, technology, education and equal opportunities; the series was scheduled to engage about 1,000 individuals worldwide (Commonwealth Secretariat 2020a). Regional events to catalyse additional discussions had also taken place (Commonwealth Secretariat 2020b).

Case-study: Youth leaders in Cameroon

A team of ECRs undertook an investigation of youth reactions – and recommendations for responding – to the global pandemic.

Primarily drawing upon those attending a youth leadership training programme, this study drew upon a convenience sample. The 67 respondents to the ten-question survey were predominantly from Cameroon (approximately 88 per cent); most were from 25 to 35 years of age (almost three-quarters); there was an almost equal division between male and female respondents (a 54:46 ratio, respectively); while the population could be considered to be highly educated (for example, more than half of all respondents were registered in or had already completed postgraduate education).

The set of respondents unanimously reported that they had been affected by the pandemic. Elaborating further, respondents were asked specifically for additional details of their experiences in a university setting. The importance of e-learning and/or digitisation of the university’s activities more generally were identified as particularly salient issues (identified by close to two-thirds of respondents). Indeed, the importance of capacity building with respect to ICT – on the part of both university students and staff – was highlighted by this group of youth leaders. A secondary theme that emerged was with respect to the importance of health and safety measures.

Finally, the engagement level across virtually all of the respondents was high. When offered the opportunity to provide, in one sentence, advice to university education stakeholders in light of the global pandemic, 64 of the 67 respondents (96%) advanced a recommendation. While no two responses were, not surprisingly, identical, the ICT and health and safety themes were once again the most frequently raised issues.

4.3.3 Discussion of societies' expectations of universities following the global pandemic

Moving forward, it is now widely accepted that all communities and all sectors, worldwide, must be part of a co-ordinated and comprehensive response to the pandemic (WHO 2020b). As such, universities across the Commonwealth – and, indeed, around the world – must continue to reflect and act upon the ways in which they deliver on their respective core missions (i.e. learning/teaching, research/scholarship and service/outreach), which will necessarily have elements that are more inward focused and those that are more outward looking. All of this, moreover, will have to be done sustainably across various social, environmental and economic dimensions. Indeed, the realities of a resource-constrained world make that requirement even more of a priority than ever before.

During the past few months, many universities' leaders and other representatives have convened in order to discuss further the higher education sector's prospects for the longer term (ACU 2020i; ACU 2020j; IAU 2020c; University of Cape Town 2020). Several themes already identified in this report (even if only briefly) have been raised in sessions like these, including:

- accessibility and inclusion;
- blended learning (taking the best of recent advances in online teaching);
- digitalisation's impact broadly;
- meaning of place (given reduced travel and increased virtual connections);
- public use of universities' services by individuals (including non-traditional learners and other stakeholders) and organisations (including governments);
- quality improvements;
- resilience, adaptability and flexibility;
- shifting budgets; and
- society's needs (as represented, for instance, by the SDGs)

Not yet mentioned, though similarly prominent on this broad agenda going forward, include ways in which particular constituencies within universities have been impacted by the pandemic to date, and who will probably continue to be impacted going forward: women (Viglione 2020), graduate students (Coan 2020) and ECRs (Fain 2020), for instance. Pressures to transform knowledge-production processes (article review processes and article access protocols, for example) are another set of such issues (Callaway 2020).

Externally, a number of organisations – at different governance levels – have highlighted the roles that they believe universities can and/or should play in a post-pandemic world. At a local level, for example, a strong case for the role of universities in London’s ‘economic revival from COVID-19’ has been made by the Confederation of British Industries (CBI) in the United Kingdom. Highlighting universities’ contributions to, for instance, talent development and provision, innovation and creativity, and economic development, examples from a range of universities are presented in a report published by the CBI, which concludes with a call for governmental support (CBI 2020).

A transnational example comes from the South Asia region. More specifically, Bangladeshi and Indian research organisations co-hosted a digital roundtable discussion focusing on the ‘post-pandemic economic recovery’. Ways in which international inter-university research collaborations and joint degrees could contribute to the critical development of the science and technology domain were among the approaches highlighted (Bhowmick and Kamal 2020).

Moving to the global level, UNESCO is the lead UN organisation responsible for education, generally, and higher education, specifically. It has offered analyses and recommendations in response to the pandemic, prioritising themes of equity, fairness and inclusiveness, as well as the importance of international collaboration to maximise the prospects of a ‘progressive exit’ from the current crisis. Reference to SDG 4 (particularly SDG 4.3: ‘equal access to affordable technical, vocational and higher education’) is also made (UNESCO 2020a; UNESCO 2020b). Other intergovernmental organisations – for instance, the World Bank – are also offering their suggestions (World Bank 2020a).

And transitioning from governmental to non-governmental institutions, many business, civil society and multistakeholder groups have advanced their own list of priorities and activities. The World Economic Forum (WEF), for instance, has a broader programme around a ‘Great Reset’ – an opportunity ‘to rebuild in a different way. One that makes the world better for everyone and addresses the other great crisis of our time: climate change’ (WEF 2020a). The same organisation’s particular focus upon higher education draws attention to the opportunities presented once you see this as a transformative time. Augmenting the role of technology in the delivery of learning/teaching and expanding the traditional clientele of universities to include lifelong learners and non-traditional learners are two examples (WEF 2020b).

A team of ECRs dug deeper on this issue, identifying a set of expectations among stakeholders, supporting assertions with external comment and evidence. Table 4.3 summarises their key findings.

Table 4.3 Illustrative themes arising from stakeholders' expectations of universities

Theme	Elaboration	Key source(s)
Rule of law	Pandemic responses have sometimes served to concentrate power in government bodies; the critical importance of the role of universities to advance a culture of democracy and human rights through training and information provision is evident	Giannini and Brandolino 2020; Harkavy et al. 2020
Societal engagement	Increased expectations for universities to stand in solidarity with society to address social challenges through, for instance, provision of expertise regarding problem identification/ understanding and appropriate responses (including product and process innovations, and including policy development)	AAU 2020b; Harkavy et al. 2020; IAU 2020b; Wakabi 2020
Mainstreaming the use of ICTs	Build upon their own increased understanding regarding the effective use of ICTs (through remote learning, international research collaboration, etc.); transfer this knowledge to other sectors of society (for example, governments, businesses) that would also benefit from it	IAU 2020b

4.4 Lessons and challenges

As noted above, this study brought together 19 individuals from across the Commonwealth. All volunteered their time, adding – at very short notice – to their already existing professional (and other) obligations. Informal communications from most participants revealed that the majority found it to be an enjoyable, rewarding and worthwhile experience.

Below, a few challenges that were encountered are identified, and the mitigation strategies that were deployed are also noted.

- *Heterogeneity of the participants*: Eventually a strength, the sheer diversity of participants (differences in experiences and interests across all constituencies) raised an initial challenge. This was because, not only did ‘the right tasks’ need to be found, but expectations for what could be accomplished in such a short time period also had to be set appropriately. The efforts of the ACU Leadership Team to seek more information from all participants, coupled with the decision to lay out, for the ECRs’ consideration, ‘candidate areas for research investigation’ (in terms of more specific research sub-questions and the provision of already collected data sets), helped accelerate the early stages of the process (topic selection, question refinement).

- *Global logistics:* Participants' locations literally spanned the Commonwealth's geography – from Canada and the Caribbean in the west to Fiji in the east. Crossing 16 time zones, synchronous meetings were sometimes a challenge because the 06:00 start time in the west would mean a 23:00 end time in the east. Moreover, for many of those 'in the middle', meetings could well conflict with their various professional and personal commitments during the day. While recordings of meetings (and making these promptly available) helped with the flow of information, there were still challenges in timely conversations (given the time differences involved).
- *Structure and roles:* The division of labour across the team of experienced international practitioners (the ACU Leadership Team, the mentors and the referees) evolved as the task continued. Wanting to be clear to their global peers with respect to the task at hand, the ACU Leadership Team drafted a set of terms of reference for mentor and referee applicants to review and consider. While these broadly reflected how the exercise eventually played out, there were some changes along the way (for example, inviting both mentors and referees to every team meeting, dropping the requirement for a mid-term evaluation from the referees, etc.) in order to improve the exercise. The goodwill – and good humour – of all international peers involved were appreciated by the members of the ACU Leadership Team.
- *Short timeline:* The entire experience for the participants transpired over the course of six weeks. Given the aforementioned heterogeneity of the participants – as well as the 'newness' of the particular experience for all – this meant that continual attention to the task at hand had to be accorded by all participants, particularly the members of the ACU Leadership Team. In addition to the changes mentioned above, the ACU Leadership Team had to strike a balance between 'quality' (which might well mean more time spent on an individual task) and 'progress' (continuing to move through the stages of research [research question, research design, data collection, analysis and discussion], working with mentors and referees to support the ECRs in their work). Recognising the short timeline meant something would have to be 'sacrificed', the ACU Leadership Team decided early on that it would be 'comprehensiveness' that would be forsaken. Readers will note that this study makes judicious use of terms like 'illustrative' and 'example', reinforcing the fact that there is no claim to systematic reviews of any particular aspect of universities' responses to the

global pandemic. Instead, ECRs were taken through these stages of research with (usually) a ‘convenience sample’ of data. Nevertheless, this provided not only a valuable experience for the ECRs (and for the mentors and the referees), but also a useful snapshot into a part of this critical issue/area.

- *Expecting the unexpected*: Two specific times at which the ACU Leadership Team had to improvise during the course of the exercise were as follows:
 - Data-sharing agreement: Realising that provision of a complete data set would effectively advance both of the study’s purposes (i.e. provide valuable insights into universities’ pandemic responses, as well as creating a valuable research experience for ECRs), the ACU Leadership Team promptly crafted a data-sharing agreement so as to allow the ECRs full access to original data (which the ACU already possessed), while still protecting the intellectual property of those who had collected the data in the first place.
 - Research with human participants: When the ACU Leadership Team learned that some of the ECRs were keen to collect original data through interviews and/or surveys and/or focus groups, a ‘respondent’s consent to participate’ form (and associated protocol) was quickly crafted. Drawing upon best practice from universities across the Commonwealth, this provided means for moving forward.

Notwithstanding these challenges, the point made above about the positive sentiments expressed by virtually all participants encourages reflection upon how the successes of – and the learnings from – this exercise can be used to create additional positive experiences in the future.

The kind of exercise behind the report, namely, the case of youth creating new value-added products in a time-limited and mentored environment, brings together two different sets of activities:

- Be they ‘charrettes’, ‘hackathons’, ‘jams’, or something else, there are many experiences that bring together individuals to address a specific problem or opportunity over the course of (often) one or a couple of days. While not all such events necessarily restrict themselves to youth, youth are often the predominant demographic (Angariat and Nolte 2020; Tang et al. 2020). And while the pandemic has, of course, limited the abilities of people to gather for such experiences, it has also served to encourage their reimagining (Campbell 2020; MIT 2020).

- Mentorship, or alternatively, ‘advising’, ‘supervising’, or something else is, of course, a cornerstone of universities’ and other learning institutions’ approach to advancing learning.⁵ Formal evaluations of efforts to develop effective mentorship programmes have been undertaken (Ssemata et al. 2017), as have investigations of the ways in which mentorship can take place over longer distances (Bielczyk et al. 2019).

While there is less information about programmes that have brought together these two sets of activities explicitly, the conditions created by the global pandemic may mean that the time is ripe for such consideration. Regardless, it is certainly the case that the positive energy generated herein has encouraged a systematic reflection so as to do something more and better ‘next time’.

4.5 Conclusions and recommendations

4.5.1 Research-related conclusions and recommendations

The study reported on in this chapter shows that universities across the Commonwealth have had – and continue to have – a multidimensional response to the global pandemic. They have taken actions often involving fundamental transformations in their own operations. Indeed, across the components that together constitute their core mission, it has been in the areas of learning/teaching responsibilities that the most profound changes have occurred (i.e. moving traditional face-to-face on-campus interactions to virtual platforms).

Notwithstanding this, however, it has also been shown that every major function of universities has been affected by the pandemic (that is, research/scholarship and service/community activities have also been impacted). Through their responses, universities have collectively demonstrated resilience and foresight through short-term ‘pivots’ (for example, moving courses online and repatriating students abroad and on-campus international students in a matter of days) and long-term planning (e.g. developing alternative multiyear budgets for different scenarios – reflecting both different resource envelopes available to universities and different opportunities for universities, such as problem-solving programmes and lifelong learning, among others).

This study has also shown that universities face new – or, more properly, newly emphasised – opportunities and challenges going forward. Two sets of examples are: responses to calls for SDG-oriented curricula and research and for lifelong learning; and support for vulnerable/marginalised communities both within and beyond their traditional populations. Clearly,

universities have already made significant progress in responding to these opportunities and challenges during the course of the pandemic to date. Potential remains, however, and universities have signalled their willingness to engage fully.

It is recommended that attention should continue to be drawn to the important and innovative work that universities are undertaking – in terms of their resilient responses in their operations, their critical contributions to a sustainable society across all parts of their mission, and in terms of their vital role as a key partner in an overall societal response to the global pandemic. Attention raising in this way enhances the quality of the activities undertaken by universities by sharing best practice (thus improving performance broadly), by finding synergies through aggregating individual universities' contributions (thus reaching higher levels of impact), and by highlighting opportunities to non-traditional partners in society (thus creating new pathways for sustainability).

4.5.2 Youth engagement-related conclusions and recommendations

This chapter – and, more specifically, the study that served to create it – has shown that Commonwealth youth are ready and keen to contribute to discussions about the role of universities in a pandemic and post-pandemic world. Through the six-week journey in which ECRs developed material presented in this report, ten youth have added their analyses and their perspectives to the critical worldwide knowledge base being developed. They have also demonstrated their commitment to being involved in these important global discussions.

Similarly, for their parts, the mentors and referees have lent their expertise and shown their commitment to increasing the capacity of youth researchers across the Commonwealth. The majority of, if not all, participants signalled a huge appetite for transnational and collaborative research and capacity building, with levels of enthusiasm for such engagement seeming to be higher at the end of the exercise than at its beginning.

It is recommended that learnings from this exercise be used to offer additional research opportunities to Commonwealth youth in the future. Moreover, the perspectives of all participants – which at the time of writing were being solicited by means of a post-report survey instrument – should also be deployed in order to build suggestions for similar future activities. Engagement of Commonwealth youth – and development of their respective research capacities – are both a long-standing Commonwealth priority and an activity worth pursuing. For its part, ACU is committed to contributing to fulfilling this recommendation.

Notes

1. As of January 2020, it was reported that of the world's 29,429 universities, 6,833 (or 23.2%) were located in Commonwealth countries (Webometrics 2020).
2. The following sources were reviewed: Collins 2020; Deguara 2020; Fiji National University 2020; India Education Bureau 2020; Otago Daily Times 2020a, 2020b, 2020c, 2020d, 2020e; Radio New Zealand 2020a, 2020b; Radio New Zealand Newshub 2020; Scoop 2020; Stuff 2020; Te 2020; The PIE News 2020; Times Higher Education 2020b; University of California, Davis 2020; University of Auckland 2020; University of Fiji 2020; University of Otago 2020a, 2020b, 2020c, 2020d, 2020e, 2020f, 2020g, 2020h; USP 2020; Victoria University 2020; Williams 2020.
3. See surveys from a variety of university constituencies. There are those focusing upon current students: in Canada, Statistics Canada 2020; in Nigeria, Jegede and Hasan 2020; and in the United Kingdom, National Union of Students 2020; those focusing upon current international students: Redden 2020; those focusing upon prospective students: Quacquarelli Symonds 2020; those focusing upon researchers: ResearchGate 2020; and those canvassing members widely: University of Bristol 2020.
4. Discussion in this section draws from both the work of the ECRs and ACU 2020h.
5. We acknowledge that JET Education Services used the term 'bootcamp' to describe this activity (JET 2020c). We have seen the term, 'bootcamp', used to refer to short(er), skills-based training experiences (see, for instance, Fain 2018). Thus, while this activity had some research training as part of its overall offering, the focus was not predominantly upon 'training' as one might expect in a more conventional 'bootcamp'.

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Section II

Access, Equity and
Inclusion

Chapter 5

Access and Inclusivity in Education: Addressing the Barriers for the Most Disadvantaged and Marginalised in Times of Pandemics

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5.1 Background and context

5.1.1 International agreements

Over the past 30 years, national governments have acknowledged that educational opportunities are limited for a significant proportion of the world's population. This situation is recognised in international agreements and national policies adopted by Commonwealth and other countries, including the World Conference on Education for All: Meeting Basic Learning Needs (UNESCO 1990), the Salamanca Statement and Framework for Action on Special Needs Education (UNESCO 1994), The Dakar Framework for Action, Education for All: Meeting our Collective Commitments (UNESCO 2000), and the Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4 (UNESCO 2016). The adoption in 2015 of the 2030 Agenda for Sustainable Development (Sustainable Development Goals [SDGs]) (UN General Assembly 2015) emphasised the inter-relationship between factors, including poverty, poor healthcare facilities, inadequate education, and environmental degradation and conflict, which have led to disadvantage and marginalisation for individuals and communities.

The current pandemic is placing an economic burden on governments that may negatively impact their ability to maintain progress towards attaining the SDGs. This is a situation that will need to be carefully monitored by organisations concerned about education and the rights of children and young people.

Each of these international agreements indicates a commitment to provide universal access to primary education and to increase opportunities for those of school age who have been identified as marginalised and denied an opportunity to learn through formal schooling. These disadvantaged populations have been identified as those with disabilities, refugees, ethnic minorities, girls, and others living in poverty or subject to discrimination on the grounds of caste, class or religion. Learners, families and communities thus categorised have often been subjected to discrimination and exclusion from the social, educational and welfare rights identified in the Universal Declaration of Human Rights (UN 1948), The Convention on the Rights of the Child (UN 1989), and the Convention on the Rights of Persons with Disabilities (UN 2006).

A succession of global monitoring reports issued by the UN Educational, Scientific and Cultural Organisation (UNESCO) indicate that some progress has been made towards achieving a commitment to provide universal primary education for all, but that this has often taken place at a much slower pace than might have been anticipated. The most recent of these reports (UNESCO 2020b), presents several continuing challenges that indicate the pervasive disadvantages faced by many families. Among the most disturbing facts identified in this report, is the indication that in all but the wealthiest countries, mainly those in Europe and North America, only 18 of those in the poorest sections of the school-age population manage to complete secondary school for every 100 of those from wealthy families. In many sub-Saharan African nations, hardly any poor rural young women complete secondary education. An estimated 258 million children, adolescents and youth – equating to 17 per cent of the world's school-age learners – do not attend school. In sub-Saharan Africa, the number is continuing to grow. This is a situation that cannot be addressed by educators alone. Rather, it demands a commitment from professionals across all services and will require continued collaboration between governments, NGOs, and other individuals and organisations who proclaim a belief in social justice and equity.

5.1.2 Moves towards inclusive education

National governments, including those in all Commonwealth countries, have considered the promises made in successive international agreements and have formulated policies to promote inclusive education. Policy alone cannot address the issues faced by families and children who are excluded from educational opportunity. Essential elements to create a just society include a more cohesive approach to the fair distribution of resources and expertise; changes in the training of teachers and other professionals to develop knowledge, skills and understanding suitable for the creation of inclusive learning environments; and the development of partnerships between

education establishments, industry and commercial interests. A piecemeal approach to addressing the challenges of exclusion – whereby individuals or groups have a narrow focus of interest, such as disability or poverty – is in evidence in many countries. If brought together to share in development work, these interest groups could have a far greater impact.

It should not be assumed that passing legislation and implementing policy will bring about the desired changes in the lives of marginalised children and families. Many countries have developed excellent policies that have faced obstacles, and in some cases opposition, that has inhibited their impact. In India, the Right of Children to Free and Compulsory Education Act (RTE) (Ministry of Human Resource Development 2009) indicates the government's commitment to universal primary education. The legislation is well constructed and well-intentioned but has encountered anxiety in many elements of the education system in India, notably among those who provide education to children from the more advantaged sectors of society. The problem is largely concerns expressed by parents who pay for their children to attend schools, that an influx of those who may have difficulties could demand too much attention from teachers and thus limit the opportunities of their own children. Concerns have also been expressed about the limited training and experience of teachers, who are now being asked to teach classes of greater diversity. Here and in other countries, we can see increasing opposition to the concept of inclusive education. This is a fair indication of the lack of confidence seen in many teachers in their ability to address the needs of a diverse population of learners. Evidence from research conducted in several Commonwealth countries, shows that lack of teacher preparedness for inclusion is a major issue (Shah et al. 2013 [India]; Kamau and Wilson 2017 [Kenya]; Otukile-Mongwaketse et al. 2016 [Botswana]; Nketsia et al. 2016 [Ghana]).

The slow rate of progress towards inclusive education in many countries cannot detract from the high level of commitment to social justice shown by many teachers. Positive attitudes to diversity are critical for progress to be achieved, and there are undoubtedly some barriers to be crossed in this area. However, attitudes improve when teachers gain greater confidence in their ability to teach successfully in inclusive classrooms, and they deserve greater support if they are to be expected to succeed (Rose and Doveston 2015). Examples of successful innovations to promote inclusive education can be seen across the world, including from those countries that are often identified as struggling to achieve universal provision (West 2015; Watkins and Meijer 2016; Singal et al. 2019). Such examples can provide the foundation for further developments for the benefit of children, teachers and families.

Understanding the issues surrounding inclusive education requires focused research (Amor et al. 2019). The researchers who have contributed case

studies to this report are well positioned to provide further insights into the challenges faced by teachers, children and families that have led to exclusion and to provide examples of how these might be overcome. Research-informed practice can instil confidence in professionals about what might be achieved as we look to providing a better future for all learners.

5.2 Survey methodology and findings

5.2.1 Overview of research project

From the outset of this project, it was important to establish research questions and ensure these would be practicable in terms of the limited time and resources available for the research process. The following two research questions were agreed:

- How has the COVID-19 pandemic impacted the educational opportunities of those of school age in this specific population? (with each researcher identifying a sample from one marginalised group within their country)
- What measures, if any, have been taken to support children from this population to access education at this time?

The research reported in this chapter consists of a series of summarised case studies, each of which looks to understand the impact of COVID-19 on the educational opportunities afforded to children and their families, based on data obtained from representatives of marginalised groups. In addition, each case study provides insights into a unique situation defined by the country from which the data were gathered, and on a specific population sample – for example, migrant workers or girls.

While it would seem fair to assume that COVID-19 has had a detrimental effect on children and families in situations of disadvantage, as has been the case in other national and international crises, the novel situation of a pandemic requires evidence to confirm this. Research of this nature must focus on asking questions and gathering data to inform situational interpretations. While we may hypothesise the impact of the pandemic, it is important to avoid generalised statements until such time as data has been acquired, analysed and interpreted.

In order to conduct research of this nature it was important from the outset to establish some agreed definitions for the terminology used by the individual researchers and those who were providing mentoring and support. See below:

- **Inclusivity (inclusion).** Inclusion is seen as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and

communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all learners (UNESCO 2005,13).

- **Disadvantaged.** Disadvantaged individuals or groups are those who are denied access to those rights and opportunities that are available to the majority of their peers. Disadvantage may result from attitudes to disability, culture, ethnicity, religion, caste, class, religion, socioeconomic status, gender, migration status and displacement, or sexuality. It often results from conditions of poverty, but can also be related to natural or human-made catastrophes (such as warfare, earthquakes or pandemics).
- **Marginalised.** People are marginalised when they are either denied an opportunity to voice their opinions or lack the ability or authority to express their views to those who have control over their lives. Such situations result in denial of access to human rights and those conditions that enable individuals or groups of people to live with dignity within their communities.
- **Pandemic.** A pandemic is a disease outbreak that spreads across countries or continents. It affects more people and takes more lives than an epidemic.

Timetable

The time allocated for this project was determined by JET in consultation with the Commonwealth Secretariat, the [commissioning agency]. The urgent need to understand the impact of COVID-19 on marginalised groups and the limitations of available resources inevitably limited the time available for conducting the study, and of necessity-imposed restrictions on both the sample sizes that could realistically be established and the methods of data collection open to researchers. This was an important consideration when designing the research approach.

Over a six-week period, researchers were allocated a series of tasks that enabled them to identify a focus for their research, select a purposive sample, develop a research instrument, familiarise themselves with appropriate literature, gather and analyse data, and write a case study. This was a demanding task, which would have been challenging even for experienced researchers and required a high level of commitment and diligence on the part of each participating researcher. The thematic lead and co-lead maintained contact with the researchers throughout this period, offering

advice and encouragement as necessary. A weekly online meeting involving all researchers and supporters was used to review progress, set and discuss tasks, and provide encouragement to the researchers.

Case study format

In the early days of the project, it was agreed that a case study format would provide a sound foundation within which the researchers could work, and that this would enable them to locate information within an agreed template as their work progressed. This template allowed for some flexibility but aimed to give researchers a structure that would enable them to make progress throughout the time of the project rather than having the challenge of designing a report format at the conclusion of their work.

In many of the countries in which data were collected, the marginalised or vulnerable populations form a numerically significant percentage of those in school. This situation varied across the countries and was influential in enabling the researchers to select their population of focus. The format below established for the case studies included context (description of country and pandemic response); research sample (description of population studied, why selected and where located); method (research instrument, how it was applied, how data were analysed, ethics etc.); findings (what study revealed, relevant literature); and challenges/recommendations.

Data collection, analysis and reporting

The method for data collection and the approach to fieldwork were determined by each individual researcher. Conducting fieldwork in the time of a pandemic inevitably presented several challenges, with the requirements of social distancing and imposed lockdown situations restricting opportunities for face-to-face interactions. The researchers each designed an instrument with this challenge in mind and established a sample based on accessibility, safety and relevance to the research questions. In addition, each researcher conducted a search and literature review related to their chosen study area. Table 5.1 indicates the sample established by each researcher and the primary methods of data collection used during each project.

The researchers managed and interpreted the data using thematic analysis approach. In this way, they were able to identify key issues that were impacting the lives of students and their families, and those measures adopted by national governments to minimise disruption to learning. The majority chose to manage data manually using the electronic software package NVIVO QSR 1999 (QSR International 1999). Summary findings from the research are presented below.

Table 5.1 Research sample and primary data collection instruments

Researcher	Country	Defined sample	Primary data collection instruments
Paul Habineza	Rwanda	Children in poor households	Telephone interviews
Timothy Dziedzom Amaglo-Mensah and Kenneth Gyamerah	Ghana	Girls	Interviews
Itumeleng Thabang Moiphisi	Botswana	Children preparing for public examinations in rural communities	Interviews
Hoimawati Talukdar	India	Children of migrant workers	Interviews
Isaac Yeboah	Ghana	Children of migrant workers	Questionnaire/interviews
Melvin Sharty	Sierra Leone	Adolescent Girls	Interview/questionnaire
Dawud Suleiman	Nigeria	Children living in poverty	Interviews

Research ethics

All researchers were required to abide by a code of practice established for this project. Additional documentation for obtaining informed consent and gaining ethical approval was provided by JET Educational Services. Ethical considerations were managed by JET Educational Services and, following consultation, between the theme lead and a University Research Ethics Committee.

5.2.2 Overall findings from the case studies

The full case studies provided details of the context, methods, findings and recommendations from each individual researcher.

The small-scale nature of the research meant that findings could be generalised to a wider population. However, they did provide important illustrations of the current situation for significantly disadvantaged individuals, whose access to education and other services had been severely disrupted during the COVID-19 pandemic. In addition, they provided an indication of the need for both supportive action and more research in this area.

An analysis of emerging themes from the national case studies enabled a series of commonalities and exceptionalities to be identified. Rose and Shevlin (2014, 115) define these two terms as follows:

- **Commonalities:** Phenomena that are seen to be common across cases and might therefore be used to formulate ‘fuzzy generalisations.’

- **Exceptionalities:** Phenomena that were seen in single cases and cannot therefore be generalised beyond the specific location.

In research of this nature, where the samples are purposive and the sample size is small, it is not possible to generalise findings beyond the study locale. However, the consistency with which some issues arise did enable ‘fuzzy generalisation’, whereby interpretation of the data provided an indication that implied that a finding was common to a few locations, and therefore *may be* typical of that situation. An example within the studies reported here was the finding that e-learning material was not reaching the rural and remote parts of the country or people living in poverty. This was due to lack of internet facilities and technology such as mobile phones and laptops/computers, television and radio. This was reported from Botswana, Ghana, India, Nigeria and Rwanda.

Table 5.2 identifies commonalities across the case studies with respect of the educational challenges faced by marginalised learners and their families during the COVID-19 pandemic.

These commonalities allowed us to draw some conclusions from the research and these are presented later in this chapter. Some of the commonalities may

Table 5.2 Commonalities among the study countries

	Common features	Countries where issue was recorded
1.	Burden on parents to find alternative learning modes	Nigeria, Sierra Leone
2.	Adolescent girls at higher risk of educational exclusion or sexual exploitation due to COVID-19	Ghana, Sierra Leone
3.	Government plans in place for inclusive education, but limited funds to execute the plans	India, Nigeria, Sierra Leone
4.	E-learning material not reaching rural/remote parts of the country and people living in poverty due to lack of internet facilities and technology such as mobile phones and laptop/computers, television and radio	Botswana, Ghana, India, Nigeria, Rwanda
5.	The lower the income of parents, the higher the chances of their children not performing well in their studies	India, Nigeria
6.	Illiteracy of parents contributed to lack of support for learning at home	Botswana, India, Nigeria
7.	Lack of power supply/electricity inhibited ability to study at home	Botswana, Ghana, Nigeria, Rwanda
8.	Migrant workers lived in poorly constructed temporary structures/ feared of eviction from the places they lived in	Ghana, India
9.	During the pandemic, migrant workers went back to their hometowns and lacked education support	Ghana, India
10.	Inequality in support systems and facilities due to the rural–urban divide	Botswana, Ghana, India, Nigeria, Rwanda, Sierra Leone

in fact have been found in the other case studies, but as the focus of each project differed this was not always obvious.

In addition to the commonalities identified by the researchers, there was also a range of exceptionalities which appeared to be specific and relevant to individual countries. The following summaries/statements for each country are drawn directly from the full case studies.

Botswana

The study was conducted among students staying in Molepolole who came from the nearby land or cattle posts such as Mosokotso, Dikgonnyane and Katswana. These students were mainly transported by donkey cart to and from classes.

The participants were chosen by simple random sampling in order to give every student an equal chance of being chosen. Purposive sampling was used to ensure that there was equal representation of gender and intellectual abilities. Purposive sampling was also used to choose teachers. A total of ten participants took part in the study: three from primary school, three from junior school and four from senior secondary school.

Botswana's public schools usually have very large classes of 40–45 students per class. This had the potential to increase the risk of transmission of COVID-19, should there be any cases in the classroom. To ensure that there was social distancing and thus reduced contact in the classroom, each class was divided into two, that is 20–25 students per class. This resulted in hiring more teachers to assist with the extra classes. The division also led to classes being divided into morning and afternoon shifts, with each class lasting four hours.

Students expressed concerns about the situation resulting from the pandemic and its likely impact on their examination results and their ability to learn. Comments obtained in student interviews included:

The lockdown has really affected us; we have been out of school for two months. I am worried that we may not be able to finish the syllabus.

The four hours shift is really not working for us as students; teachers are forced to rush through topics. Sometimes we do not understand but because of time, we are unable to spend more time on the topic.

I completely forgot what was taught in the first time. I was too anxious to study because I was scared that we might die from corona.

Teachers expressed similar concerns:

The two months' lockdown has really affected our lessons delivery; we are forced to rush through the syllabus so that we can be able to finish it and revise with our students.

Our students are really not prepared for the exams. I am really worried on whether they will be able to pass, despite the little time they have and the amount of work that still needs to be covered.

Learning at home was seen to be particularly challenging when support was limited, because of poor literacy among household members.

Staying at the cattle post or lands has its disadvantage in that we stay with our grandmothers who are illiterate. This makes it difficult for them to assist us with schoolwork when we get stuck.

As in other countries, access to online learning or accessing lessons through the media was problematic. One student stated:

I stay at the land or cattle post. There is no electricity there, so we do not have a television. The only time I got to watch a television is when I have the money to visit my friends in Molepolole to study with them.

And similar concerns were expressed by another:

Students who have had access to the online materials are better off than us, because they are able to use channels such as YouTube to access learning materials. Those of us who do not have the internet cannot access such.

One student felt that she had a solution to the difficulties of access, but that this had not been considered:

I feel that because we are not many, lessons should have been arranged for us at the local kgotla [court/meeting place] so that [we could] study and also watch the study programmes that were provided online.

The case study summarised issues, stating that equitable distribution of resources was important for any thriving society. This included strengthening access to resources for marginalised groups. These groups were often left behind because they did not have access. Students in marginalised areas complained about the lack of resources, which made it difficult for them to perform well in school. Thus, ensuring all students had access to the same resources would contribute to improved learner performance.

Ghana (1)

The population investigated in the first case study from Ghana was a sample of girls in government senior high schools. The rationale for choosing girls specifically for this study was based on the evidence that in every humanitarian crisis, girls' education was severely impacted (UNICEF 2016; Save the Children 2015; Malala Fund 2020). In the Ghanaian context, girls faced several cultural and systemic barriers to participation in education.

The researchers recruited 11 girls as samples for the case study. Of this sample, five participants resided in rural areas, one participant lived in an

inner city and the rest were from urban communities. A qualitative approach was adopted, with primary data collected via semi-structured interviews carried out remotely.

Summary findings were as follows:

In terms of academic support and engagement, most of the girls received most academic engagement and support from their parents and/or siblings, rather than from their teachers and schools.

A majority claimed COVID-19 had brought negative changes in their lives: uncertainty, panic, stress, and increased anxiety. One girl said:

The COVID-19 pandemic has caused a drastic change in all aspects of human lives. Be it, education, financial aspect, religious organisations, our extended family gatherings and even our personal lives as well.

In terms of mental health and well-being, most of the girls had also experienced some form of anxiety, nervousness, stress and discomfort, which has affected their motivation to study. One participant said:

It has disrupted my studies. I no longer feel enthused to study hard as I used to. I also feel anxious of contracting the virus.

In terms of lack of access to remote or distance learning and digital devices, the girls in rural communities were disproportionately affected. Conversely, all the girls who lived in urban and the peri-urban areas asserted they had access to TV and radio at home and they were able to join some national remote learning programmes. The girls from the urban and peri-urban areas also acknowledged that they had personal computers and smartphones; however, most rural girls did not. One girl in a rural context stated:

the government should provide computers and internet to students to make learning easier.

From our findings, it was clear that although girls fell within the at-risks and vulnerable groups who might be left behind during this educational crisis, those in urban and peri-urban contexts had a better chance of benefitting from some alternative education programmes compared to those in rural communities.

Ghana (2)

The second Ghana case study focused on female migrant workers residing and working in peri-urban communities in Greater Accra. Survey interviews were conducted in households or the marketplace. The researcher used purposive sampling and was able to interview 32 respondents.

The Ministry of Gender, Children and Social Protection increased cash transfers under the LEAP (Livelihoods Empowerment Against Poverty)

programme across poor households in Ghana to help girls return to school. LEAP is a social cash transfer programme that seeks to reduce poverty by promoting basic household consumption, basic school enrolment, attendance and retention, and access to healthcare services and opportunities among extremely poor and vulnerable households in Ghana. The LEAP programme is predominantly active in poor households in rural areas.

Although the Ghanaian government instituted a number of digital initiatives to support learning during the pandemic, most female migrant workers to urban areas (whose origins were rural areas in Ghana) lacked the infrastructure necessary to support online learning. Therefore, their children were denied access to the government's virtual learning initiative. As one mother indicated in the interview:

My child is not in school, so I don't know if the government gave such intervention. Besides, we don't have electricity here [female migrant worker, 26 years].

The dispersal of migrant workers led to a situation of considerable confusion. A female migrant worker explained that during the lockdown, most of the women returned to their place of origin:

Most people left during the corona lockdown. We were left with only about four families here. Those left here were not so many [female migrant worker, 18 years].

Those who returned home faced the challenge of inadequate educational resources and a lack of opportunities to continue their learning:

My child is with the father in our village [in northern Ghana]. In our village, they have constructed nice school buildings but there are no teachers to teach them. During the COVID-19 pandemic, none of them are going to school. They are all at home [female migrant worker, 32 years].

Those migrant workers who did not return home faced many challenges. In an in-depth interview, one of the respondents explained that amidst a constant threat of evacuation from her home, it was not possible to gain the same level of income as before the pandemic. She also explained that they were suffering oppression from those in positions of authority:

The market is not good at all. The people [local authorities] have been coming here to sack us from here. They take our belongings outside our rooms. When it rains too, you need to be awake until the rain stops before you can sleep – you and the child. That is what is worrying us [female migrant worker, 17 years].

All the female migrants interviewed confirmed that they did not benefit from the government's initiative of distributing free food. This could possibly

have been influenced by the mass return of female migrant workers to the northern region. The responses to this issue from two interviewees were revealing:

We didn't get some [food]. They didn't bring the foodstuffs here. They always come here to write our names, but they don't give us anything [female migrant worker, 19 years].

No, we didn't receive some of government's food here. We left to the northern region. They sometimes come here to sack us here. And we don't know where to sleep [female migrant worker, 21 years].

In all, it was observed that little was done by the government and other civil society organisations to protect respondents during and after the COVID-19 lockdown. COVID-19 had severely exposed them and their children to social, economic and health inequality in Ghanaian society. Their plight was seen but not heard. The needs and interests of female migrant workers and their children were largely absent from mainstream debates on gender, child protection and inclusive education.

India

The reason for selecting Uttar Pradesh (UP) in India as the focus of this research was that media reports suggested a large number of migrant workers whose sufferings and hardships had come to the fore were from UP and Bihar. The place chosen for the study was the village of Chithera in Dadri district, Gautam Buddha Nagar in UP. Interviews were conducted with 12 women migrant workers aged between 19 and 60 years. The women worked as garden labourers. They were asked about the issues they faced in their workplace, their level of literacy and their children's education. Their children (a group of 25) were aged 2 to 18 years.

The data had to be collected directly from the migrant workers, who because of poverty and high levels of illiteracy did not possess mobile phones. The lockdown presented a difficulty as most migrant workers could not come to their workplace. So, the data reported in this research was limited to that collected in two weeks of fieldwork. The research instrument developed for the study was an unstructured interview. The data was analysed using a qualitative approach of thematic analysis and interpretation.

For migrant workers, education had not been prioritised. However, the changing nature of the economy and their appreciation of the fact that education leads to a decent salary had motivated these workers to send their children to school. The hope was that the children would not have to undertake the kind of manual labouring jobs that their parents were doing. This may indicate a shift in focus among the migrant worker parents, who had previously seen little option but to adopt their current lifestyle.

One of the Indian interviewees stated:

If we don't work, we won't get food for survival, education comes later. So, our focus has always been on earning for survival, [the] rest comes later.

The provision of a midday meal had had a considerable impact upon school attendance in India. When children were in school, the provision of this meal took pressure off families to ensure some aspects of good nutrition for their children. It was therefore unsurprising that a parent should emphasise the importance of 'food for survival' at a time when her children were out of school as a result of the pandemic.

The COVID-19 crisis left these children without any form of education, despite being enrolled in school. From March 2020 onwards, when the schools were forced to close down, they had no teaching-learning form of education. This was a huge gap, considering the length of time they were kept away from their studies without any access to digital platforms. The uncertainty about when schools would reopen loomed large. The children had lost interest in education and that interest would be hard to regain.

In addition to lack of access to online classes, electricity was provided for only a few fixed hours in the rural areas. Worse still was the issue of parental illiteracy: parents were not aware that the government had provided e-learning platforms (such as Swayam, E-Vidya and E-Pathshala). Understanding about online education was still a long way ahead for them. It was only by educating them on the recent trends in education that their children would improve their education and be able to reach the same level as children from privileged classes.

It was anticipated that a different set of problems could face the children of migrant workers when the pandemic ended. The Director of Policy, Research and Advocacy, Child Rights and You (CRY) suggested:

The recent traumatic experiences may affect their learning outcome and eventually affect their retention in school. School administration will need to provide special attention and counselling services to these children.

Nigeria

The focus of the case study from Nigeria was children living in poverty. Nigeria has the highest rate of child poverty in sub-Saharan Africa (World Data Lab projections 2019).

The study relied on qualitative primary research and a desktop literature review. Primary data was collected using structured interviews, while the secondary data was based upon desktop research. The research interviews were conducted in Tudun Wada. This is a small urban area located in Zaria, Kaduna State, in the north-western region of Nigeria. A simple random

sampling technique was employed. The sample size was just six; due to lockdown, the researcher chose to focus more on the literature review. Data were obtained using questionnaires and a structured interview method.

Under normal circumstances, qualitative data would have been obtained in face-to-face interviews or focus groups. The limitations on travel and the necessity to maintain social distancing had a profound effect upon this process. The researcher resorted to digital communication: use of the telephone and other desk-based approaches to conduct their studies.

The main findings from this case study were as follows:

There were insufficient textbooks available to enable children to study either at home or school. Schools were often far from homes, with no transport facilities available to assist children to attend.

Children living in poverty were more likely to stop their education completely during the pandemic. This was one of the biggest issues affecting children living in poverty. They had no additional support from the schools or even the teachers. This was because most of them were only able to afford to attend public schools, which were often far behind in terms of access to basic infrastructure and resources. As a result, they could not afford to organise extra support for their students and teachers as some private schools did.

The most severe issues faced by children living in poverty arose from their parents' lack of money. Even under normal circumstances, many respondents had to trek long distances to school every day, without any proper midday meal arrangements. This made learning difficult and further discouraged children from going to school, thereby increasing their marginalisation.

Many children living in poverty studied for only a few hours during the pandemic: an average of one or two hours daily. Most of this studying was less intense and serious than learning in school. Many participants also confirmed that there was no proper structured timetable, which made it difficult to maintain consistency and focus. According to one participant:

My parents send me on errand at times when [I am] reading and I will just stop everything.

This was another reason children only learned for a few hours each day.

Rwanda

The research sample was selected from a marginalised vulnerable community, which was part of the COVID-19 economic relief programme. Due to limited time and limited resources, 50 professional teachers were selected from the Nyarugenge district of the city of Kigali because it had more accurate information on the effect of COVID-19 on vulnerable child learners. The school had many young vulnerable pupils.

The research tools consisted of sets of questions and instructions on how they should be answered. Telephonic responses to questions were obtained and unstructured interviews were used for data collection.

Rwanda was still recovering from the genocide against the Tutsi population that took place in 1994, which destroyed the entire social and economic fabric of the country. The war and genocide left approximately 1 million child-headed households. Some of the children had since grown up or been absorbed into other households, but most of them still faced a higher burden of responsibility and work than their peers. During the pandemic, it was difficult for such households to prioritise education or maintain the quality of education that learners were receiving before the pandemic.

All respondents strongly agreed that the coronavirus had an effect on the education of vulnerable learners. Of the respondents, 70 per cent confirmed that support from television, YouTube channels and radio teaching programmes was not affordable or could not be accessed by vulnerable child learners.

The use of radio and television as a main support for students unable to attend school during the pandemic was seen as a positive move by the government. However, it was suggested that the most vulnerable students were likely to live in communities that lacked access to electricity, and they were therefore disadvantaged compared to their wealthier peers.

Sierra Leone

The case study sample population in Sierra Leone was adolescent girls aged 10–19 years. The sample was selected from the 2015 Sierra Leone Population and Housing Census report (Statistics Sierra Leone (SSL) 2017).

The case study used a qualitative approach to analyse data collected from principal secondary sources that applied to key research questions. Data was collected from online searches of key institutions, including the Ministry of Basic Senior and Secondary Education (MBSSE).

In Sierra Leone, public and private schools had reopened across the country by the time of the research. However, this was only for pupils and students who were preparing for public examinations, therefore excluding many thousands of children from school.

Key findings were as follows:

- Adolescent girls were at higher risk of contracting HIV/AIDS, being forced into early marriages and suffering female genital cutting. Thousands of adolescent girls were also left vulnerable to unwanted sex and transactional sex for food and other essentials. This saw more than 18,000 girls fall pregnant.

- The COVID-19 crisis was accentuating existing risks and bringing additional risks of gender inequality, gender-based violence (GBV) and adolescent pregnancy as young girls faced greater expectations to care for children and relatives at home instead of studying and teaching. They were more prone to domestic abuse without regular access to school, teachers, and other support systems in the community.
- The Sierra Leone government had put comprehensive safety guidelines in place in terms of access and inclusivity, with four pillars that addressed (i) communications, (ii) continuous distance learning, (iii) school reopening readiness, and (iv) operations, planning and policy.
- The Sierra Leone government was incurring additional expenses because of the pandemic to supply personal protective equipment and water to schools; fund radio learning programmes; and finance additional costs associated with providing extra remedial classes (especially for examination classes).
- A plan had been developed that covered school-, community- and system-level interventions to bring girls back to school post-pandemic. It was hoped this would enable pregnant girls and young mothers who had dropped out to re-enter formal education. Girls in this situation had previously been excluded, but the Transforming Girls Education programme – initiated by the Canadian government and funded from the US\$400 million G7 Charlevoix Declaration on Quality Education – had set out a plan to increase enrolment, retention and completion rates for girls across the country by 2023. Among the initiatives included in this programme, which aimed to improve opportunities for 80,000 students, was the proposed piloting of a new scholarship initiative that would support 120 young women pursuing teaching degrees.

5.3 Case study recommendations

Some key recommendations that came out of the seven case studies were as follows:

- The need to scale up social protection systems that provide relief to the poor, marginalised and vulnerable. Governments should also consider setting up wider programmes to provide a midday meal to children.
- Poor/vulnerable communities are less likely to observe the protocols of COVID-19. Government should work with the media

to persuade these communities to wear face masks, wash their hands and use hand sanitisers, and practise social distancing. Face masks and hand sanitiser should be distributed free to protect communities.

- The need for investment in digital and physical infrastructure. Rural schools, as well as inner cities and communities, must have access to ICT if they are to have equitable access to education. Internet connectivity fees must be regulated/reduced.
- While governments have initiated measures to enable continuity of education during lockdown, special efforts must be made to ensure migrant and other vulnerable children get access to remote learning. Radio and TV support programmes should be strengthened, with parents encouraged to help children stay engaged.
- The need to prioritise girls' education. In every pandemic and humanitarian crisis, girls' education is greatly affected (sexual exploitation, teenage pregnancy, child marriage, dropouts). Government and partners should educate the public on the need to ensure that girls continue to benefit from education. The public needs to understand that domestic work should be divided equally among all members of the household. As domestic violence during this period may rise, it is important to teach the public how to deal with cases of domestic violence.
- Policy-makers should invest in teacher capacity – so they are better able to use digital and information skills for teaching/learning. Teachers should also be motivated and supported to use inclusive pedagogical approaches to ensure girls and other vulnerable groups continue to benefit from education.
- Ministries of education should provide well-being, counselling and therapy support to students and teachers when the schools reopen. The focus should be on mental health, especially the challenges girls/ other vulnerable students have faced during pandemic.
- Students must get access to special training or bridging courses to recover lost school time.
- Government should provide migrant workers with a basic form of learning, so that they can at least use a mobile phone. When they have and can use mobile phones, their children will gradually learn to use them for education purposes as well. Parent literacy will also improve the educational prospects of their children. Government should consider building hostels for migrant communities.

5.4 Discussion and conclusions

The data obtained by the researchers has enabled us to draw some conclusions from those findings that may be defined as commonalities (see Table 5.2). While we must respect the limitations of these studies, which were conducted with small samples in geographically limited areas and within a short time frame, we can suggest the following:

- *The role of technology in supporting learning*

Even in the twenty-first century, it should not be assumed that digital technology and e-learning are wholly effective ways of supporting learners who are out of school. This research demonstrated how the honest endeavours of national governments to make use of technological support during the pandemic benefited the wealthiest in society, while failing to engage with those living in the poorest communities. A lack of access to technology and equipment has placed learners from marginalised groups and communities at a severe disadvantage when compared with their wealthier peers, who enjoy much wider access.

This situation is exacerbated for families living in rural environments, who in some instances do not have access to electricity. There was a clear urban/rural divide in those Commonwealth countries that participated in this study and this denies many children their right to education.

- *The role of parents in supporting learning*

In many instances, students are placed at a disadvantage because of the limited education of their parents. Parental ability to support the learning of their children is dependent upon an ability to understand the education system and to have a reasonable level of literacy. Children who are first-generation learners are less likely to receive good-quality support for learning from their families during the pandemic.

- *Girls at greater risk of failure than boys*

There remains a disparity between the expectations placed upon boys and their sisters in respect of educational outcomes. This is a common issue internationally but has been exacerbated by the COVID-19 pandemic. Data suggest that being out of school is likely to mean a cessation of learning for girls, who become further engaged in domestic responsibilities, placing them at risk of academic failure and reinforcing community beliefs that educating boys is more important than educating girls.

- *Lack of financial and resident security*
Migrant workers from rural areas fear for their security and suffer both financial and social discrimination and hardships that deny them opportunities to adequately support their children's learning. Even in situations where government interventions are intended to support such families by providing food and other essentials, it is evident that this system is flawed and that families are suffering hardship. This situation has been emphasised during the COVID-19 pandemic and the education of children of migrant workers has suffered as a result.

- *Two overriding factors: 1) poverty and 2) lack of effective government planning for inclusion*

A key factor in all the inhibitors of inclusion and equity demonstrated in the case study data is that of poverty. All the issues raised in this section of the report have a direct connection to the impoverished state in which individuals are living and attempting to obtain an education. There is no doubt that governments in the study countries have attempted to implement support mechanisms to alleviate the suffering of the populations studied. However, at the core of these studies are individuals, families and communities who were already disadvantaged and excluded from adequate resources and support prior to the pandemic. The current pandemic has exacerbated their situation and reduced the learning opportunities available to their children compared to those of wealthier families in the same country.

The governments of every country in the case studies have made a commitment to providing education that is equitable and inclusive. They have done so by passing legislation, making policy and stating their intentions to adhere to international agreements. Beyond the policy level, there are serious omissions in planning for the implementation of inclusion, which have resulted in the further distancing of those in greatest need from their peers. The COVID-19 pandemic has brought forward several key issues, as outlined in this chapter, and has confirmed the failure to address the needs of the most vulnerable members of society.

5.4.1 A further focus for research

Good practice in promoting inclusive practice exists in all the countries that have contributed to this research. This needs to be brought to the forefront of future thinking, in order that both policy-makers and professionals delivering services can become more effective in addressing the needs of

those who are marginalised in all societies. The research reported here has served well to identify issues; it is now important to build upon these small-scale studies to ensure not only better understanding, but also a reinforced commitment to practical implementation of inclusive practices.

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Chapter 6

Exploring the Impact of COVID-19 on Education with Respect to Gender Equity and Equality

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6.1 Background and context

Evidence from infectious disease breakouts similar to COVID-19 indicates that women and girls can be affected in particular ways, and, in some areas, face more negative impacts than men (Burns et al. 2019). Previous pandemic outbreaks such as Ebola in Africa, Sars in Asia, Zika in Latin America and the Caribbean, as well as H1N1 worldwide, show that women and girls are often more exposed to the various negative impacts of such crises, particularly where they are occupationally and domestically engaged in caregiving roles or jobs. These roles lead to increased direct contact with those infected, as observed in the Ebola outbreak (Fawole et al. 2016). It is important to note that the traditional caregiving image of women is not only exclusive to the African region, but is prevalent worldwide (ibid). Hence, the adverse effects are more likely to be borne by females.

No other infectious disease has posed similar challenges to health services nor required the large-scale confinement measures that COVID-19 demands. Therefore, lessons from these experiences need to be interpreted with caution, particularly for the vulnerable majority of women across the world. Evidence from the Ebola epidemic, despite focusing on west Africa, offers insights, since lockdown and school closures were also adopted during the containment phase in the worst-hit countries. They project a high drop-out ratio of girls, due to the increased financial hardship and the increased burden of unpaid caregiving on females (Jain 2020). A global pandemic like COVID-19 increases the vulnerability of women and exacerbates other crises, like forced child marriage and risks of sexual violence against girls (Peterman et al. 2020).

6.1.1 COVID-19 and education equality

One of the effects of COVID-19 is stalling education. The pandemic also has the potential to push back economies and societies by creating a learning divide between genders. The responsibilities of educational institutions, governments and civil society in terms of effectively introducing reforms and policies to tackle disparity thus increase. Hence, in this chapter we explore the key factors behind female participation in education and formulate working models that can help to promote equality and equity in education.

Existing and emerging barriers to education during the COVID-19 crisis can be addressed via a special focus on vulnerable groups, particularly women, so that gender equality is prioritised. Whereas equality focuses on equal treatment for all peoples and groups, equity means treating everyone according to their respective needs. To create an inclusive class in respect to education, every child should be subject to similar opportunities and treatment, while adopting an approach which solves learner-specific issues.

The Race Matters Institute (RMI) asserts that achieving equity is not accomplished by treating everyone as equals. Instead, it is achieved by treating everyone equitably as per their circumstances (Waterford.org, 2020). Equity leads to equality (UNFPA 2005). When equity and equality are viewed through the lens of gender, it seems that gender equity indicates fair treatment to both genders. However, their respective needs and circumstances must always be considered. While this may suggest different treatment for both genders, each should be considered equivalent in terms of rights, benefits, obligations and opportunities (Writer 2018).

6.1.2 The onset of e-learning in the higher education system

Online education has become a crucial platform in enabling continued educational activities. As a result, realistic expectations and understanding of how it can be used to support students affected by the pandemic is important. Instead of progressively and strategically moving to online teaching, universities have had to migrate to emergency online delivery of in-person content (Crawford et al. 2020). The higher education sector in many countries has employed various techniques and methods to provide lessons and to minimise the disruption of the curriculum and academics by providing the following:

- educational channels which are accessible and broadcast through national television to all students;
- video lessons through mobile applications like Facebook;
- audio lessons through mobile applications like Zoom, Microsoft Teams and Skype; and

- digitising textbooks and creating e-libraries which are accessible to all students (World Bank 2020).

However, according to Bogdan-Martin (ITU, 2019), the global proportion of women with access to the Internet is 48 per cent, compared to 58 per cent of men. Although this gap is small in developed countries, it is significant in developing countries.

6.1.3 Role of technology in the learning process

Technology has impacted almost every aspect of life, and education is no exception. Access to education has been simplified due to the development of technology and its convenience and efficiency. This has resulted in a tremendous change in society (World Bank 2020).

Educational technology refers to anything that enhances classroom learning in terms of the utilisation of blended, face-to-face or online learning. With the use of technology, students have access to learning materials and large amounts of information from books, audio files, images and videos through laptops, tablets, smartphones and the internet. The emergence of technological resources has greatly benefited lecturers and students by affording them remarkable access to new opportunities for learning, as well as new approaches to working together (Khan 2019).

However, Winthrop (2020) argues that online learning is the worst form of learning, as there are real risks. It can be very solitary and didactic when students are expected to watch videos, read documents online or click through presentations. Winthrop (ibid) also claims that online learning is a great disadvantage to those who are the furthest behind.

According to Mahaye (2020), the literature reveals that technology can affect education in the following ways:

- it provides teachers vast access to resources;
- it provides learners with access to limitless learning resources that can boost their competence and confidence;
- teachers and learners can conduct learning from wherever they are, without the traditional demands of coming together;
- technology enhances collaborative interaction between teachers and learners, which improves learners' confidence and performance;
- it has been instrumental in offering continued access to education during the COVID-19 pandemic;

- it facilitates immediate assessment and feedback;
- technology allows teachers to function as facilitators, while learners construct their own knowledge in a participatory manner.

However, we need to be critical in assessing the benefits of technology in terms of online learning. Janssen (2020) poses the question: How effective has digital technology been in reaching the almost 1.6 billion students affected by school closures, especially female students?

The use of technology in fostering education during the COVID-19 pandemic has presented several challenges and problems. Every child does not have access to digital devices or internet connectivity at home (Winthrop 2020). These learners, particularly those in vulnerable communities, need access to learning resources too.

Half of the students kept out of the classroom by COVID-19 (approximately 800 million) do not have access to a household computer. Approximately 43 per cent (some 700 million students) have no internet access at home. Furthermore, about 56 million students live in locations that are not served by mobile networks (Janssen 2020). Many children do not have a desk, books, internet connectivity, a laptop at home or supportive parents (Saavedra 2020). These resources are needed to foster education, yet are not always readily accessible, affordable or available to students in many Commonwealth countries.

Several issues impact the effectiveness of online learning, particularly in low-income societies. A major challenge is the extent to which learners lack the requisite skills to facilitate and use online learning technologies. More nuanced problems exist too, one of which is gender.

The study that is the focus of this chapter investigated gender differences in students' use of technology during the COVID-19 pandemic and how gender differences – in terms of skills, access and technology usage – could be reduced. We need to understand how this form of learning will affect women generally, as well as how it affects female teachers and educators.

There are some differences in the way both genders receive learning. Hence the delivery method aided by technology needs to be inclusive of the learning styles of both.

Overview on gender differences in access to, and usage of, technology

The digital divide is described by Dzansi and Amedzo (2014) as the differences in the level of development of, and access to, information and communications technology (ICT). According to the United Nations (UN 2005), the term 'gender digital divide' is regularly used to refer to gender

disparities in resources and the ability to access and adequately use ICT within and between countries, regions, sectors and socioeconomic groups.

There has been growing attention to gender differences in the adoption and utilisation of technology in teaching and learning (Almekhlafi et al. 2017). Several studies have sought to investigate the differences in access to and usage of technology in the education sector between female and male teachers (Almekhlafi and Almeqdadi 2010). There seem to be conflicting views about the influence of gender on the pedagogical use of ICT (Teo 2008).

Some researchers dismiss the digital gender divide, arguing that gender is not a predictor of ICT integration into teaching (Norris et al. 2003). However, there appears to be general consensus about the existence of gender differences in terms of accessing and using technology for education delivery. Almekhlafie et al. (2016) point out that some studies highlight significant differences between male and female teachers in strategies and intensity of technology integration in their classes. Mariscal et al. (2018) argue that stark gender inequality is pervasive in terms of access, ownership of digital devices, digital fluency and the capacity to make meaningful use of the access to technology. Some researchers claim that male teachers tend to be more interested in learning about and using digital technologies (Schumacher and Morahan-Martin 2001; Yuen and Ma 2002). Morahan-Martin (2000) notes that females have reached a state of being equal with males in terms of internet use and this leads to the unsubstantiated belief that the digital divide has disappeared.

Role of educational technology in advancing gender equality

Education plays a crucial role in empowering girls and women. But how far do countries still need to go to ensure that every girl has access to education and every woman is literate and equipped with digital skills (UNESCO 2019)? Technology has a deeply gendered history and the discourses relating to gender and technology use reflect this, labelling it as 'masculine' or not a place for a woman (Niiranen 2017).

Girls continue to face greater challenges than boys in accessing education. The latest figures from UNESCO reveal that 743 million girls (111 million of whom live in the world's least developed countries, where unpaid domestic and care work is disproportionately handed to girls and women) have been severely affected by the closure of learning institutions due to COVID-19. This can result in them losing access to information technology, jeopardising girls' return to school, while increasing the risk of early and forced marriages, sexual exploitation and early pregnancy (Wadland 2020).

For example, in Kenya, media reports citing data from a government-managed health information system state that up to 4,000 adolescent girls

may have visited health facilities for antenatal services in Machakos County alone between January and May 2020 (Plan International 2020). Meanwhile, the COVID-19 pandemic threatens to be catastrophic for girls in Sierra Leone, where, during the Ebola outbreak, teenage pregnancy soared due to knock-on effects of school closures and increased poverty. According to an analysis by Save the Children, disruption due to COVID-19 could lead to 23,000 extra teenage pregnancies by the end of the year (World Vision 2020).

No country can afford to ignore the gender dimensions of COVID-19 school closures (UNESCO 2020). Girls and women must be supported in becoming technologically competitive and must gain an understanding of how to use technology safely and effectively. Education planners should be aware of the particular threat the coronavirus school closures pose to girls and women. According to Lewis (2020), some of the lessons from the Ebola outbreak (such as school closures) affected girls' lives because many dropped out of school, there was a rise in teenage pregnancy rates, instances of domestic and sexual violence increased, and more women died in childbirth because resources were diverted elsewhere.

Educational planners should ensure that plans for learning continuity take this into account (UNESCO 2020). In Sierra Leone, for example, Save the Children has leveraged technology through an interactive game application for boys and girls which provides reliable information on sexual health, as well as how to stay safe from the coronavirus (World Vision 2020). Closing the gender digital divide is more urgent than ever, because COVID-19 is increasing society's dependence upon ICT to address the pandemic and to keep economies running (Gendell and Saxton-Fox 2020).

6.2 Snapshot of sample countries

For contextual background, this section provides country-specific perspectives of the issues under study. Three countries, Ghana, India and South Africa, are examined. These countries comprised 70 per cent of the sample. It presents local information on the impact of COVID-19 and issues related to gender equity.

6.2.1 Ghana

Educational sustainability is vital to economies since it is the bedrock for every nation's development. Education has faced many challenges, ranging from curriculum changes to the closure of educational institutions as a result of demonstrations by staff or students, political instability on a national level and/or disease outbreaks. Ghana's education system is no exception.

Ghana recorded its first imported COVID-19 case on 12 March 2020. Cases increased a week later. This led to several interventions, including school closures for the first and second cycles as well as tertiary institutions on 16 March 2020.

Universities have adjusted their systems according to measures put in place to manage the COVID-19 pandemic. This has ensured that learning was not stalled. Lecturers were trained in online instruction to facilitate a smooth transition to virtual/web-based alternatives. For example, the University of Ghana worked with Vodafone to provide subscriber identification module (SIM) cards to students. This allowed students easy access to the university's digital learning platform, Sakai. Some universities were also using built-in, pre-existing learning platforms such as Google Classroom, WhatsApp, YouTube and Zoom (Mohammed 2020).

While tertiary education in Ghana has seen tremendous growth in terms of increased access and participation over the past decade, there remain inequalities in the higher education system, with unequal participation among women. Access to, and participation in, higher education by females has generally improved over the past few decades, but disparity persists between female and male students. While there was a 154 per cent increase in female enrolment between 1999 and 2011, this increase only resulted in 37 per cent of the total enrolment (Atuahene and Owusu-Ansah 2013). World Bank data for 2019 showed a Gender Parity Index (GPI) of 0.8 for gross enrolment in tertiary education, indicating a continuing disparity in favour of males (World Bank 2019a).

6.2.2 India

India has the world's largest youth population (around 423 million) and it is the second most populated country in the world, with a total population of about 1.36 billion as of 2019 (World Bank 2019b). In the wake of the growing concerns about COVID-19, a nationwide lockdown was imposed on 24 March 2020. The lockdown and restrictions changed the way of life and modified how institutions functioned, including in the education sector.

India's female literacy rate has increased over the years from 1 per cent in 1911, 9 per cent in 1951, 30 per cent in 1981 to 65.5 per cent in 2011 (India-Census 2011). The overall literacy rate has risen from 18 per cent in 1951 to 74 per cent in 2011. Despite this, only one in three school-going children pass class 12 in the appropriate age group (CRY 2018). The underlying reasons are better understood with numbers, where approximately 30 million children between the ages of five and 18 years are employed in the labour workforce (Ministry of Women and Child Development 2016). Of those, 19 million working children between the ages of 15 and 18 are out of school (CRY 2018).

India is also home to one of every three child brides in the world (UNICEF 2019). In addition, child marriages lead to underage motherhood, which often curtails the continuity of education. India currently has 3.4 million girls between 15 and 19 years who have given birth (CRY 2018). Other major factors contributing to women's illiteracy are social, economic and cultural. There are also additional constraints such as infrastructure, lack of qualified teachers and pupil—teacher ratio. Crimes against children (for example, child labour, child marriage and child trafficking) constitute other reasons children drop out of school (Pandey 2018).

As per recent data, only 23 per cent of girls are enrolled in higher education (Businessline 2015). According to the All India Survey on Higher Education (AISHE) report 2018–19 (MHRD 2018), approximately 26 per cent of the students in the 18–23 age group are enrolled in higher education. This disparity is higher in some states like Bihar, with the enrolment ratio near 13 per cent and higher for states like Sikkim, which has an enrolment ratio of 53 per cent.

Fewer than a third of internet users in India are female. In rural areas, they face discriminatory objections for using the internet based solely on their sex (UNICEF 2017). Another survey states that 71 per cent of men own phones, whereas only 38 per cent of women own a phone (Barboni et al. 2018). The disparity in ownership of technological devices is testament to the current crisis the Indian education sector is undergoing. Internet access and mobile devices have become irreplaceable tools in engaging the learning process, especially during the pandemic.

A lockdown was declared by the Indian government on 23 March 2020 (Indian National Commission for Cooperation 2020). However, colleges and universities started shutting down prior to this to combat the spread of the virus. The Ministry of Human Resources Development and its associated institutions began promoting digital education through online educational platforms, television and radio for students in remote areas (Department of School Education and Literacy 2020). Some of the online resources developed by the government include e-PG Pathshala (e-content), SWAYAM (online courses for teachers) and NEAT (which aims to enhance employability).

Government initiatives like the National Programme on Technology Enhanced Learning (NPTEL), National Knowledge Network (NKN) and the National Academic Depository (NAD) have provided access to learning materials and modules during COVID-19 (Farooqui 2020). However, teachers and students struggle with this new mode of learning. The digital divide and financial constraints have raised significant issues for students in terms of accessing e-learning (Financial Express 2020).

6.2.3 South Africa

South Africa's education system is complex, due to historical inequalities going as far back as the Apartheid era (Jantjies 2020). The majority of schools are located in rural areas, where many students are deprived access to quality education (Mahaye 2020). Fifty-eight (58) per cent of students in South African universities are women and 42 per cent men (Naidu and Ossome 2018). Regardless of these numbers, women in the higher education sector experience social marginalisation, which is often the main cause of discrimination, vulnerability and gender-based violence (Paterson 2019).

It is not surprising, therefore, that there are more women in the lower levels of institutions, and few in senior management and higher academic positions across South African academic structures. Acquiring a position of senior decision-maker, being part of a university council or attaining a vice-chancellor position has been an unsupported struggle for women, as there are few strategies for recruiting, mentoring and keeping them in these positions (ibid).

With the apartheid legacy (Gudmundsdottir 2010), females in the country are often likely to be further left behind in mainstream economic activities owing to sociocultural and customary beliefs (Maleka 2011). This suggests that gender inequalities may also influence the way in which women access and use ICT (ibid). However, there is little aggregate data profiling adoption and usage patterns of ICT in South Africa (ibid).

While South Africa has made progress in overcoming some of the issues introduced and maintained during apartheid, gender and racial issues still persist. They have compelled South African universities to put plans and processes in place to consider the transformation agenda applied by the state. A media statement from the Department of Telecommunications and Postal Services (DTPS) indicates that South Africa has developed policies to ensure no one is left behind in the transition to a digital information society (ibid). To eliminate gender differences in adoption and usage of ICT, South Africa must adopt an all-inclusive approach, meaning all individuals must be afforded equal opportunities (Hashim 2008).

While public institutions have prescribed collaboration across the education system, jointly creating solutions and sharing available resources during the pandemic (Universities South Africa 2020), students' access to digital platforms is becoming more and more varied. A steady number of first-year students enrol at universities with inadequate access and exposure to technology and basic computer literacy skills. As students continuously seek academic skills to operate in this digital era, challenges remain constant (Ngambi et al. 2016).

As a result, while acknowledging the inequalities among the socioeconomic backgrounds of their students, especially those who lack access to digital resources, South African universities have resorted to emergency multimodal remote learning. Some universities have been able to provide data bundles and laptops to students and, at different levels of lockdown, some students have been reintroduced to campuses in a phased manner to utilise campus facilities and engage in blended learning (Dipa 2020).

6.3 Survey methodology and findings

6.3.1 Methodology

The country descriptions provided above support the assertion that gender equality is not always practised. Due to socialisation, females and males are often treated differently in various societal aspects, be it in their homes, the workplace, educational institutions or in society at large. Females are under-represented in the education system, despite progress over the last 25 years.

The study that is the focus of this chapter sought to determine the impact of COVID-19 on gender equity and equality within the education sector, with a specific focus on male and female as dominant gender groups. The study also aimed to explore factors affecting access to learning during the COVID-19 period, with particular focus on whether there was a gender dimension to the impact (that is, the extent the pandemic impacted gender equity and/or equality in the access to alternative learning modalities).

The following research questions fulfilled the aim of the study:

1. When schools were closed because of COVID-19, did gender differences influence participation in alternative learning strategies offered by educational institutions?
2. What factors inhibited students' participation and how did they differ between genders?
3. How was technology used to keep education programmes on track and what role did gender play?

This study employed a quantitative cross-national comparative research design. It focused on seven Commonwealth countries: Bangladesh, Cameroon, Ghana, India, Nigeria, South Africa and Uganda. The countries were chosen because of the diversity of the multinational research team (which represented the countries mentioned above and thus understood the local contexts).

Sampling strategy

The study adopted a non-probability sampling technique. Non-probability sampling depends on the researcher's subjective judgment rather than

objective representative sampling (Malhotra and Krosnick 2010). Convenience sampling, which refers to a sample presented to a researcher by merit of its accessibility (Bryman and Bell 2011), was also employed as participants were chosen based on their accessibility and availability to participate.

To achieve the study's objectives, students from higher education institutions (colleges and universities) from the seven countries were invited to participate. The researchers targeted 500 potential respondents (student and teachers), based on state selection criteria; 343 responded to the survey. Therefore, the study achieved a 69 per cent response rate. Of the respondents, 53 per cent were female, 46 per cent male and 1 per cent chose not to declare their gender.

The sample was drawn from the higher education sector, as this sector empowers us with the skills, knowledge and expertise to combat sustainability challenges; it also reflects indicators of societal change. Additionally, higher education has a critical role in the fulfilment of all 17 of the UN Sustainable Development Goals (Global University Network for Innovation 2019). It catalyses the achievement of poverty eradication, ensures health and promotion of our well-being, propels us toward achieving gender equality and sustainable economic growth, and ensures decent working conditions. Furthermore, higher education advances better access to justice, accountable institutions at all levels and strengthens global partnerships for sustainable development (UNESCO 2015).

Development and administration of the questionnaires

For the purpose of this study, self-completion questionnaires were developed using Google Forms to collect data from students in higher education institutions. The questionnaire consisted of 27 questions. The survey was conducted on various social media platforms including WhatsApp, Twitter and Facebook. Emails were also sent to researchers' contacts. The participants were all computer literate and comfortable with social media platforms.

The questionnaire was composed primarily of closed-ended questions and a Likert scale to solicit an understanding of the participants and to allow statistical analytical tools to be used. A link to the questionnaire was sent out together with a briefing note and consent form. Clear guidelines in the questionnaire allowed for ease of participation, and respondents were provided with an email address to contact researchers if they needed to clarify issues around participation or the questions.

Participation was fully voluntary, and the process was conducted with discretion. Although there were some non-academic respondents (the survey link was sent to all contacts across social media platforms), the researchers

were able to sift through the responses and remove data from irrelevant sources. Upon receiving responses, the data were captured on a Microsoft Excel spreadsheet before being analysed. Parallel analysis of the same variables assessed dissimilarities and similarities of variables in all countries represented.

The sample size and time constraints were limiting factors, given that there were only 343 students from higher education institutions who participated. Representativeness of the survey was limited because of the closure of higher education institutions due to COVID-19 as well as the semester examinations that were ongoing in some institutions during the data collection period. These factors accounted for a low response rate.

Limited financial resources and restricted timeframes meant that only online research could be conducted. This, therefore, excluded persons who did not have access to technology and was a limitation of this survey. Furthermore, by restricting our study to the tertiary education sector and using respondents from colleges and universities, this likely suppressed some gender differentiations, as these may not be as stark at this level of the education system.

This was a quantitative study which utilised descriptive data. The questions were analysed to reflect response by gender and from a student's perspective. The cumulative data from all seven countries was then presented to show the overall responses to the research questions.

6.3.2 Findings

The sample consisted of 343 students. Of these, seven per cent were from Bangladesh, 10 per cent from Cameroon, 22 per cent from Ghana, 31 per cent from India, 6 per cent from Nigeria, 20 per cent from South Africa, and 4 per cent from Uganda.

The findings revealed that 58 per cent of the enrolment across all seven countries' universities were female. While this may not mirror the realities of other countries, it can be assumed that the same gender is greater at the primary and secondary levels. With respect to the gender composition of the sample: 185 (54%) of the respondents were female while the other 158 (46%) were male.

Research question one: When schools were closed because of COVID-19, did gender differences influence participation in alternative learning strategies offered by educational institutions?

The first research question solicited an overall response and required college students to indicate the extent to which the pandemic had affected their learning by rating five items. The remaining questions interrogated individual impacting factors.

Overall, 90 per cent of respondents either agreed (22%) or strongly agreed (68%) that the COVID-19 pandemic had affected learning. Of those who strongly agreed, females represented the highest percentage (36%) as opposed to 32 per cent of males.

To answer this question, respondents were also asked to give their opinion on female college/university students and the impact lockdown had had on that group compared to their male counterparts through a scale of 1 to 10, where 10 represented most affected and one represented least affected. With respect to whether females were more affected than males, there was a 75 per cent level of agreement, where 43 per cent of all respondents 'agreed' and 32 per cent 'strongly agreed' (Table 6.1). Overall, female students were more likely than their male counterparts to indicate that they (females) had been more affected by the various issues explored in the study.

Table 6.1 Responses to the question rating the extent that females are more disadvantaged than males in a nationwide lockdown

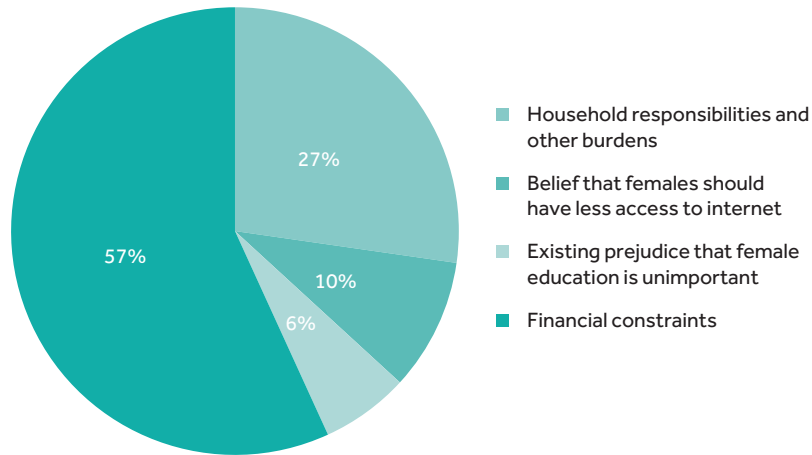
Do you think the education of a female college/university student is more likely to be affected by the nationwide lockdown than a male counterpart?	Rating	1–4	5–7	8–10
	Response	26%	42%	32%

Research question two: What factors inhibited students' participation and how did they differ between genders?

To answer this question, students were asked to rank four factors based on how they hindered the education of females at college/university level during the COVID-19 pandemic. The four options were: financial constraints in terms of accessing e-learning; the belief that females should have less access to the internet; household responsibilities and other work burdens; and an existing prejudice that female education was unimportant.

Fifty-seven (57) per cent of respondents selected financial constraints as the predominant hindrance; of these, approximately 32 per cent were female and 26 per cent male. Twenty-seven (27) per cent of respondents agreed that household responsibilities were a hindrance; of the respondents, approximately 16 per cent were females and 11 per cent males. The third most favoured factor was the belief that females should have less access to the internet, with 10 per cent of the respondents subscribing to this option. Few (6%) respondents believed that there was prejudice in terms of female education being unimportant (see Figure 6.1).

Figure 6.1 Factors hindering the education of female college/ university students during the COVID-19 pandemic



Research question three: How was technology used to keep education programmes on track and what role did gender play?

To answer this question a number of sub-questions were posed. The first asked students to indicate how many more hours per day they spent on the internet for educational purposes during the COVID-19 pandemic than before. Findings were that 31 per cent spent more than four hours; 32 per cent spent two to four hours; and 30 per cent spent zero to two hours. A minority (7%) said that they did not spend any extra time on the internet for educational purposes during the COVID-19 crisis than they did before.

The researchers then highlighted five major challenges faced by students as they used technology to further their studies during the pandemic. Of the five challenges, the cost of internet packages and familiarity with e-learning platforms presented the greatest difficulty. The challenges are listed and discussed individually below:

- *Network connectivity*: of the 343 survey respondents, 49 per cent indicated that the greatest challenge was network connectivity; 25 per cent were female, while 24 per cent were male. An additional 35 per cent indicated that network connectivity was a moderate challenge to them; 20 per cent of these respondents were female and 14 per cent male.
- *Lack of access to electricity*: 49 per cent of respondents indicated that lack of access to electricity presented a moderate challenge; 25 per cent of them were female and 24 per cent male. Another 27 per cent indicated that a lack of access to electricity was the least challenging factor they faced.

- *Accessing course material remotely*: 50 per cent of the respondents said that accessing course material remotely was a moderate challenge, with 25 per cent of them being female and 25 per cent male.
- *Affordability of internet packages*: of the survey respondents, 45 per cent indicated that affordability of internet packages was the greatest challenge they faced. Of these, 24 per cent were female and 22 per cent male.
- *Familiarity with online teaching tools and technology*: 46 per cent of the respondents indicated that they were not familiar with online teaching tools and technology. 27 per cent of them were female and 19 per cent male.

Some of the above findings should be highlighted:

- there remained a perception that females were more disadvantaged than males;
- along with financial issues, household responsibilities remained a major issue for females;
- negative responses from females exceeded those of males with respect to the following factors:
 - level of mental stress, and
 - lack of familiarity with e-learning tools; and
- financial challenges, such as the cost of internet packages, was a concern for both genders, but more so for females.

6.4 Recommendations

Based on the analysis of the data collected and presented above, the study recommends that attention be paid to technology and its components for African students. The use of technology should be included in school curricula to familiarise students. Household chores were a major issue that interrupted the smooth study of females while they were at home. Social roles, though peculiar to every culture and setting, should be shared equally to prevent females from having to bear the burden of carrying out these domestic duties alone.

The study further recommends that government policies and budget allocations make provision for unpredictable circumstances, such as the disruption of education during pandemics. Telecommunications companies could liaise with educational institutions to provide suitable internet packages to facilitate learning. Further studies into gender roles and teacher—student relationships, and how they have contributed to the education sector during the pandemic, are recommended.

Education has been the bedrock for the development of every nation and is, therefore, vital to the growth of economies. Key stakeholders are concerned about education because of its positive implications. Generally, productivity improves due to education, as educated people can undertake tasks more efficiently, think critically about issues and come up with solutions. Education is more rewarding when equal and equitable opportunities are granted to all students, irrespective of their gender.

Our observations emphasise the need for increased availability of technical infrastructure and enhanced accessibility to learning modules via the internet. A change in mindset to ensure fewer burdens in terms of household chores for women and greater acceptability of the new digital format of learning are needed. Policy recommendations to address key challenges in terms of online learning for females at the higher education level are outlined below:

- Educational stakeholders, together with higher learning institutions, should develop gender-neutral curricula and formulate learning tools that ensure the educational system is sensitive to gender inequality.
- Higher learning institutions should create safe and supportive learning environments, where all genders can participate and learn freely.
- Higher learning institutions should be proactive about gender inclusion by ensuring that all students are equitably included in learning, class discussions and participation and are equally involved in the school's extracurricular activities.
- There is a need for co-operation between all educational stakeholders including, but not limited to, ministries of education, learning institutions, teachers, parents and community members to ensure that girls and women are equally supported in pursuing their educational paths and careers, rather than conforming to traditional gender stereotypes and roles.
- Higher learning institutions should develop user-friendly technological tools (for all users, irrespective of gender) and create infrastructure for e-learning which enhances continued access to education and promotes equal digital literacy for all genders.
- Higher learning institutions should work towards improving gender equality in their education systems, by creating equal access to learning tools and making them readily available on an equitable and equal basis to bolster participation of both female and male students in school programmes and extracurricular activities.

- All stakeholders in the educational sector should provide girls and women with equal access to technology and digital training. Stakeholders must also develop policies to ensure safety on online learning platforms.
- Governments should promote equality and ensure equal educational rights are enjoyed equally by both genders. This can be achieved through advocacy among higher learning institutions' teachers and by developing policies that encourage and strengthen equitable and equal access to education and literacy for all.
- All educational stakeholders and civil society organisations, particularly those that support women's and educational rights, should address the barriers faced by women in the education system and encourage female students to pursue their educational interests, regardless of gender biases.
- All educational planners should address and eliminate gender stereotypes and gender discrimination in textbooks and school curricula, to strengthen their commitment to gender equality.
- All educational planners and stakeholders should develop tools to make educational systems sensitive to gender inequality and review their educational policies, curricula and textbooks. They should make recommendations and conduct information sessions about gender equality, to increase awareness across all higher learning institutions and society as a whole.
- Higher learning institutions should support girls and women to be as technologically competitive as their male counterparts, to bridge the digital divide and minimise learning disruptions that may be caused by a lack of basic technological knowledge.
- Higher learning institutions should include reproductive health rights and family planning methods in their curricula. The institutions should collaborate with healthcare providers to provide subsidised family planning services, to enable women to pursue educational qualifications while understanding that their sexual rights are protected. This may prevent disruptions that lead to school dropouts.

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Chapter 7

Youth Working in a Pandemic: Roles and Practices of Youth Workers as Non-School-Based Education Providers

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7.1 Introduction

The primary purpose of the research that features in this chapter, was to explore youth workers' non-school-based educational practices during the COVID-19 pandemic and to understand how these changed and developed as a result of the outbreak. As most nations around the world have had to implement strict movement control measures because of COVID-19, our study set out to understand how the various restrictions affected youth workers' interaction, engagement and knowledge-sharing activities with young people. We also explored the challenges they faced in continuing their work during the pandemic. The study aimed to provide a basis for further inquiry into the emergence of new youth work 'learning spaces' during times of crisis, including how the use of learning and communications technologies could be employed in creative ways to meet the goals of youth work practice.

7.2 Background and context

As a result of the COVID-19 pandemic, governments have imposed varying degrees of border closure, lockdowns and restrictions in movement. These policies have affected all aspects of life, including education. During COVID-19, much attention has been given to studying the impact of the pandemic on formal educational systems, institutions and the implementation of online and digital learning. However, few studies to date have considered the impact on non-formal and informal education and the professions that rely on it, such as youth work.

Non-formal education refers to ‘planned, structured programmes and processes of personal and social education for young people designed to improve a range of skills and competences, outside the formal educational curriculum’ (World Scout Bureau 2019, 8). Informal education, on the other hand, refers to ‘a lifelong learning process, whereby each individual acquires attitudes, values, skills and knowledge from the educational influences and resources in his or her own environment and from daily experience’ (ibid, 9). Whereas non-formal education occurs through organised activities such as projects and programmes conducted in youth and community organisations, informal education and learning occurs at all times and places, through unplanned and unstructured activities. Formal, non-formal and informal education and learning are thus complementary, mutually reinforcing and often overlapping elements of a lifelong learning process. As an occupation, youth work relies primarily on non-formal and informal education to facilitate youth learning and development.

Youth work has received little attention from researchers since the outbreak of COVID-19 in January 2020. While often overlooked, the services and programmes delivered through youth work are essential for the cognitive and social development of children and young adults. Moreover, given the challenges many young people have faced due to the massive disruptions to their educational, social and economic lives caused by COVID-19, youth work is perhaps more relevant and necessary than ever. Against this background, it is imperative to explore the impact of COVID-19 on youth work and how youth workers have adapted to deliver educational programmes, with the ultimate goal of carving out new, effective, non-school-based learning models for COVID-19 and future pandemics.

7.2.1 Defining youth work of today

The Commonwealth Secretariat defines youth work as ‘all forms of rights-based youth engagement approaches that build personal awareness and support the social, political and economic empowerment of young people, delivered through non-formal learning within a matrix of care’ (Commonwealth Secretariat 2017, 1). Stone et al. (2004, 9) define a youth worker as ‘an individual who works with or on behalf of youth to facilitate their personal, social, and educational development and enable them to gain a voice, influence, and place in society as they make the transition from dependence to independence.’

Several countries have also defined youth work in their national youth policies and laws. In Section 3 of Ireland’s Youth Act (2001), for example, youth work is defined as ‘a planned programme of education designed for the purpose of aiding and enhancing the personal and social development

of young persons through their voluntary participation, and which are [sic]: a) complementary to their formal, academic or vocational education and training; and b) primarily provided by voluntary youth work organisations'. In these definitions, youth work emphasises that the basic nature of youth work is voluntary, educational and developmental (Devlin and Gunning 2009). Youth workers strive to meet youth anywhere in a community where youth congregate and socialise. Youth work can also take place in virtual spaces by connecting with young people on online platforms, where workers can also provide information and counselling to young people (Kiilakoski 2015).

7.2.2 A historical perspective

Historically, youth work was only officially recognised in the early eighteenth century, where it started out as faith-based groups in Europe that were formed to encourage young men to live meaningfully. The Young Men's Christian Association (YMCA) and clubs like the Young Women's Christian Association (YWCA), Boy Scouts and Girl Guides were also formed to equip youth with survival and life skills (Borden et al. 2011). In Africa, Asia and other parts of the world, youth workers have probably existed for centuries. Teaching boys how to hunt, mentoring them on how to be responsible adults and equipping them with cultural values, early 'youth workers' supported the identity formation of youth by cultivating their tribal and community roles and values.

The importance of youth workers has also been long acknowledged and plays a critical role in the health and welfare of marginalised communities across the world (MacNeil et al. 2016). Nieminen (2007) outlines the four functions of youth work: socialisation, personalisation, compensation and allocation. First, socialisation implies the process by which young people become citizens of adult society and strive to learn its skills, practices and knowledge in order to function as active members of the society. Second, personalisation implies the process of developing one's self-image and personality, which pave the way for a happy life. Third, compensation is the process by which a youth worker helps young people to address social exclusion and marginalisation. This is done by providing targeted services. Last, allocation implies the process of distributing societal resources to organisations or informal groups of young people. These functions are indicative of the educative nature of youth workers (Kiilakoski 2015).

7.2.3 Youth workers as educators

At its core, youth work is based on a voluntary relationship with young people guided by the values of honesty, trust, respect and reciprocity. The learning process that occurs in youth work enables and supports young

people to learn from their experiences and develop themselves as authentic human beings – i.e. people who know themselves and are true to themselves (Young 1999). As such, youth work does not have a particular institutional or contextual coherence, as it occurs in various settings, including private, public and non-governmental organisations (NGOs) (for example, schools, community organisations, faith-based organisations, after-school programmes, charitable organisations, government programmes and international agencies) (Cooper 2018).

Youth workers impart non-formal learning through projects, workshops, trainings and simulations. Young people's participation in these activities helps them to discover their potentials and abilities. This facilitates new levels of independence and decision-making and the acquisition of valuable competencies. Through such learning activities, youth workers help to develop transversal skills, traits and attitudes such as self-efficacy, social confidence, teamwork, relationships with peers and elders, programme planning, conflict resolution, and others. Youth work can serve as a bridge for young people who are socially and educationally excluded, giving them alternative channels to training, qualifications and employment. It also helps them to enter mainstream education (Kiilakoski 2015). Youth workers play an instrumental role in the development of 'soft skills' among young people, which is an important requisite for employment (Souto-Otero et al. 2013).

7.2.4 Youth work during COVID-19

An important aspect of youth work is the ability to help young people navigate crises that might arise during the course of their lives. 'Crises' for youth may range from making good relationship choices to coping with major traumas like parental divorce, rape, loss of loved ones, accidents and other life-changing events. Utilising experiential and reflective learning strategies, youth workers help young people to understand themselves and life better, by helping them negotiate and cope with life stressors. The crises that young people go through become important learning experiences that youth workers use to help youth build resilience and develop their problem-solving skills.

Depending on the context, crises that youth face can range from problematic relationships, community issues, floods and natural disasters, and even wars or epidemics. It is in such circumstances that youth workers play a very important role in helping youth learn how to cope and manage the problems they face (Borden et al. 2011). They also play important roles in providing youth with psychosocial support and critical skills for survival.

For both youth and youth workers, the COVID-19 pandemic presents a unique kind of crisis. Since March 2020, youth have been severely affected

by COVID-19 due to school and university closures, social distancing restrictions, mandatory testing and, perhaps most importantly, the mass closing of businesses and economic activities in many countries. This has had severe effects on young people's everyday lives, including massive job losses and dislocation from the labour market (Blustein et al. 2020). As a result, COVID-19 is unleashing a wave of need for young people around upskilling, ICT training, social and emotional coping, entrepreneurship, and others.

The response of youth work to date is largely unknown. Are youth reaching out to youth workers in new ways? How are youth workers utilising social media and online platforms to engage with youth? What roles are schools and other social and educational organisations playing as intermediaries between youth and youth workers? What new needs are youth facing? How do these differ in different countries? These are some of the important questions affecting youth work that have yet to be explored by researchers.

This study set out to explore these questions by examining the roles that youth workers are playing in developing the skills and knowledge of young people during the COVID-19 global pandemic. Specifically, we sought to better understand how youth work is facilitating the development of interpersonal skills, communication, creativity, solving complex problems, conflict resolution, adaptability, and building resilience during the COVID-19 pandemic.

7.2.5 Reaching out to young people

In the past, youth workers relied on interpersonal means to communicate, share information and learn. Over the past few decades, communication between youth workers and youth has evolved from wholly interpersonal communication to taking on more hybrid approaches that make use of social media and other digital platforms. In many places, digital and interpersonal communication have merged with daily living. At the same time, there are still many countries and communities that are cut off from technology. In these communities, youth work remains heavily dependent on face-to-face interaction.

Given these trends, how are youth workers educating young people living in homes and environments facing crises? How are youth workers empowering youth who are facing inactivity, loneliness, sickness, financial hardships and other problems during the pandemic? What role does technology play and how do youth workers leverage technology to continue and advance their work with youth during COVID-19? These are some of the questions we sought to address in this study.

7.3 Study methodology and findings

7.3.1 Methodology

This study was carried out between 11 June and 31 July 2020. The research team consisted of 13 researchers, all with some experience of working in education or with children in schools. Weekly team meetings were held during the course of the study using Microsoft Teams, Google Hangouts and Zoom, along with regular written communication by email and WhatsApp between team members. Following the induction meeting, researchers self-selected to participate in one (or both) of two working groups, one for literature review and report writing and the other for data collection and analysis. The two project leaders each led one of the two working groups.

Sample

The data for the study that is the focus of this chapter was collected using in-depth, qualitative interviews with youth workers. The workers were recruited by research team members using a combination of criteria-based and convenient sampling. The research team members contacted workers that they had previous affiliations with, according to several selection criteria.

We defined youth workers as those working in a direct-service capacity from the government, private or non-profit (NGO) sectors. We defined youth work as any capacity-building work with young people aimed at the imparting of soft and life skills. We also sought those working with young people within the legal ages of youth, as defined by the countries under study. We only selected those who worked with young people who had been significantly affected by the COVID-19 pandemic (for example, in terms of being prohibited face-to-face interaction, decreased mobility).

The sample comprised 15 workers from six Commonwealth countries: four from India, two from Kenya, one from Malawi, three from Malaysia, two from Nigeria and three from Uganda. The age range of the workers was between 21 to 32, with a mean age of 27. Eleven were full-time workers and three were part-time. Ten were female and four were male. They were quite heterogeneous in their work profiles, ranging from founders, presidents and CEOs of youth clubs to youth officers and administrators in their respective organisations. The focus areas of work included volunteerism and youth welfare, youth leadership and mentoring, capacity building and training with a focus on digital skills, entrepreneurship and vocational skill development, physical and mental health education, and environmental and human rights awareness.

Data collection and analysis

With the aid of Google Platform, an interview guide was initially developed by the main research team and then shared with the others for feedback.

The guide contained 15 questions, segmented and developed according to the three study questions (see below). The interview questions aimed at understanding current youth work, education-related communication, educational practices during COVID-19, and the changes that have occurred as a result of the pandemic. We also explored explicit strategies and tools used to facilitate working with youth during lockdown. Interviews were conducted by individual members of the research team in their respective countries, either online or via email. The online face-to-face interviews were recorded for analysis purposes.

A thematic approach was employed to analyse the data. The researcher(s) conducting the interview analysed the data first to identify specific themes and patterns. These analyses were sent to the Malaysian team, which performed second-level analysis to generate broader themes from the full sample. General themes and connections were then made and conclusions drawn.

Limitations

Given the limited time available to complete the study, several limitations must be mentioned. We were unable to commence at first due to delays around ethical clearance. While this did not compromise the quality of the report, it did mean that team members had limited time to conduct follow-up interviews with study participants investigate the study subject matter more. Furthermore, we were unable to perform member checks of our analysis and interpretation of the data. The size of the research team proved beneficial for engaging in peer review of the study findings. The diversity of the team with regard to age, location, professional background and previous research experience also allowed for different perspectives on analysis and interpretation of the qualitative data. This added to the richness of the study as a whole.

7.3.2 Findings

Findings from our online and written qualitative interviews with youth workers are reported below. The findings are presented according to the three main study questions:

1. How are youth workers maintaining contact with youth during COVID-19? What tools and strategies do they employ to facilitate communication?
2. What types of learning experience do youth workers prioritise and provide during the pandemic?
3. What are the challenges youth workers face in providing learning and support for youth during the pandemic?

In addition to coming from diverse geographic backgrounds, the youth workers in our study also had diverse professional backgrounds. Before enquiring how they communicated with the young people during the COVID-19 pandemic, we asked them how important they felt it was to continue to work with youth during COVID-19. All participants agreed that it was *critical that youth work continued during the COVID-19 pandemic*. Hitesh, a youth worker from India, emphasised the urgency of working with youth due to the overwhelming stress and anxiety that so many young people were facing:

We have been in a nationwide lockdown for almost 100 days now. It is everywhere in articles, blogs and more evidently in the behaviour of the people that this situation is triggering a lot of anxiety and mental health concerns in people especially the youth. People who are in the prime of their lives are down with a feeling of the world closing down on them, to which there is no escape. Their routine life has completely overturned, and the worst part is that there seems to be no end to the dangers of the Novel Coronavirus.

In attempting to meet the immediate needs of their young people, many youth workers in the study provided important services such as food programmes, awareness and advocacy on human rights in relation to lockdowns, digital skills training, communications training, and many others. Youth workers expressed concern that young people would drop out of programmes if they did not maintain contact.

Others shared concerns over young people's mental health and emotional stability, due to social movement restrictions. Two youth workers were concerned about injustices occurring in homes during periods of lockdown due to familial stress caused by overcrowding and lack of freedom to go out of the home. In some cases, parental stress boiled over to actual cases of violence towards children. As a result, a youth worker from Uganda emphasised the importance of sensitising youth about their rights within their own homes. When asked whether she felt it was important to continue her work with youth during the pandemic, she replied:

Very important because there is so much violence occurring in homes. Youth need to know their rights at home. Injustice has to be reported. These days we occasionally discuss injustice issues and things that affect society.

Particularly for young people lacking strong support networks, the youth workers employed a variety of strategies to keep their youth engaged. These included keeping in touch frequently, keeping youth engaged in work and giving them challenging problems to solve, encouraging them to be hopeful and optimistic, and maintaining a strong sense of companionship to ensure that they did not channel their energies into negative, self-harming activities.

For example, a youth worker from Kenya, shared that COVID-19 had effectively paralysed all small business activities in his area, causing many young people to become either unemployed or severely impoverished. He feared that as a result, many would resort to crime or selling drugs to meet their basic needs. He also shared that drug use might become a means to 'pass time' when there was nothing else to do.

Research question 1: How are youth workers maintaining contact with youth during COVID-19? What tools and strategies do they employ to facilitate communication?

The findings on this question are organised around two major themes: first, the use of *social media, internet, phone calls and in-person visits* as the main tools for maintaining contact; and second, *engaging organisational partners and networks*, which reflected how youth workers used organisational partners such as NGOs, religious organisations, radio and newspaper outlets, as a core strategy for maintaining youth engagement during the pandemic.

Social media, internet, phone calls and in-person visits

Keeping youth engaged during the pandemic required a variety of strategies and tools, as communication proved to be a major barrier for the youth workers living and working in different countries. Many of our youth workers reported that prior to the pandemic, face-to-face meetings, group meetings and direct service provision were the norm. They would often meet youth to conduct mentoring sessions, hold group activities, conduct projects in the community or provide needed services, especially to low-income areas.

During COVID-19, however, with social distancing restrictions, many youth workers had to shift to the use of *phone calls, email, SMS and social media (WhatsApp, Facebook and Instagram)*. One youth worker reported that in their mentoring programme, older youth mentors could be contacted because most had access to social media, but they were unable to contact younger mentees (secondary school pupils). For younger programme participants, therefore, access to technology was a barrier.

Several youth workers emphasised the effectiveness and ease of WhatsApp as a communication platform. In India, area-wise WhatsApp groups of youth leaders were formed to pass on information and content to their youth club members and other villagers. This was mentioned specifically as a key strategy to ensure consistency in staying in touch and keeping abreast of the well-being of the young people. One youth worker from a Malaysian NGO noted:

For me, every Friday I will text all my contacts, including the young people, to do a do'a [prayer] for them. After a few minutes I will get a reply and their reply will always come with a question! Normally they ask, when we can meet?

For those with access to internet, *online learning and communication platforms* such as Zoom, Slack and others were cited as effective tools. A worker from India spoke about the critical role blogs played in engaging youth in educational activities during the pandemic:

Through blogs, we are trying to keep the youth engaged in topics that are educational, inspirational, fun and relatable. Technological tools are being used to create content for remote learning for students in all sectors. The rate at which online platforms like YouTube, Udemy, Coursera, etc. are used has been exceptionally increased. Virtual platforms like Zoom, Google Meet etc. are being increasingly used to impart knowledge.

In more technologically advanced urban centres such as Kuala Lumpur, youth workers made use of YouTube and their organisational websites to invite young people to provide updates on their well-being and status during the pandemic. Websites were also effective for running programmes such as online workshops and donation drives for food and other necessities for needy individuals. A youth worker from Malaysia mentioned:

During the pandemic situation, we have managed to have big data on the young volunteers and our target group. We have from all over Malaysia. This is what is happening now, the community is using our website to ask for help and we contact them and communicate, then use volunteers in that location to get updates and help them through the local volunteers.

The reliance on digital tools during the pandemic has contributed to young people's realisation of the need to acquire digital skills. One youth worker from Nigeria, whose work involved vocational and life skills development, commented:

The orientation has changed to the use of digital tools for trainings ... Our trainees now see the importance of digital skills in anything they are learning since we cannot do physical trainings anymore and they are more enthusiastic about learning digital skills.

For youth workers in low-income areas and communities, social media was not an option as their clients did not own computers. In some more conservative countries, parents would not allow their children to use cellphones. Others could not afford the data needed to access the internet. These youth workers stressed the importance of being able to call their clients and actually speak to them. Some youth workers also reported that not all their clients were comfortable sharing their problems on social media. For these young people, phone calls were much more effective. Therefore, phone calls and, when possible, *in-person home visits* were used. In some situations, the youth workers would *print out the study materials* and send them directly to the young people, or use newsletters to disseminate information.

Engaging organisational partners and networks

Through organisational partners and networks, several of the youth workers in our study leveraged organisational partnerships that provided greater direct access to youth, allowing them to carry on with their work. One youth worker in Uganda reported engaging with churches as intermediaries, through which workers could provide necessary services such as medical services, food aid, educational continuity and home visits. Unlike other organisations facing restrictions, churches in Uganda were allowed to operate. Similarly, in India, youth workers co-ordinated with NGOs and other developmental agencies to reach young people. In Malaysia, NGO-based youth workers reported partnering with youth associations and government agencies like the Department of Welfare and the Ministry of Youth and Sports to maintain contact with youth. Co-operation between government and the third sector proved to be important to the youth workers in Malaysia, as they were able to access government databases to maintain contact with their young people.

Youth workers also used *media organisations such as newspapers and radio stations* to facilitate their work. As information disseminators, media organisations are often granted access to restricted areas where other organisations are prohibited. Knowing this, a youth worker in Malaysia contacted a journalist for information about areas that were locked down where families could not leave their homes. From there, the youth worker utilised his networks to get food to the youth and their families. In Uganda, radio stations devoted time to youth leaders to help spread awareness and sensitise young people about COVID-19-related issues.

Our study participants also spoke about the importance of intra-organisational strategies to maintain communication with both young people and their co-workers. These included the use of *volunteer task forces* and *work teams*. In India, volunteers were used to go out and spread information to young people about COVID-19-related issues:

We started dividing ourselves in teams – today you two, tomorrow you three and so and so. This minimised all of our burden and became systematic ... These volunteer taskforces would go out to disseminate the educational content and spread awareness on COVID-19.

Other youth workers reported that their organisations would assign teams of youth workers to communicate with youth on different days to limit fatigue. Inter-team communication thus became critical in creating greater collaboration as a way of consolidating resources and making communication more effective.

Research Question 2: What types of learning experiences do youth workers prioritise during the pandemic, and how have learning priorities changed as a result of COVID-19?

The results here indicated that online learning was prioritised due to restrictions on meeting face-to-face with youth. However, this was not the case for all youth workers, especially those from under-resourced areas. At the same time, learning priority areas shifted to the following: psychosocial and emotional support and information; life and survival skills; COVID-19-related information and skills; and digital skills development. Youth workers also reported that many of their normal learning activities ceased during the pandemic.

From face-to-face to online

Prior to the COVID-19 pandemic, the youth workers reported using mostly face-to-face, non-formal educational methods such as meetings, outreach programmes, camps, symposia, community projects, and skill-based trainings and workshops. Others reported relying mostly on group and peer-to-peer learning approaches. As much of these were not allowed during the pandemic, learning experiences changed. Organisational priorities shifted to budgeting for telecommunications and buying airtime and internet data for online communications. A youth worker from Nigeria explained:

There was an instructor for each of the skills they wanted to learn, and we took them through in-person practical sessions. We still do practical sessions virtually, but there is a limit to what we can do ... For example, during the training on adire [dyed cloth] making, the students could only see what I was doing via the videos I sent, but they could not get the materials needed to do it on their own at that particular time. Before the pandemic, they had access to the materials we provided and used them to work on their own, and that helped them to commit the methods into memory based on the fact that they did the practical themselves instead of just watching videos like now.

Another said:

The structure of learning, including teaching and assessment methodologies, has drastically changed. The COVID-19 pandemic has resulted in the transformation of 'experiential learning' to 'experiential e-learning'.

Psychosocial and Emotional Support and Information

Providing youth with psychological and emotional support to enable them to reach their full potential goes hand-in-hand with being a youth worker, particularly for those who work with at-risk and marginalised groups. During COVID-19, however, most of the youth workers emphasised that

psychosocial and emotional support took centre stage. The fear that COVID-19 created among youth led to a shift in learning priorities and strategies; youth needed to understand themselves better and how to cope with a loved one falling ill or contracting the virus themselves. An Indian youth worker elaborated:

COVID-19 has pointed out a definite need for social and emotional learning of the youth. So, my priorities also changed as per the situation. The fear of the situation was affecting their mental health and work. Counselling them on managing stress and keeping safe helped in the process.

Another Malaysian youth worker said, 'Before the pandemic the emphasis was more on knowledge and skill development, but since COVID-19, spiritual and emotional support to combat depression and boredom became the priority.'

Life and survival skills

The COVID-19 pandemic forced many youth workers to shift their educational priorities to teaching young people to survive. The near-complete shutdown of social interaction and business activities in many countries has resulted in massive loss of jobs and economic activity for millions of young people. During the pandemic, youth workers thus shifted their educational priorities to helping young people with basic survival and economic skills to get by when jobs became scarce. In some countries, like Uganda, youth workers emphasised the importance of working with willing parents to *provide important life and survival skills* to their children, such as bricklaying, cooking, cleaning, sewing, and farming. The increased engagement with parents in some countries was necessary given the youth workers' inability to engage with youth directly.

In India, the youth workers focused on skills that went beyond basic survival and *prepared youth for the job market*. One youth worker explained that although COVID-19 forced them to mainly shift online, the overall goals of their work remained the same. He said:

We are prioritising on improving those learning skills which can anyway help them to stand out in the future. They are being helped to improve their skills like marketing skills, content writing skills, web developing skills, etc. whose demand in the market is always constant, no matter what the situation prevails in future.

These youth workers' experiences clearly indicated that they were not only providing additional COVID-specific skills and information, but also continuing their critical work around preparing young people with work-related skills. This raises important questions regarding sustainability, as

already-limited funds for youth work will be more scarce given the financial constraints faced by governments and other funders as COVID-19 drags on.

This attitude of continuity was also reflected by a youth worker from Uganda. She said:

With or without COVID-19, the outcomes have not changed – teaching youth how to take care of themselves. They always had Saturday meetings and trainings but now the frequency has reduced because it is harder now. In these meetings the youth are equipped with skills necessary for them to survive in life. Skills that enable them to take good care of themselves.

A leader in a national youth association in Malaysia emphasised the need to prepare youth with entrepreneurial skills to help them identify ways to meet their basic needs:

Before was more on knowledge and skill development as leaders and organisation members (leadership and followership). Since COVID-19, economic support and opportunities are priorities, as most of my target youth are jobless and became unemployed, so their source of income was affected. They need piecemeal jobs to survive and continue supporting themselves and their families, so knowledge and skills on securing small jobs and online business became the priority.

COVID-19-related information and skills

At the onset of COVID-19, youth workers reported major shifts in the types of learning activity and experience that they provided for youth. During the pandemic, youth workers devoted much more time to disseminating information on safety and health and providing experiential learning activities that also related to the pandemic, such as community initiatives to make face masks and protective equipment. Thus, youth workers were playing critical roles in dissemination health information and improving healthy literacy to enable young people to use COVID-related knowledge, to act responsibly and to make good decisions that would impact their health. This was the case in Malaysia and India, where youth workers from NGOs used YouTube to provide non-formal learning sessions about COVID-19. Another Malaysian group learned how to make face shields and protective equipment for hospital workers in Kuala Lumpur. One youth worker commented:

We prepare the information on safety and health about COVID-19 and post into YouTube which is very formal because our clients are from many levels. For the young they always use YouTube to learn.

In India, one youth worker mentioned how his organisation was helping its youth clients learn how to become volunteers in the fight against COVID-19:

All programmes are on hold, so we have to explore other methods to reach out and work towards the goal. We are using digital platforms where youth can get trained as volunteer to learn about pandemic and where they can contribute. Also, the interested youth can work with different departments to help the administration carry out tasks smoothly.

Digital skills development

Another learning priority shift was to digital skill enhancement. Understanding how important digital skills have become in the COVID-19 environment, youth workers in our study spoke at length about the shift in their programmatic foci towards digital skill development among their youth clients. In Nigeria, a youth worker explained how his organisation and work had shifted much more profoundly to an emphasis on digital skill development. He said:

Digital skills have become more relevant, they [the youth] have placed priority on learning how to use digital tools to improve their lives, work and provide solutions for others. For example, some of them have been learning website development to help businesses get online. Some have been doing graphics design to help businesses promote their work and market themselves better at this point, because of the need to put your business in the faces of people and in their minds. These two areas have been our major focus and general proficiency in tools that aid remote learning ...

Another youth worker from Malawi pointed out that her organisation decided to make ICT a critical learning component for its mentoring programme:

We have prioritised trying to develop an ICT component within our mentorship programmes, so that the secondary school mentees will be more comfortable using computers and the internet once schools open.

In Kenya, a youth worker linked the emphasis on acquiring digital skills with the need to prepare youth for future employment. He said, 'This is what we are currently working on. There is a big need for skills on remote working and digital jobs'. Finally, a youth worker from India said:

Now the situation does not allow gatherings making education solely online. People are more prone to using learning apps such as YouTube, Coursera, Udemy, EdX and others. Discussions are made over platforms such as Zoom, Google Meet classrooms etc. In order to fit in the competing world more and more emphasis is laid on improving skills and catering to the requirement of market via digital technology.

Learning activities ceased

Part of shifting learning priorities and strategies during COVID-19 also meant *putting learning activities on hold completely*. Much youth work

is typically conducted through highly interactive, experiential learning approaches. Our youth workers spoke about, for example, environmental clean-up activities, field visits, interactive workshops and exchanges that had ceased as a result of the pandemic. While many were able to adapt and shift to online activities, not all were successful in doing so. Given the barriers they faced, and the need to prioritise safety, youth workers in both India and Kenya spoke about how their typical learning activities ceased completely.

In India, one youth worker who involved youth in a campaign to stop the use of plastics stressed the obvious limitations that the pandemic had had on their work:

We couldn't continue this after the pandemic started ... Shops got closed. We just told people not to throw plastic here and there, please collect it and keep it one place ... With all activities on hold, conventional learning and development is also at a standstill.

Another youth worker in India said that although his normal hands-on work could not continue, he was able to develop case studies and reflective activities:

Learnings of the past are helping with adapting to new learning experiences of working with the help of technology. Since not every stakeholder is comfortable with technology, the work relations that were made earlier with a lot of physical efforts are still paying off.

Research Question 3: What are the challenges youth workers face in providing learning and support for youth during the pandemic?

To unleash the potential of young people, youth workers work hand-in-hand with youth as mentors to help the latter make good decisions and work through life challenges. From funding restrictions to limits on face-to-face interaction, the youth workers in our study elaborated on the many challenges that COVID-19 had imposed on their youth work practice, particularly in their efforts to maintain regular educational activities. Our youth workers reported several such challenges including lack of funds, limited access to youth, technology access constraints, demoralisation, lack of co-operation from government officials and parents, and restrictions on experiential learning opportunities.

Lack of funds

One of the biggest challenges mentioned by youth workers from Malaysia, Uganda and Nigeria was a lack of, or at best reduced, funding streams. In Malaysia, an NGO-based youth worker spoke about reductions in donations due to the economic impact of COVID-19. As a result, youth workers were often left to use their own funds to support their work, or to rely more heavily on volunteers. In Nigeria, one youth worker explained:

Personally, I spend a lot of money in purchasing fuel every week now. It used to be monthly before, but I have to get fuel weekly now. Many of our students do not have enough resources to be able to do that and we are trying to see how we can get partnerships in that regard, so that we can have a certain amount that we will be able to give each person so that they can take care of their power supply needs.

In Uganda, a youth worker mentioned that even their usual donors were facing constraints. When the youth workers were asked how youth would overcome the challenge of funding constraints, few had an answer. The respondent from Uganda suggested, however, that they had begun to learn cheaper ways of achieving their goals by cutting costs and coming up with new ways for their staff to work.

Limited access to youth

Another major challenge that youth workers faced was reduced access to youth as a result of social distancing measures. For youth workers who rely heavily on personal relationships, experiential and community-based learning, and interpersonal exchange as a cornerstone of the education process, reduced access to youth was seen as a major challenge. A youth worker from Malaysia shared his concerns:

During the pandemic, we cannot have face-to-face interactions. We have missed a lot of chances to help the young even though they ask for it ... Face-to-face meetings are our main medium because in work with youth, we need to meet them, to see their face, work with their environment and meet with their peers.

In India, another youth worker explained how the shift to e-learning had made it difficult for his organisation to recruit new members, as there are thousands of youth-related programmes in India, with organisations competing to serve young people. In Uganda, outreach was also cited as a major challenge during the pandemic. One worker shared why lack of accessibility to youth in resource-restricted countries could create many problems:

Social distancing has reduced accessibility to the youth. One staff to 80 kids makes it harder for workers to reach the youth. Challenge is now meetings hold fewer youth. The alternatives are harder; headhunting each youth to give individualised lessons is an impossible task. Teaching is now harder. Training is harder. Meeting is just much harder now. Kids not as available as before. Used to face-to-face learning. Videos not an option.

In some of the countries, social distancing led to the complete termination of programmes, which meant no access to youth at all. Once again, in resource-poor programming contexts, organisations were not able to turn to alternative modes of education and had no option other than to terminate

their programmes. In Malawi, a youth worker explained how an intervention programme was prematurely discontinued as a result of the pandemic:

We haven't had the chance to have our weekly interventions which has caused the 15-week programme to come to a halt since mentees are home. We haven't had training, which we hoped we would do.

Given the unpredictable nature of the COVID-19 pandemic, the youth workers were at a loss as to the future of their weekly interventions. It forced them to take a 'wait-and-see' approach, which also negatively impacted learning continuity and momentum.

Some of the youth workers in the study also felt that the loss of experiential learning during the pandemic posed a major challenge to the overall quality of educational service they provided their youth:

Our trainings for the youth involved a lot of activity-based learnings. The touch and feel part of the learning experiences are missing now. We're trying to replicate the experience while designing unique experiences through a digital medium. Major part of the learning involved travelling to the places of intervention, interacting with the community and stakeholders. Given the current situation, this learning has been affected as the community has not transitioned to online channels.

Technology access constraints

Many youth workers have relied on technology-based communications to continue their educational work with youth. This has not always been easy, however, or even possible for some workers. Several mentioned technology-related challenges they faced, including lack of funds for young people to purchase internet data or airtime, lack of resources to buy phones or computers, parental objections to youth owning phones or computers, or insufficient network speed to communicate regularly. As a result, many youth workers relied on individual home visits or phone calls to reach youth. As one worker in Nigeria stated:

Phone calls are used, as well as personal visits to the young people when they can, especially when parents are not around. The second challenge has been internet access and we have been able to reduce that effect by providing them with funds to buy data, connect with the internet and get their job done. We still need support to make this better.

Another youth worker from Uganda explained:

Because the youth are from very poor homes, most have no phones, so it is very hard for communications via mobile, especially up country.

In Kenya, internet accessibility was mentioned as a major challenge: 'With the use of online learning and interaction sites, the major challenge has been

to reach the youths in time because of internet inaccessibility'. Youth workers in Malaysia and India also commented on the challenge of internet speed.

Demoralisation

One of the most often publicised challenges that youth throughout the world have faced has been the demoralising nature of the pandemic. For many young people, the future outlook is grim: loss of jobs or fewer job prospects; lack of funds to further or continue with education; themselves, family members or friends contracting COVID-19; and even death.

In addition, lack of social interaction with others and restrictions on social movement or being under complete lockdown have resulted in demoralisation among many young people. A key role for youth workers under these circumstances has been to help boost morale, counsel and even link youth to professional mental health services if needed. A Ugandan youth worker described her role as 'spreading hope for better days in the future'. Another youth worker from India commented:

The increasing number of cases, unemployment and the economic crisis has eventually disturbed the thinking and decisive power [of the youth]. On one side they are concerned for their studies and learning skills, but on the other side the declining economy of families has led to trouble.

Lack of co-operation from government officials and parents

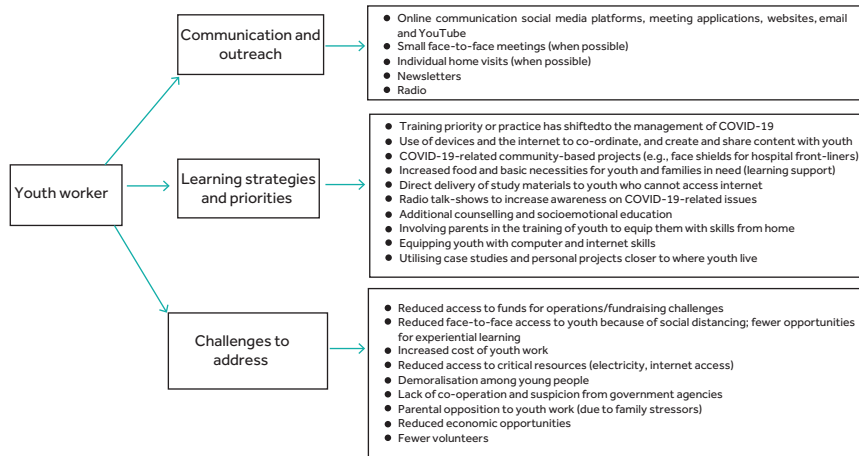
In addition to social distancing and limited access to technology, some workers also had to deal with uncooperative parents and even government officials. In India, one worker mentioned that for him, outreach was made difficult during the pandemic because of parents. Extended periods of lockdown in communities where houses may be small with many family members living together could cause tension between youth and parents. In some cases, this could result in domestic violence. In such situations, parents are often wary of letting their children interact with youth workers. This was echoed in Uganda, where youth workers could be 'chased away' by parents:

Parents chase away youth workers who come to talk to their children. Parents are quite wary. Outreach has been very hard. Domestic violence in homes. Some parents ban their children from meeting youth workers or cover up the dirt and injustices going on at home...

In India, a worker explained that youth work affiliated with government might be hampered by bureaucracy due to mistrust of the workers' motives:

One challenge while you are working with government machinery is there is lot of red tape. You have to go through the hierarchy. Sometimes teachers don't give you their time, sometimes the principal, sometimes the block extension officer ... until and unless they realise and are assured by your

Figure 7.1 Study findings: Youth workers as educators during COVID-19



continuous work you are not there for profit motive ... You might have noticed when you walk into a government office and ask for data, they become very suspicious – why are you asking for data – is this a media person or what? So, you need to work continuously, prove your motives, have lot of patience, and control your anger ...

7.4 Recommendations

Limited face-to-face access to youth, funding constraints, new technologies and new priorities are changing the way youth workers work. From our research findings, we propose ten recommendations to maximise youth work and learning during COVID-19 and beyond. The recommendations centre around core issues that require urgent attention and substantial effort.

Recommendation 1: Mainstream digital communications and online learning for youth worker training and development

Online and digital tools to be used in moderation. Since COVID-19, in many countries they have become the main source of communication and education between youth workers and youth. This will only expand in the future. Therefore, youth work practice should, where possible and where resources allow, include digital tools in training programmes, professional development courses, formal youth work degree programmes and other forms of youth work education. Furthermore, digital communications tools such as social media and messaging applications (e.g. WhatsApp) have become an important means of staying in touch when face-to-face meetings are not possible. These and other similar applications should be part and parcel of youth worker training and education. They are effective tools for conducting outreach, collaboration, feedback and reflection on and management of

activities. In a recent study of Malaysian youth worker competencies, however, the use of social media ranked near the bottom (Muhammad et al. 2018).

Recommendation 2: Bridge the digital divide

There is a need to bridge the digital divide between youth workers and youth. As many youth workers rely heavily on social media and online learning platforms, young people with no or limited access to such tools are unable to receive youth work services. The digital divide further exacerbates pandemic-induced isolation and restricts the inclusiveness that youth work attempts to create among young people. For many young people, access to digital communication is their only hope of staying connected as many places are in strict lockdown, which is likely to continue for the foreseeable future. The gap between youth who have access to technology and those who do not will widen if nothing is done.

Recommendation 3: Train youth workers on the ethics and professional boundaries of digital and online media use

The shift to online and digital learning within youth work during COVID-19 has made the need for ethical use of these tools a priority. Support is needed, therefore, to ensure that youth workers – and young people – are aware of what ethical use of media entails. Youth workers also need to learn about professional boundaries regarding ethical interaction with youth via online and digital media. Training is thus needed for youth workers to engage with youth, using digital learning tools that is both effective and ethical.

Recommendation 4: Provide high-quality alternatives to digital learning for working with youth and families from under-resourced communities

As modes of youth work vary depending on country, more advanced contexts can use blended models, as the interpersonal touch is vital despite the availability of technology. However, in under-resourced countries and communities, the use of phones, newsletters, printed educational materials and home visits is still highly relevant to youth work practice. While technology continues to play a major role in education and youth work, those who cannot afford digital tools, infrastructure and internet access must not be left behind. Although technological platforms advance the reach of youth work, they are not themselves sufficient because most youth work is best executed in an interpersonal context. Harnessing both modes to find the most appropriate blended approach would be helpful for each youth work setting.

Recommendation 5: Prioritise self-determined learning

During COVID-19, the amount of face-to-face contact with youth has been greatly reduced, impacting the type of learning that has occurred.

Nevertheless, youth workers must be able to provide meaningful, effective, experiential educational opportunities, without having to meet young people as often. This requires not only technological tools, but also a different learning approach that can maximise young people's desire to pursue areas of interest for their personal development. Youth work does not subscribe to any one particular learning approach, but tends to move between different approaches depending on the social, emotional, cultural, moral, spiritual and physical developmental needs of young people (Smith 2012). By implementing learning strategies that focus on independent self-learning, with fewer concerns for the particular time, space, place and group dimensions of learning activities, youth workers can creatively engage youth in meaningful experiential learning, without having to have regular, direct contact with them. One example from this study was the youth worker in India who encouraged a young person to focus on doing environmental clean-up work around his home during COVID-19, as an alternative to group community projects that they had conducted prior to the pandemic. The young person then reflected on his experiences and shared them with the youth worker using digital communication.

Recommendation 6: Prioritise financial and professional development support for youth workers

Financial and professional development for youth workers will help them to:

- Work with youth to meet their basic needs. COVID-19 has threatened the basic needs and livelihoods of many young people and their families. Provision of basic services is a way to reach youth, build relationships and educate. Providing youth with work, food and medical care is a way of doing outreach work as well, as basic service provision can be used for recruitment into youth organisations and programmes.
- Involve youth in service provision. Involving youth in service provision for other youth and their families can provide case studies that highlight critical community issues and develop critical consciousness in young people.
- Work more creatively and collaboratively. Creative collaboration with other organisations means survival for youth workers during COVID-19, as it means being able to fundraise more effectively and provide a wider variety of educational services. Collaboration not only allows youth workers to pool resources, but is also crucial to build social capital by intensifying partnerships with parents and families, government agencies, and corporate bodies such as telecommunications providers, health agencies, food banks and others.

Recommendation 7: Conduct further country-specific research on youth work during COVID-19

Administrators of education systems (from ministries of education to academic institution management teams) can learn a lot from how youth work is adapting. Hence this study forms a foundation for further country-specific research. Such efforts can increase awareness of potential collaborations between sectors to enhance youth well-being during the COVID-19 pandemic and beyond.

Recommendation 8: Facilitate sharing COVID-19 experiences and best practice among youth workers globally

There is need both within and across countries to facilitate sharing of COVID-19 experiences among youth workers, so they can learn creative strategies from each other. The Commonwealth, or other similar institutions, could play this critical role of developing and strengthening youth work support networks during COVID-19 and future pandemics.

Recommendation 9: Provide greater recognition of youth work as a critical occupation during COVID-19 response efforts

Youth work should be officially recognised as a critical responder during the COVID-19 pandemic. This will support efforts to collaborate with education and other critical sectors, so that youth workers can have appropriate resources and representation on critical policy-making bodies. This would help youth workers to do their work effectively during the pandemic and beyond.

Recommendation 10: Support youth workers in their role as change agents

During COVID-19, youth workers act as critical change agents through their training and educational efforts. In so doing, they fulfil the following roles:

- change management experts – by being knowledgeable about how change occurs;
- advocates of change – by engaging young people in change and demonstrating support for change;
- communicators of change – through ongoing communication and outreach;
- liaison – by facilitating two-way communication between adults and youth, responding to feedback and questions
- support – listening and providing help to youth; and
- coach – guiding youth in decision-making.

To enhance youth workers' capacities as change agents and to promote more effective youth practice during COVID-19, the competency domains of cognitive, intrapersonal and interpersonal should be prioritised by youth work training and professional development bodies. Within these domains, the following youth work competencies can be prioritised to facilitate effective change management:

- The cognitive domain. This includes three clusters of competencies: cognitive processes and strategies, knowledge, and creativity. These clusters include competencies such as critical thinking, information literacy, reasoning and argumentation, and innovation.
- The intrapersonal domain. This includes three clusters of competencies: intellectual openness, work ethic and conscientiousness, and positive core self-evaluation. These clusters include competencies such as flexibility, initiative, appreciation of diversity, and metacognition (the ability to reflect on one's own learning and make adjustments accordingly).
- The interpersonal domain. This includes two clusters of competencies: teamwork and collaboration and leadership. These clusters include competencies such as communication, collaboration, responsibility and conflict resolution.

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Section III

Innovative Solutions

Chapter 8

Harnessing ICT and Digital Low-Cost Solutions While Ensuring Access, Equity and Safeguarding During and Post-COVID-19

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8.1 Introduction

COVID-19 has brought about a sudden unexpected disruption in education worldwide. Within weeks of the outbreak, millions of children, young adults and mature learners were out of school and university. To cope with this unforeseen and unusual situation, educational institutions resorted to ‘emergency remote teaching’ to ensure continuity in the teaching and learning process.

In developing and developed countries alike, the response to the educational crisis has mainly centred on technology and digital media. Virtual/online teaching and television have been used to broadcast recorded lessons for primary and secondary (high school) students. Universities have resorted to online delivery, mainly through virtual lecturing, e-learning platforms, and distance education and online learning (DEOL).

These ‘emergency remote teaching’ measures have had limited success and acceptance from key stakeholders, namely teachers, students and parents. One key issue (among many others) repeatedly highlighted has been the ‘digital divide’, which leads to digital exclusion for underserved populations who cannot afford technology and those living in remote areas where internet connectivity is still a problem (Bozkurt and Sharma 2020).

Technology in education can be broadly divided into two categories: high end and low end. Often, there is a tendency to think that high-end technology has a higher impact on learning, while the opposite is true for low-end technology. This is not the case, as it is possible to have high-end technology with low impact on learning and low-end technology with high impact on learning.

The key question therefore is how do we go about using low-cost information and communication technologies (ICT) to harness innovative pedagogies and learning activities to promote active learning to ensure access, equity and safety during and post-Covid-19? While COVID-19 has provided an opportunity for governments to take rapid action to support school students and learners through education technology, the premise is not only one of equitable access to learning and the continuity of educational processes, but to ensure that learning effectively takes place with positive impact on students' learning outcomes. How education technology is used and how it is embedded in the learning experience is critical to its effectiveness (Bryant et al, 2020).

8.2 Background and context

The importance of ICT in the education sector is widely acknowledged in supporting educational reform (Kumar 2008). It contributes to improving learning and teaching by ensuring effectiveness is maintained and by capturing the interest of learners. As in the traditional classroom setting, lessons are delivered in a way that supports effective learning and boosts interest in a given topic by using resources, materials and teaching techniques (Nisar et al. 2011). ICT also provides access to broader educational and learning materials and may be highly effective for research. For example, researchers can keep up to date with the latest scholarship in their field and can take advantage of appropriate ICT tools to carry out their work (Kumar 2008).

With the outlook for education shifting increasingly from the classroom to virtual platforms, ICT in education provides opportunities to explore different educational categories such as e-learning, blended learning and distance learning. Indeed, ICT provides different educational categories to cater for the needs of students and teachers and contributes to efficiency in education. It also supports the delivery of more radical developments, including building a different vision of pedagogy based on soft skills and new digital literacies (Livingstone 2012). Research shows that the availability and use of ICT tools is essential to improving the educational efficiency of students and teachers (Nisar et al. 2011).

In light of COVID-19, much consideration has been given to the opportunities for the education system that ICT presents. Yet challenges that hamper fully exploring and exploiting ICT in education must also be recognised.

Availability of ICT tools and infrastructure

In some developing countries, there is still a need to develop ICT infrastructure. For students and teachers to have access to ICT, there must be

a building to house computers and ICT tools, including software, and access to electricity and the internet. For some marginalised communities where learners only have access to radio and television, it is important to explore ways in which these media can support interactive learning.

Additionally, during the COVID-19 pandemic, some governments and education sectors have taken rapid action to change from traditional classroom learning to online platforms. However, these changes have put pressure on school budgets. Countries where education might be competing with health, sport or other national development goals may encounter challenges with budget allocation and national priorities.

A lack of or limited ICT skills and knowledge among teachers is also a major challenge that hinders the progress of ICT in education. Teachers are not trained to use these tools to create lessons, but such training is necessary so they can deliver effective teaching (Kumar 2008).

Regarding the non-formal learning component of the education sector, there is still need to explore the use of ICT in the delivery of non-formal education, identify the support required and assess its effectiveness including in addressing special learning needs or counselling services.

Change management and leadership

Robust management and leadership should take charge of the transition to ICT in the education system as teachers who do not receive any leadership or management support during the transition from a traditional classroom setting to using ICT are more likely to experience problems. This transition should ideally be gradual and should include a change in policies, curricula and existing lesson plans (Livingstone 2012). The effective integration of ICT into an educational system requires a multifaceted process that addresses institutional readiness, teachers' competencies and many more dimensions (Tinio 2003). It therefore requires strong leadership to manage the change within education administration.

8.2.1 Educational access and equity for All

As countries turn to distance learning due to COVID-19 and school closures, it is difficult to ensure equitable opportunities for all learners. Many developing countries have insufficient infrastructure, especially in rural areas; households lack internet connectivity and the hardware needed for distance learning. There is a massive regional variation in internet penetration globally, with Africa having the lowest at 39.3 per cent, compared to North America's 94.6 per cent (Salman Asim 2020). There is also a considerable disparity even across low-income economies, such as Niger and Somalia, where internet connectivity reaches less than 10 per cent of the populations

(ibid). Yet, the situation is much worse in the Central African Republic, while in Burundi and Eritrea internet access is below 5 per cent (Chebib 2020).

Moving from school education to distance learning (digital and non-digital) is a new and challenging experience. The extended period of school closures has accentuated the digital divide in schools and made it an educational divide. Families with better digital literacy can help their children, while children of digitally illiterate families are at risk of falling behind (Baiza 2020).

Among the problems and challenges faced by rural communities are limited infrastructure, an inability to buy ICT equipment, lack of ICT skills and knowledge, and lack of training in ICT. Rural areas dwellers, including educators, learners and parents, are disadvantaged in the use of ICT for various reasons including lack of interest and expertise in using ICT and lack of appropriate infrastructure (Siti 2014). Teachers in rural and remote areas also seem to be less qualified than their urban peers (Liu and Onwuegbuzie 2012). Fifty-three (53) per cent of students in low-income countries have difficulty reading and understanding a basic text at age 10. The situation is likely to worsen as there will be a more significant disparity between those who can access remote learning platforms and those who cannot (Sharma 2020).

The COVID-19 pandemic has put on hold the normal functioning of education, especially for students in underserved and remote communities (Reimers et al. 2020, 3). 'Remote' means 'off the grid' – set apart from mainstream society; isolated by gaps in language, culture or social exclusion due to political or socioeconomic status, no matter how physically proximate (Griffith 2020, 47). Therefore, to increase universal access to education during this crisis period, it is important to address inclusion, especially digital inclusion, of these remote communities into the socioeconomic fabric of developed communities.

Access requires not only the easy adoption of digital solutions, but also affordability (Chandrasekaran and Purushothaman 2019, 46). Low-cost solutions should cater for the needs and aspirations of remote communities, with target prices and features that match middle- and low-income customers (Hesseldahl and Ballan 2016, 6).

8.2.2 Low-cost solutions as an innovative model for teaching

Low-cost solutions to bridge the digital divide could include the community communication centre (C3) model; massive open online courses (MOOCs); the use of social media as a learning platform; and the use of digital platforms.

Digital version of the community communication centre (C3) model

To bridge the digital divide, there is a need to establish a community communication centre (C3) that not only provides internet service in rural areas and communities, but also helps deliver educational content to students at a low cost during any crisis period. This C3 model is a revised concept for developing countries. It is not a new idea: UNESCO has many models of community communication such as community information centres, telecentres and community IT centres, multipurpose community telecentres, community multimedia centres, and community learning centres (Dutta 2019). The C3 model can be used for digital platforms with three main purposes: as a community information and learning service, as a community participatory service, and as a community archiving service.

All three can be used for educational purposes on a digital platform. A community information and learning service, a database forming an online community library, can be formed. Community communication centres built in each zone or square can be developed where audio- and video-based learning programmes can be made available through the local/community radio broadcasting and television channels (Kumar 2020). As a community participatory service, educational assignments can be developed online through contributions to a weekly wall magazine, a bi-weekly or monthly community newspaper, or participation in radio or television programmes online. As a community archiving service, this model could also act as an online archive of audio-visual or other important information that students can access at any time by going online. To keep costs low, the entire digital version of the C3 model will have to run on renewable energy funded by governments, public sources, or via corporate social responsibility (CSR) and with the support of community members.

MOOCs as open educational resources (OER)

The term ‘massive open online courses’ (MOOCs) was coined in 2008 by Dave Cormier of the University of Prince Edward Island and Senior Research Fellow Bryan Alexander of Britain’s National Institute for Technology in Liberal Education. This was in response to a course called Connectivism and Connective Knowledge, which was led by George Siemens of Athabasca University and Stephen Downes of the National Research Council. Naidoo (2015) notes that MOOCs can increase access to high-quality education and global leaders in fields of study, at minimal to no cost. This could be an important platform for lifelong learning and continuing education for developing countries to consider.

An important component of effective MOOCs, which underpins the model, is the availability of the course materials and learning resources as open educational resources (OERs). The term OER was first used at a UNESCO

meeting in 2002, where it was defined as ‘teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions’.

The Commonwealth of Learning (COL) recognises and promotes OERs as central to its agenda of learning for development. COL has adopted the widest definition of OERs, describing them as ‘materials offered freely and openly to use and adapt for teaching, learning, development and research’ (Naidoo 2015, 4). While OERs can mainly be shared in digital format (both online and on DVD or CD-ROM), COL does not see them as merely synonymous with online resources, online learning or e-learning. Rather, in COL’s view, OERs can also be made available in print format (Naidoo 2015).

Although the development of the entire digital mechanism of education may be expensive, once it is in place it provides access to online modules designed for distance learners at a lower cost, or to free online courses on the web. Online modules can be created cheaply, specifically to be shared by several campuses or colleges (Bold Business 2017). Developing more online educational materials and distributing them with data packages and online platforms developed by the government, as is done in India with ePathshala, VidyaGyan etc., could meet educational needs during a pandemic at a lower cost (Kumar 2020). Moreover, to keep intact the variability of digital or online education, online materials on various subjects need to be developed and made accessible at an affordable price. Open-source projects in science or computing produce an end product that belongs to everyone and can be shared openly, modified by anyone and redistributed at will (Hill and Ciccarelli 2013). A similar approach in education would be beneficial.

Social media

Students in higher education have used social media as a learning platform during the COVID-19 crisis. Social media, such as Facebook, Twitter and Instagram, provide an alternative way to deliver learning components and balance the loss of academic contact (Dutta 2020). These media are used mostly to collect information, not necessarily pertaining to education; at the same time, they allow students to build communities to share experiences, discuss concepts and create a space for co-learning. Educators can interact with students beyond the confines of the classroom (Persaud 2019). In India, for example, the messaging application WhatsApp has been used mostly to share information, documents, presentations, texts, videos, etc., whereas

YouTube has become one of the most significant tools for self-learning. In addition, video-conferencing applications such as Zoom, Skype, Jitsi, Google Meet, Cisco Webex, Starleaf and Whereby have become popular tools for keeping in contact when students are increasingly socially isolated during the coronavirus pandemic.

Students who were not previously tech-savvy are now using different social media tools to get in touch with teachers and classmates. Social media used in this way breaks the monotony of classroom teaching, as students can access relevant multimedia materials such as videos, lecture notes and presentations and have wider access to sources and experts online (Dutta 2020).

The age of social media users depends on demographics and the type of platform. Therefore, it is important for researchers to study users of WhatsApp and Facebook in each geographical area based on age. Thereafter, a recommendation may be made on the use of social media for educational purposes.

Digital platforms

Social media and other digital platforms can be used to set up an online forum or build a community of learners for a particular subject. For example, researchers at Harvard University created an online forum using the platform Ning with their pre-service teachers, in an attempt to create a 'community of praxis' to increase both student engagement and learning. Ning is a social network similar to Facebook, where users create or join particular networks with others who share similar interests (Delello et al. 2015, 166). This can also enhance co-learning, which grows from a sense of engagement provided by learning on social media platforms.

The research questions

For the study that this chapter is based upon, the researchers set the following questions:

- What are the perceptions of parents, teachers and students on the effectiveness of emergency remote teaching during COVID-19?
- What is the perceived effectiveness of low-cost ICT solutions in ensuring continuity of educational provision in underserved and remote communities?
- What policy measures, technology solutions and other elements (for example, related to building educator capacity) should be put in place to ensure universal access to educational provision for these communities?

8.3 Study methodology and findings

8.3.1 Methodology

For this research, two main methods were adopted: a desk review and survey research. The desk review was conducted on low-cost ICT solutions in pandemic contexts, especially in remote areas and for underserved communities. The researchers devised three survey instruments and administered these to parents, students and teachers. They carried out basic descriptive and visual statistical analysis to interpret the survey responses.

For the purposes of this research, a target of 30 respondents in each category was set as a suitable sample size. The numbers of respondents for each category were:

- parents: 33 (from 7 countries)
- teachers: 65 (from 3 countries)
- students: 106 (from 6 countries)

While we targeted parents indiscriminately, teachers and students were mainly selected from secondary- and tertiary-level educational institutions.

Limitations of the research

This work was initially planned to cover a five-week period, but it actually took ten weeks. This relatively short period of time put constraints on the researchers in terms of designing the questionnaire, administering it and processing responses. Therefore, the results of this work cannot be generalised, though they can provide a first-hand insight into the situation.

More systematic research is needed to be able to make deductions that are conclusive and consistent with the actual situation. Since the surveys were mainly administered online, we cannot be sure if we really captured the issues of those who were excluded completely from emergency remote teaching/online learning by not having access to any form of educational services during the crisis.

8.3.2 Findings and observations

Parents' survey

For the parents' survey, there were 33 respondents from seven different countries: 42.4 per cent (14) were from Solomon Islands, 24.2 per cent (8) from India, 18.2 per cent (6) from Ghana, 6.2 per cent (2) from Papua New Guinea, 3 per cent (1) from New Zealand, 3 per cent (1) from New Caledonia and 3 per cent (1) from South Africa.

In terms of location, 48.5 per cent (16) of the respondents lived in a town, 33.3 per cent (11) lived in a city, 15.2 per cent (5) lived in a suburban area

and 3 per cent (1) lived in a slum. Three (21.1%) respondents lived with a partner, 69.7 per cent (23) were married and 9.1 per cent (7) were single parents. Most (91% [30]) of the respondents had a tertiary education, including bachelor’s degrees, postgraduate qualifications and an MA. In terms of employment, 20 (60.6%) had a full-time job, 27.3% (9) a part-time job, 1 (3%) was self-employed, 1 (3%) owned a business and 6.1 per cent (2) were unemployed. Of the parent respondents, most had one or two children (39.4% [13] and 27.3% [9] respectively).

Most of the respondents (72.7%, 24) had an internet connection at home, while 21.2 per cent (7) did not and 6.1 per cent (2) used mobile phone data to connect to the internet from home (Figure 8.1).

With respect to the tools and technologies that they employed to ensure continuity of learning for their children, the responses are shown in Figure 8.2.

Most of the respondents (21 out of 33) used smartphones to facilitate their children’s learning. Only 11 out of the 33 (33.3%) respondents had access to a laptop or personal computer (PC) at home. Only the respondent who lived in a slum had no access to online learning facilities or other facilities such as TV or radio. In that case, the respondent relied mainly on printed lessons and student workbooks.

Just under half (45.5% or 15) of the parents said that their children spent less than two hours per day on schoolwork while at home; the same number said their children spent between two and five hours a day on schoolwork. See Figure 8.3.

Figure 8.1 Internet connectivity

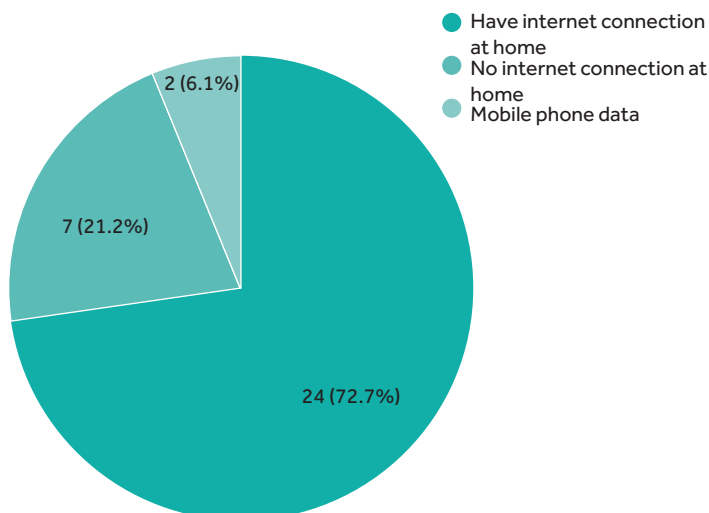


Figure 8.2 Tools and technology used in learning

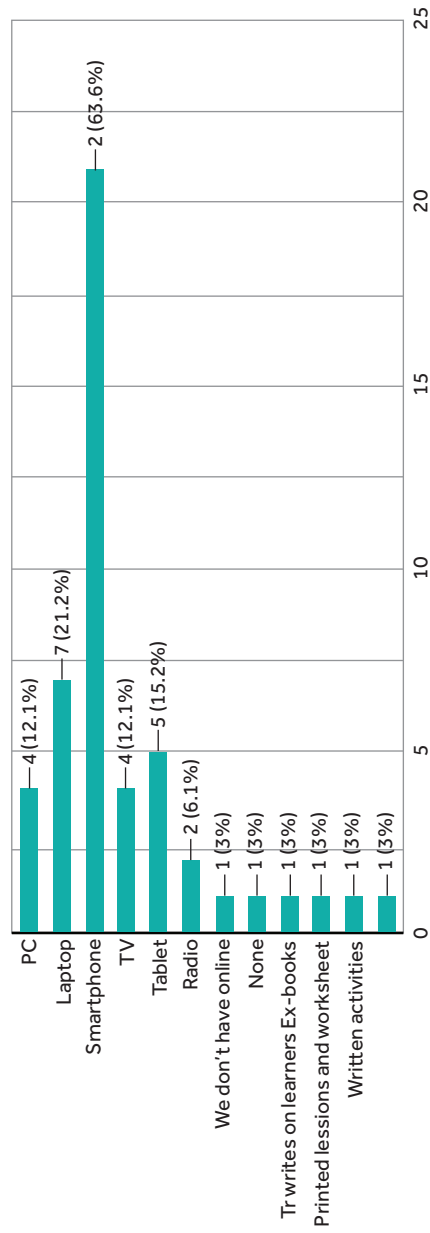
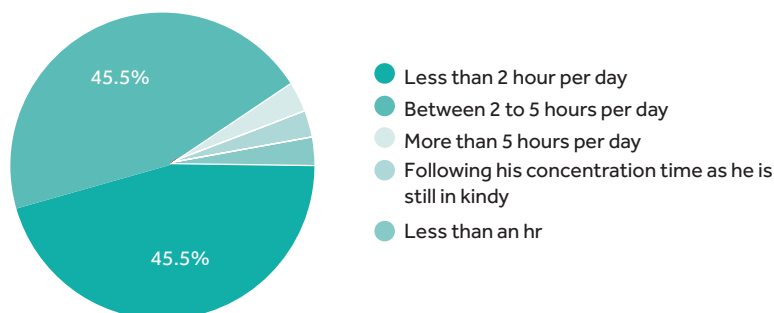


Figure 8.3 Time children spend studying


When asked about how they planned and ensured that their children spent time learning during home-schooling, 48.5 per cent (16) of the parents planned a routine so their children were ready for class; 18.2 per cent (6) left it to their child(ren) to manage their own agenda for lessons; 21.2 per cent (7) ensured the computer was well connected to the internet; 48.5 per cent (16) monitored their child's/children's homework; and 21.2 per cent (7) trusted that their child(ren) to work independently.

In the parents' opinion, the main barriers to supporting their children were the high cost of internet connection, especially data packages, and their own digital literacy limits. Furthermore, they felt that students concentrated less on the lessons that were delivered online or via television. Parents highlighted the need for them to be constantly present during online or TV broadcasts, as their children needed assistance. It was mentioned that students were not used to learning in isolation. Parents also felt that TV lessons could be beneficial in lockdowns, but that the design and delivery needed analysis. Television was the preferred medium, given the high cost of internet access and computing hardware. Parents also mentioned that for safety reasons, they would prefer home-schooling over the risks associated with being physically present at school in case of a COVID-19 resurgence.

Students' survey

There were 106 student respondents from six different countries: 70.7 per cent (75) were from India, 15.1 per cent (16) from Ghana, 8.5 per cent (9) from Kenya, 2.8 per cent (3) from Solomon Islands, 1.9 per cent (2) from Canada and 0.9 per cent (1) from Germany. Of the total, 40.6 per cent (43) of the respondents lived in villages, 34.9 per cent (37) lived in towns and 24.5 per cent (26) lived in cities.

Regarding education, 37.7 per cent (40) were at master's degree level, 36.8 per cent (39) were undergraduates, 9.4 per cent (10) were at doctoral level, and the remaining 16.1 per cent (17) were at high school and higher secondary school level (Grades 8 to 12). Most of the respondents were studying in the

fields of social science and humanities, followed by science and commerce. Females numbered 57 (53.8%) and 46.2 per cent (49) were male.

For 61 per cent of respondents, emergency remote teaching was an acceptable approach to address their immediate learning needs during the crisis. There was no other alternative for 69 per cent to continue their education during that time. For 40 per cent, compulsory attendance at online/virtual lectures made them use this form of teaching. Remote teaching created a tense learning situation due to technical difficulties for 66 per cent of students, along with uncertainty due to a lack of devices and connectivity for 64 per cent. Moreover, half reported that online teaching created ‘chaos’ in their learning experience, as they were expected to be capable of ‘emergency adaptation’. More than 65 per cent did not feel that this form of teaching made their learning experience more interesting. On the other hand, 63.2 per cent said Zoom was their platform of choice for remote learning, and 59 per cent agreed that online teaching/learning created an independent learning environment where they could schedule their classes at any time. Asked whether it would be more time consuming to complete the syllabus through emergency remote teaching, 37 per cent agreed while 35 per cent were neutral.

Teachers’ survey

There were 65 responses to the teachers’ survey from three countries: 80 per cent (52) from Kenya, 10.8 per cent (7) from Ghana and 9.2 per cent (6) from India. Male respondents made up 78.4 per cent and 21.5 per cent were female. In terms of location, 55.4 per cent lived in urban areas and the remaining 44.6 per cent lived in rural settings. Figure 8.4 indicates the highest qualifications of the respondents. Overall, the respondents had at least the minimum education qualifications required to teach.

More than 84 per cent of respondents were secondary school teachers. About 10 per cent taught in the post-secondary sector and 89 per cent in a public school.

Figure 8.4 Respondents’ highest qualification

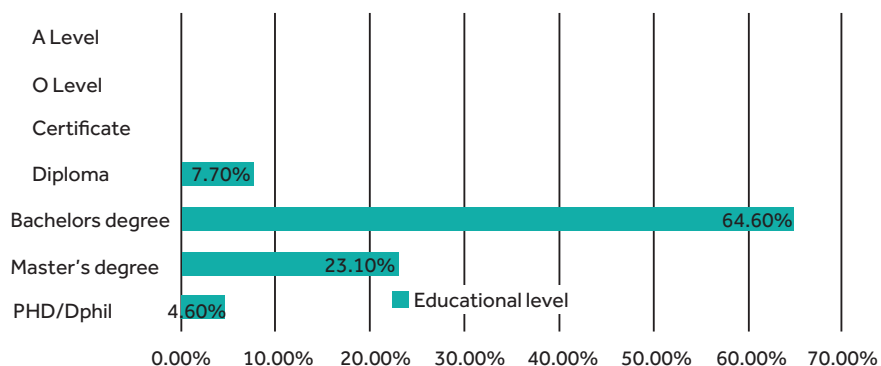
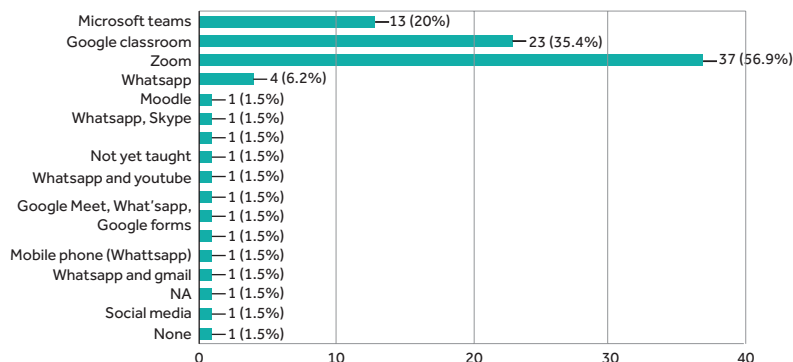


Figure 8.5 Tools used for remote teaching



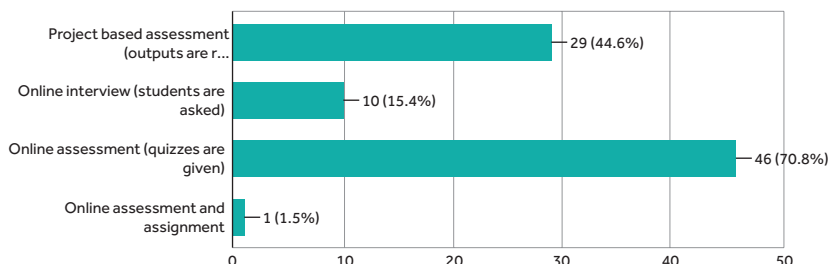
It emerged that virtual classrooms were the preferred way to ensure continuity of education. Figure 8.6 shows that many respondents (56.9% or 37) employed Zoom to set up virtual classrooms; 20 per cent (13) used Microsoft Teams for virtual teaching, 1.5 per cent (1) used Moodle, and the rest used social media platforms such as WhatsApp, Skype, YouTube and Google.

Educators were asked how they assessed students when teaching virtually. The responses are shown in Figure 8.6. The majority gave students quizzes (70.8% [46]), 44.6 per cent (29) relied on projects, 15.4 per cent (10) used interview-based questions and one (1.5%) relied on assignments.

While approximately 86 per cent of the respondents reported having sufficient ICT skills and knowledge, the majority would also welcome additional training in delivering virtual classes and preparing learning materials. Asked if they perceived virtual lectures to be more efficient than physical classroom interaction, 40 per cent neither agreed nor disagreed; 34 per cent found them to be more effective; and 24 per cent thought that classroom-based teaching was better than online teaching.

On the other hand, 58 per cent of respondents agreed that delivering a virtual lecture required more effort on their part to achieve effective learning outcomes compared to teaching in a conventional classroom. According to

Figure 8.6 Assessment methods used



83 per cent of respondents, students were subjected to many distractions from family members when learning remotely and online; about two-thirds of teachers responded that it was difficult to conduct virtual classes in some subjects like mathematics and for practical sessions.

The respondents reported several issues linked to internet connectivity and power supply. Power cuts represent a real challenge in many regions, especially on the African continent. Respondents also reported a lack of motivation among students and their non-participation in/absenteeism from online classes. Digital and ICT competencies were also highlighted as a challenge for educators.

The teachers identified a need for training, appropriate equipment and tools to make them better equipped for their tasks. They also highlighted the need to have an appropriate policy on digital learning and to make the internet more accessible for all stakeholders. They emphasised the need for better remuneration of educators.

8.4 Recommendations and conclusion

The findings of this research can be seen as providing preliminary insights for further research and actions by policy-makers to address the issues experienced during the pandemic. Action plans are needed to address future and similar problems to ensure continuity of educational provision, access to educational services, especially for underserved populations, and meaningful learning.

Based on the findings, the following were identified as priority issues for governments and authorities to address:

- There was no low-cost solution *per se*. Some solutions are less costly than others, but the fact remains that formal education is not designed to be adaptable to the medium of delivery or to the financial means of the family. Some families cannot afford television sets and for others internet connectivity is still a major hurdle. Governments should ensure equity prevails in terms of access to educational services and digital technology.
- Curricula have not been adequately designed and customised for remote teaching or for broadcast media. There is therefore a need to either rethink the curriculum or design an alternative model that can be activated when remote teaching is needed.
- Teachers should be trained in remote teaching and have access to teaching technologies. Teacher training models and programmes should be revised and aligned with curriculum needs in crisis

situations, such as pandemics, when adapted or customised teaching is needed. Teachers should also be appropriately equipped in terms of facilities (for example, computers and internet connectivity).

- Governments should have policies on how to include parents and involve them more in the education of their children, including appropriate financial support, especially for those in underserved areas.
- Technology-enabled learning should be assessed to ensure that in addition to promoting better learning experiences, it contributes to the resilience of the educational system to expand learning beyond the classroom.

The survey allowed us to make some important reflections, even though the findings are not necessarily supported statistically. There is a need for in-depth and further research on the three main actors, namely parents, students and teachers, to better understand their educational experiences, especially with technology in education, and during the pandemic. From the snapshot we obtained from this survey, we are confident of the importance of the above-mentioned recommendations.

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Chapter 9

Innovative Financing for the Public Education Sector

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9.1 Introduction

The global impact of COVID-19 on education requires innovative responses in the public education system, to ensure that any learning challenges experienced before, during and after the pandemic are addressed effectively. In this way it will be possible to build better education systems that can withstand future shocks, while at the same time addressing existing socioeconomic inequalities by improving the school performance of marginalised children.

The research that this chapter draws on a desktop review, an online questionnaire survey and interviews to explore the potential of innovative financing mechanisms to address education challenges that existed before and during the COVID-19 pandemic, and which will persist when the pandemic is over. Broadly, the study explores potential innovative financing mechanisms in education and highlights how some of these can be utilised. Considering the education system requirements and the ailing state of education in low- and middle-income Commonwealth countries in Asia and Africa even before the COVID-19 pandemic, the chapter specifically suggests that results-based financing (RBF), an innovative financing mechanism, could be employed to improve efficiencies and effectiveness in education systems and ensure better outcomes.

The research focused on Asian and African Commonwealth countries, in order to align with the research interests of the eight young researchers from Ghana, India, Kenya, Nigeria and Uganda who conducted the various research tasks.

9.2 Background and context

9.2.1 What is innovative financing?

According to the Bertha Centre for Social Innovation and Entrepreneurship (2017, 3) based at the University of Cape Town:

Innovative financing is an approach to funding organisations, businesses and projects that optimises positive social, environmental and financial impact. It uses all available commercial and philanthropic financial tools to support the growth of these initiatives, and when existing tools do not work, it creates new ones.

Burnett and Bermingham (2010) propose five key objectives of innovative financing mechanisms (highlighted **in bold font**), while De Witt (2020, 11) provides concrete examples of how four of these objectives can be achieved (presented in regular font):

1. **Mobilise additional resources to address financing gaps** to increase the amount of funding from traditional sources, which for most low- and middle-income countries are the public sector, official development assistance (ODA) and private donors. Additional funding and investment can be attracted from non-traditional sources, including commercial and philanthropic-orientated private investors, such as foundations, high net-worth individuals, development finance institutions (DFIs), fund managers (private equity/venture capital alternative debt), asset managers, pension funds, and insurance companies that require social and financial returns on their investments. Collaborative funding models involving governments, donors and private investors through formal and informal arrangements reduce fragmentation and enhance resource flows to key priority areas where there is evidence of increasing success. Pooled funding can enable scaling of effective solutions.
2. **Increase effectiveness, efficiency and equity of current funding** by using limited amounts of grant and concessionary funding in a catalytic manner to address specific market failures and to leverage more risk-averse capital. Conditional funding mechanisms can be used judiciously to focus on performance and accountability, and to attract large individual and country donors who want to pay for results. There should be increased focus on access, quality, equity and success.
3. **Stimulate innovation** by building market infrastructure to institutionalise learning and practice associated with the use of innovative finance. New technologies and available data can be used to improve and streamline programme delivery and funding flows, ensuring alignment with national policy and learning outcomes, while enabling flexibility in delivery models.
4. **Raise the profile of education to ensure that it receives the needed levels of prioritisation**, especially during the COVID-19 pandemic, during which time the focus has appear skewed towards

health. Hence it will be necessary to generate momentum to ensure that education gains which have been attained are not reversed.

5. **Meeting the educational needs of fragile and conflict-affected countries**, particularly in the context of COVID-19, during which time resources have been stretched or exhausted because of health demands.

9.2.2 Innovative financing mechanisms

Bellinger, Terway and Burnett (2016, 9) examined various innovative financing mechanisms and systematically assessed 18 of these, based on desktop review and interviews conducted with Finance Panel members from the Global Partnership for Education (GPE), the World Bank, UBS Optimus, Moore Europe and Sir Ronald Cohen, along with other experts. They used the following criteria:

- positive impact on educational outcomes;
- potential additional funding that they could mobilise;
- replicability and scalability;
- cost-effectiveness at scale;
- sustainability and predictability; and
- feasibility, ease, speed and transaction cost of implementation.

Although these instruments could be used in a variety of sectors, they are discussed in this chapter only in relation to education. Table 9.1, which draws on Bellinger et al. (2016), together with other sources referenced in footnotes, presents selected financing mechanisms, describing how they operate, when they should be considered and the education issues they could address.¹

9.3 Methodology and findings

9.3.1 Methodology

The key research questions for the study that this chapter focuses on were:

1. What are the short-, medium- and long-term requirements for quality education provision during institutional closures and upon resumption? How will these be funded?
2. How have governments and other education stakeholders responded to COVID-19-induced education system needs?
3. What innovative finance instruments are currently used in Commonwealth countries? How well do these work?

Table 9.1 Innovative financing mechanisms and relevant education issues

Mechanism	Description	When to consider it	Relevant education issues
Education bonds	Investment in a debt, whereby the investor receives a fixed return on the principal and interest of the underlying security, which can be secured based on any future revenue streams. Bonds can be issued by national governments as domestic bonds, or by multilateral financial institutions (MFIs) as thematic bonds.	<ul style="list-style-type: none"> - To generate future revenue streams. - When there is a relatively mature bond market. - When there is a need for upfront capital outlay. - For countries willing to raise bonds for education sector projects. 	Development of large infrastructure projects, such as school buildings, teacher education institutions, ICT equipment and connectivity.
Results-based financing (RBF)	At least part of the payment to a service provider by the results funder is contingent upon achievement of pre-determined results/outcomes. This is a departure from traditional funding arrangements that pay for inputs and activities. ⁷ Outcomes-based financing and loan buy downs are RBF instruments.	When incentivising service providers and allowing flexibility in the delivery of an intervention is likely to improve results.	Improving access to education and enhancing learning outcomes.
Outcomes-based financing	An RBF instrument where a principal (e.g. a multi- or bilateral donor foundation) transfers funds to the agent (e.g. to government, an NGO or a private organisation) in exchange for the delivery of specified outcomes. Outcomes-based financing instruments include social impact bonds (SIBs) and development impact bonds (DIBs).	When there is a clearly defined intervention with explicit outcomes.	All education issues with clearly defined outcomes.
Loan buy-down	When part or all the interest and/or the principal of a loan between a country and a lending organisation is reduced by a third party, in order to release the borrowing country from all or part of repayment obligations. Savings accrued from the buy-down can be invested in other development projects with agreed outcomes.	For countries that are unwilling to take out loans for education or are not creditworthy, provided that bought-down debt can be provided at grant or near-grant terms.	To increase access and improve learning outcomes in basic, upper secondary and tertiary education.
Risk financing	'Transfer of disaster or political risk to the market in the form of disaster insurance, catastrophe bonds or the catastrophe-deferred drawdown option'. ⁸	When there is a high risk of natural disasters in a country and there is an existing risk insurance facility set up to keep costs down.	Natural disaster post-recovery education interventions.

(Continued)

Table 9.1 Innovative financing mechanisms and relevant education issues (Continued)

Mechanism	Description	When to consider it	Relevant education issues
Global solidarity levies	Levies imposed on global economic activity to pay for global public goods, including education, health and security.	End-users or consumers are willing to pay 'a small tax on a high-volume product or service'.	Any issue.
Remittances	'Remittances for education amplified by government or donor incentives or by labelling as for education.' ⁹ For example, when government taxing of remittances is favourable, and it is specified that the tax will be directed towards education, this will increase remittances in countries with large diasporas.	Countries have a large volume of remittances, which is true for most low- and middle-income countries whose skilled workforce seeks employment in other countries.	Any issue.
Corporate levies	Taxes paid by corporates as part of doing business.	There is an enabling tax system and sectors are lobbied to make a social contribution.	Any issue, although skills for employment could be particularly attractive for corporates.
Debt swaps	Debt relief entailing forgiveness of debt by the creditor, conditional on the debtor committing specific funding for specific developmental projects.	When there is available debt for conversion or creditor(s) are prepared to cancel debt. Debt swaps would be critical for post-COVID-19 recovery efforts.	Any issue.
Diaspora bonds	A debt instrument that can raise finance from a country's citizens living abroad.	When countries have a large diaspora community and a relatively mature bond market and a revenue stream to repay the bondholder.	Provision of upper secondary, higher education and youth training.
Crowdfunding	When citizens contribute to a particular project, usually via an online platform.	For emergencies such as COVID-19, to raise relief funding. The educational need has to be presented in a way that appeals to potential funders.	Any issues, including education emergencies.
Public-private partnerships (PPPs)	A contract between a private party and a government entity to provide a public asset or service, in terms of which the private entity has responsibility for raising the funding and carries the risk and management of the delivery of the service or the goods. ¹⁰	When the government is willing to collaborate with the private sector and where there is private sector interest in working with government to achieve agreed developmental goals.	Any issues, but mostly infrastructure projects.

Sources: Bellinger et al. 2016; de Witt 2020; Instiglio 2018; World Bank 2020.

- 4 What are the constraints of these instruments?
- 5 How can innovative finance solutions be applied to education system needs during institutional closures and in the future?
- 6 What would be required to implement these recommendations?

The methodology chosen for this research study had both qualitative and quantitative components. The qualitative research component took the form of a desktop review which consulted guides and research reports on innovative financing, supplemented by interviews.

Most data reported here were provided by organisations with membership bases that enabled quick, reliable data collection, e.g., the Association for the Development of Education in Africa (ADEA), the African Union (AU) and the World Food Programme (WFP). Additional data were provided by desktop research; for example, data tracking institutional closures compiled by the Centre for Global Development (CGD) or drawn from the UN Educational, Scientific and Cultural Organization (UNESCO 2020b). Other situational data, mostly localised, were gathered through short spanned, real-time research.

Four interviews were conducted: three with education officials in India at the state level, while the fourth was with the United Kingdom (UK) director of Educate Girls (based in Rajasthan, India), the organisation that implemented the world's first education development impact bond (DIB). The interviews deepened our understanding of education impact bond implementation and provided insight regarding the impact of the COVID-19 pandemic on girls' education.

The quantitative research component comprised an online questionnaire survey, to determine perceptions of key challenges to African and Asian Commonwealth education systems posed by the COVID-19 pandemic, particularly about financing of the education system. Unfortunately, the online questionnaire survey had a low response rate of only 14 per cent. A total of ten responses were received from six of the 27 countries targeted: five in Africa (eSwatini, Ghana, Malawi, The Gambia and Zambia) and one country in Asia (Sri Lanka). Eight of the respondents were employed by ministries of education in their respective countries, one worked for a National Accreditation and Quality Assurance Authority, and one respondent was in the employ of a National Council for Tertiary Education. All respondents were senior managers in policy and planning, economics and budget analysis in their respective ministries or organisations. Seven respondents focused on post-secondary level, one concentrated on primary and secondary levels, and two respondents worked across all education levels.

Possible reasons for the low response rate included the inability to verify whether emails to officials of ministries of education had been delivered

or not; some officials may have been working remotely during the time the survey was sent and had no access to internet; and information shared with directors of education about the research may not have filtered down to officials, so they might not have been aware of the survey.

Given the low response rate for the online questionnaire survey, it was not possible to generalise trends about perceived challenges posed by COVID-19 to education systems in Commonwealth countries in Asia and Africa. The findings of the survey were supplemented by desktop review to paint a broader picture of the situation in Commonwealth countries in the two regions.

9.3.2 Findings

Why do we need innovative financing in the public education system?

The most significant effects of COVID-19 acknowledged by our research, were its social and economic impacts on education.

Social impact

Education Cannot Wait (2020a) documents challenges witnessed in some countries ravaged by conflict and asserts that ‘when a conflict or natural disaster erupts, education is generally the first service interrupted and the last resumed’, as government focuses on basic needs such as ‘food, water, shelter and protection’. This is likely to happen because countries are seldom prepared to provide education in emergencies: courses have to be developed where none existed previously, funds to implement remote learning need to be found where no budgets previously existed, etc. There is broad consensus that education systems were already fragile prior to COVID-19 (World Bank 2019). School closures will exacerbate this, since being out of school has halted learning for some children, led to loss of certain educational content, as well as poorer nutrition for children who access meals at schools. Finally, some children are likely to drop out of school, especially girls (World Bank 2020).

Based on insights drawn from the 2008 financial crisis and the 2014/15 Ebola epidemic, the Malala Fund (2020) estimates that about 20 million more secondary-school-aged girls could drop out of school following the pandemic. COVID-19 significantly threatens gains made with regard to girls’ education and reductions in unequal access to education by some already disadvantaged groups of children, including refugees, displaced children, children with disabilities and poor children (World Bank 2020; Education Cannot Wait 2020a). These threats were highlighted by an education official of the Rajasthan Department of Education (India):

The girl’s education is affected during school closures because of the following reasons:

- *Due to poverty, most do not have smartphones to connect for digital classes or they have internet problems. Where there is a smart phone, internet is costly. Further, more than one family member uses the same phone, so there is a lack of access to internet connectivity even if there are digital classes. Because of these challenges, in most of the schools and places, digital classes are happening on paper, not in reality.*
- *Since due to lockdown, most of the family members stay at home and there is an increase in the members of the family at home, all household chores are done by the girl child, which leaves very little time for her to do any school work. There is also lack of space for the girl child to study because of the increased number of family members at home. In the same home, the television is running continuously, and the child has no place to study (Interview with education official, 5 July 2020).*

The official also predicted the undoing of progress with regard to girls' education in the recovery phase after COVID 19:

COVID-19 has erased all the development or efforts made by international and local organisations to motivate the girl child to go to school and it has put a question mark on the future of the children, particularly the girl child. In the next three years, there will be more dropouts as more families are pushed into poverty, resulting in the child to leave studies and start working. The girl child is more vulnerable to drop out as both the father and mother have to leave for work, and the girl child has to look after the family and do the household chores (Interview with education official, 5 July 2020).

Education officials from Madhya Pradesh and Bihar concurred with the official from Rajasthan regarding the threat to girls' education in the recovery period. They highlighted that shutdown of the economy was likely to exacerbate poverty. Parents were likely to send only their sons back to school, while others were likely to marry off their daughters to male partners belonging to families which did not require dowries, in order to reduce the number of family members needing to be fed.

Concerns about the adverse effects of COVID-19 on girls' education were also highlighted in the CGD *Out of School Girls survey* report (Akmal et al. 2020), based on a survey of non-governmental organisations (NGOs), school operators and other service providers delivering vital education services in different regions. Seventy-one (71) per cent of the sample from both sub-Saharan Africa and from South Asia believed girls were more likely to be

negatively affected by COVID-19. Their concerns for girls included exposure to gender-based violence, a high risk of unpaid care work, early marriage and pregnancy, and dropping out of school.

Grave concerns have been expressed regarding COVID-19 disruptions of education being likely to further marginalise the already marginalised. UNICEF (2020) highlights that globally there are '31 million children who have been uprooted from their homes, including over 17 million internally displaced, 12.7 million refugees and 1.1 million asylum seekers'. Some of these children may never return to school as they are 'exposed to violence, trafficking, child labour, child marriage and recruitment by armed groups'.

An estimated 7 million basic education learners are likely to drop out of school because of loss of household income. If learning losses during school closures are not addressed when schools resume, students in this year's cohort are likely to lose approximately US\$16,000 in earnings (at current value) during their working lives because of less learning, time lost during closures and dropping out of education (Azevedo, et al. 2020).

Economic impact

Education will suffer multiple blows because of COVID-19, the most important of which are loss of investment in education for the current cohort of learners and students, and loss of revenue from the fiscal budget and elsewhere and from other sources. Regarding loss of investment, a World Bank report highlights that loss of learning during school closures, potential dropouts and their impact on the earnings of the current cohort equate to losses equivalent to 16 per cent of government investment in the current cohort of basic education learners. Proportionally, losses will be greater for low-income countries, which are expected to lose 'almost twice as much as upper middle-income countries and more than three times as much as high-income countries' (Azevedo et al. 2020).

Multiple problems are expected in relation to the drying up of revenue streams because of loss of income from work, from consumption and from tax collection. Loss of income will also affect payment of fees in countries where there is cost sharing between government and parents in financing education. While in most Commonwealth countries primary education is free, countries which expect parents to pay for secondary education include Botswana, Cameroon, Kenya, Lesotho, Namibia, Nigeria, South Africa and Uganda. These countries may experience revenue collection challenges following the COVID-19 pandemic. If concessions are granted, and fees are reduced or suspended, the quality of education could be negatively affected.

In most Commonwealth countries, lower consumer spending is likely to reduce the revenue of corporate companies, whose corporate social investment funding supports education projects in the form of grants to the non-profit sector and government, and as third-stream funding for higher education institutions. Job losses and industry strain owing to reduced revenue during a complete shutdown are likely to lead to contractions in revenue collection, which will adversely affect national budgets and consequently education budgets.

In its *World Economic Outlook*, the International Monetary Fund (2020) estimates that because of COVID-19, in 2020 the gross domestic product (GDP) of advanced economies will contract by 8 per cent. This will translate into a reduction in education aid of US\$2 billion by 2022, a downward trend that could last as long as six years. This is likely to affect official development assistance (ODA) to education, which, according to the UNESCO, has not been a donor priority, falling from 14.8 per cent in 2003 to 11.7 per cent in 2010, and 9.75 per cent in 2013. ODA has still not recovered to 2010 levels (UNESCO 2020a). The World Bank forecasts negative real growth in education spending per capita against a baseline of -0.5 per cent for South Asia and -4.2 per cent for sub-Saharan Africa (Al-Samarrai 2020).

Need for more funding and improved efficiency

Many of those working in the education and the development space share the view that changes are needed in the education system to enable recovery and strengthening of fragile systems that have been further weakened by COVID-19 (see, for example Lewin 2020; Al-Samarrai 2020; and Biswas et al. 2020). There is a broad consensus that post-COVID-19 recovery efforts should focus on 'build[ing] back better' (Winthrop 2020; Alba and Mathiasen 2020; Wilichowski et al. 2020; Giannini 2020; Save the Children, 2020), to ensure that education systems are strengthened sustainably so that they are able to withstand any future shocks. COVID-19 presents a global opportunity for education systems to assess efficiency and effectiveness gaps in their systems and to improve on these, so that future disruptions minimise losses to learning.

While additional funding is needed to meet Sustainable Development Goals (SDGs), further funding is required to address the reversal of progress made before COVID-19. Traditional funding sources such as the fiscal budget, ODA and private donors are likely to be overwhelmed over the next period. Other non-traditional sources of funding will be needed, including philanthropically oriented investors, foundations, impact investors and collaborative models of funding that reduce fragmentation and enable funding to be directed at systemic programmes where there is evidence of impact and delivery of such programmes to scale. Available funding needs to be utilised in a manner that increases effectiveness, efficiency and equity;

sources of funding will wish to pay for results. A variety of fit-for-purpose mechanisms and instruments will be required.

Education requirements during closure and after reopening of educational institutions

The specific needs of education systems during school closures were identified by desktop review and through the survey questionnaire. COVID-19 response plans² submitted to the African Union’s Human Resources, Science and Technology Department (AU-HRST) and other desktop research found that these requirements were not a donor priority.

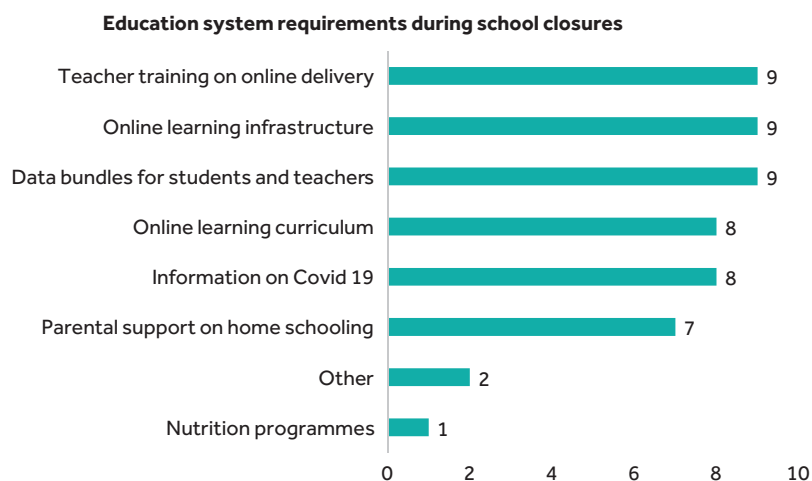
The survey found that online education provision and related enablers (such as teacher training, infrastructure, curriculum and data), as well as information on COVID-19, were the most cited requirement priorities across all education levels. Only the respondent from Malawi mentioned roll-out of nutrition programmes during school closures, which was surprising given the high levels of general food insecurity in most participating countries. The single respondent who cited nutrition schemes as a priority during closure can be compared with five respondents who saw nutrition as a priority following the reopening of educational institutions (see Figure 9.1).

According to the questionnaire results, once educational institutions reopened, requirement priorities would shift to both health and education (see Figure 9.2).

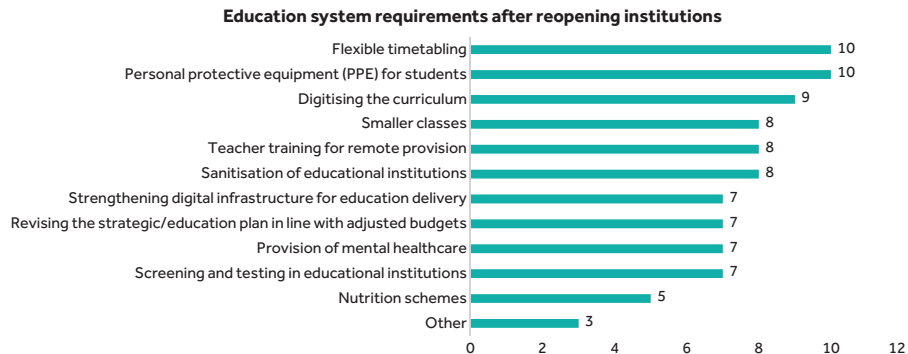
9.3.3 Responses to COVID-19

The COVID-19 pandemic has led to multiple responses by government and other education stakeholders, including the international community.

Figure 9.1 Education system requirements during school closures



Source: Survey responses; n = 10

Figure 9.2 Education system requirements after reopening institutions

Source: Survey responses; n = 10

Responses highlighted in this section were those that were perceived to have significant financial implications for public education systems during school closure and in the future.

Government response to COVID-19

Governments' responses to COVID-19 were multifaceted and included the development of policies on educational institution closure and delivery of remote education.

Based on our research from COVID-19 education response plans, Commonwealth countries adopted a range of strategies in their action plans to provide education to students at all levels during closure of educational institutions as a result of the COVID-19 pandemic.³ We found that eight countries (Kenya, Mauritius, Namibia, Nigeria, Rwanda, Seychelles, South Africa and Uganda) adopted virtual learning strategies to impart education at all levels, while The Gambia implemented virtual learning only in higher education. Five countries (Botswana, Mauritius, Nigeria, Rwanda and South Africa) planned for compensation for teaching time lost and to avoid loss of a full academic year. Teacher training was provided in Mauritius, Namibia, Nigeria, Rwanda and Sierra Leone to prepare teachers to teach online.

Sierra Leone adopted rapid assessments of children at school level, and peer support approaches in colleges at technical vocational education and training (TVET) level and in higher education at university level. South Africa provided a customised education plan to address different educational levels. Uganda purchased equipment to enable distance education such as radios, and distributed hardcopy materials to students, focused on education risk analysis and enhanced the capacity of all stakeholders in the education sector. Significantly, Rwanda's plan focused on increasing resilience of the education sector with regard to future shocks by planning for radio delivery of education as a permanent feature of education delivery going forward.

However, in the Rwandan plan, there appeared to be no provision for evaluation of the reach and effectiveness of radio lessons.

The World Food Programme (WFP 2020) estimates globally that 346 million children are deprived of meals because of school closure. In some cases, governments have taken special measures to ensure that during school closures, nutrition still reached children at home. South Africa and India both made home rations available. The COVID-19 education strategy in The Gambia included a budget of US\$1.59 million for distribution of meals to homes during school closures and following reopening of schools. Likewise, Kenya's plan provided for meal distribution to households. The Malawi plan envisaged take-home rations for orphans and child-headed households, while Pakistan's plan included a strategy to continue school feeding schemes for vulnerable learners. The plan in Sierra Leone specified that feeding schemes would continue through money transfers to beneficiaries.

In the COVID-19 education response plans for Maldives, Kenya, Malawi and Rwanda, it was clear that some or all of the funding needed to implement plans and strategies would be provided by government through budget reprioritisation. In the case of Maldives, some reprioritisation was made possible by non-utilisation of funds because of closures. It was remarkable too that Malawi's COVID-19 response plan reflected a budget of US\$10 million being readily available, with no funding gaps identified (Malawi Ministry of Health and Ministry of Disaster Management 2020).

Responses of local and international stakeholders

Bodies such as the European Union (EU), development banks, international organisations, development agencies, foundations, non-government organisations (NGOs) and local partners have played an important role supporting education in various countries during the first stages of the COVID-19 pandemic.

Various forms of information were provided by different organisations to inform strategic action to mitigate impact, and localised and targeted information to reduce the risk of infection in schools and ensure that psychosocial aspects were not ignored in COVID-19 responses. For example, data highlighting the financial implications of the pandemic has raised awareness about the strategic planning necessary to ensure that not all funding is diverted from education to health, despite health and safety being the highest priority. At the local level, Education Cannot Wait (ECW) has increased dissemination of information to students, teachers and parents regarding the virus and how to prevent infection, augmented by upgrading of water, sanitation and hygiene (WASH) facilities and development of disinfection protocols before schools reopen (ECW 2020b).

A key development in the COVID-19 pandemic was the rapid mobilisation and disbursement of funds by development banks, NGOs, local and international donors, development agencies and financiers to assist countries implement response plans. A major source of funding was the Global Partnership for Education (GPE), which quickly mobilised more than US\$500 million to assist partner countries to implement response plans. Of the 45 grants to the value of US\$415 million disbursed by GPE by 23 July 2020, US\$178.38 million went to 14 Commonwealth countries (see Table 9.3).

The World Bank and UNICEF are the main sources of funding; the focus is on addressing the immediate priorities in response plans and is insufficient to fund long-term recovery interventions.

9.3.4 Financing the public education system: current and future outlook

There is general agreement that education funding was already stretched prior to the COVID-19 pandemic, with an estimated annual funding gap of US\$148 billion in low- and middle-income countries if Sustainable Development Goal 4 (SDG 4) about quality education, was to be attained (UN 2020). It is estimated that the financing gap will increase by a third because of COVID-19. Save the Children estimates an education financing gap of US\$77 billion in low- and middle-income countries over the next two years because of COVID-19 (Save the Children, 2020).

Education funding before COVID-19

The Global Education Monitoring Report of 2019 (UNESCO 2019) highlights that government funding accounts for the largest proportion of current education financing across all income groups (see Figure 9.3).

The data in Figure 9.3 agrees with survey respondent data: most respondents (7) to the questionnaire survey rated government funding to be 'very significant' or 'extremely significant'.

Both historical and current finance data show limited funding of pre-primary education across all countries, particularly low- and lower middle-income countries globally, which tend to invest more in the primary education sector. This seems counterintuitive, as lack of school readiness when children begin primary education leads to educational inefficiencies (Figure 9.4).

Furthermore, there are huge disparities between low-, middle- and high-income countries in terms of public expenditure, and in most countries, there is inefficiency in spending. The World Bank (see Rogers et al. 2020) estimates that about a third of education spending is inefficient, including because of poor quality inputs such as inadequate textbooks, poor teacher

Table 9.2 Emergency funding disbursed by the GPE to selected Commonwealth countries (Source: GPE 2020)

Country	Amount (in US\$ millions)	Grant agent
Bangladesh	15.00	World Bank
Cameroon	11.00	UNESCO
The Gambia	3.50	World Bank
Ghana	15.00	World Bank
Kenya	11.00	World Bank
Lesotho	3.47	UNICEF
Malawi	10.00	UNICEF
Maldives	0.75	UNICEF
Mozambique	15.00	UNICEF
Nigeria	15.00	UNICEF
Pakistan	20.00	World Bank
Rwanda	10.00	World Bank
Sierra Leone	7.00	World Bank
Tanzania	16.66	Swedish International Development Agency (SIDA) and UNICEF
Uganda	15.00	World Bank
Zambia	10.00	UNICEF
TOTAL	178.38	

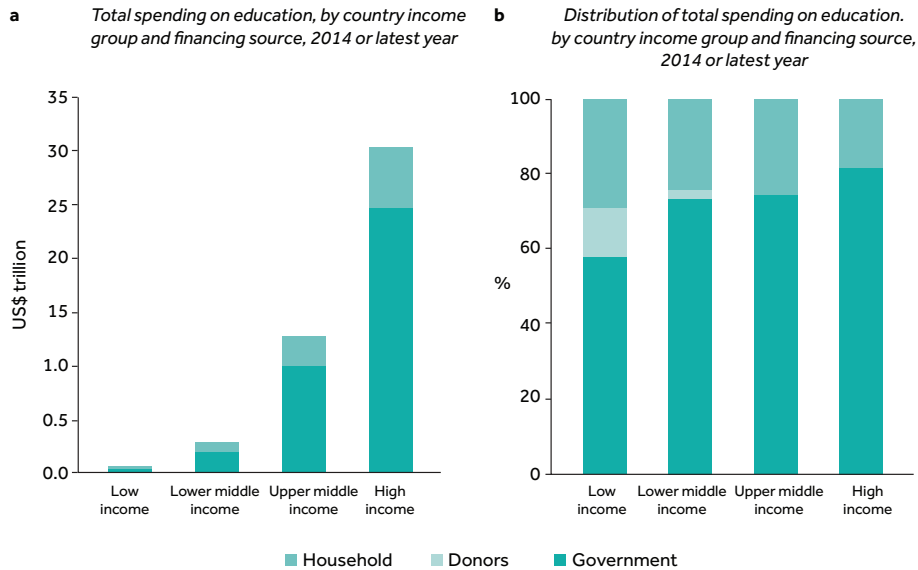
Source: GPE, tracker updated 23 July 2020.

content knowledge and absenteeism, high levels of teaching repetition, and large numbers of learners dropping out. Thus, ensuring more efficient management of existing and new resources is imperative if education systems are to be strengthened with reduced financial resources owing to economic contraction due to the pandemic.

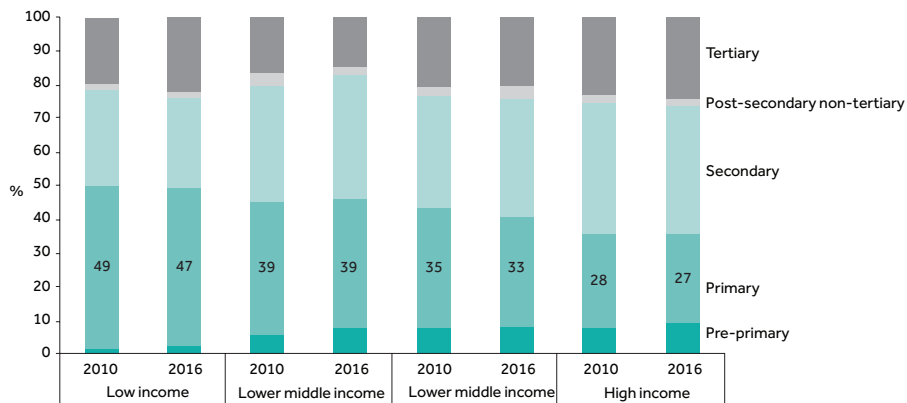
Innovative financing mechanisms offer the possibility of both exploring new revenue sources and improving efficiencies in the public education system. There is a real opportunity to strengthen innovations introduced in response to the pandemic, if there is evidence that they work, to build sustainable and resilient education systems (United Nations 2020; Rogers et al. 2020).

Funding during and after COVID-19

In emergencies such as the COVID-19 pandemic, Education Cannot Wait (ECW) (2020b) points to key challenges. These include the failure to prioritise education in relief and humanitarian efforts, poor co-ordination of planning and financing efforts in various humanitarian models, and

Figure 9.3 Distribution of funding sources by country income level**Governments account for four out of five dollars spent on education**

Source: UNESCO 2018, 236.

Figure 9.4 Proportion of education funding by educational level and country income group

Source: UNESCO 2018, 238.

insufficient funding (with as little as 2–4 per cent of humanitarian aid since 2010 dedicated to education), creating a US\$8.5 billion annual gap. In addition, lack of real-time data makes it difficult to determine priorities and needs. ECW was established to help address such challenges. By 22 July 2020, ECW had approved US\$43.5 million specifically for refugee, internally displaced and host community children and youth, with funds to be utilised in partnership with national governments, civil society organisations and UN

agencies. The Commonwealth countries benefitting from this initiative are Bangladesh, Kenya, Tanzania and Zambia (ECW 2020).

Some countries' COVID-19 response plans explicitly specified that COVID-19 would have a negative economic impact. For example, the Maldives Education Response Plan highlights that planned and approved infrastructure programmes already in place were suspended with the onset of COVID-19 (including projects at 55 schools which lacked basic infrastructure such as water and sanitation), given prioritisation of health and safety. Suspension of capital projects impacts the most vulnerable; for example, teacher training for effective support of children with severe disabilities has been suspended.⁴ The Maldives Education Recovery Budget is costed at US\$22.91 million, with 58 per cent of the budget (US\$13.4 million) allocated to two capital projects to reduce overcrowding in classrooms. At the time of writing, the recovery plan had not yet allocated funds for this purpose, highlighting that in addition to reprioritisation of domestic education budgets, further financial resources were required (Ministry of Education Maldives 2020).

The Maldives plan does not specify possible sources of additional funding. This is also true of the Response Plan for The Gambia. The Kenyan budget for COVID-19 response plan, at the time of writing, notes that the Ministry of Education will provide most of the funding for planned activities, yet there is nevertheless a funding gap of US\$9.204 million. What is clear from the plans with budgets is that education ministries have taken on some responsibility for funding health and safety, which was not the case before COVID-19.

Budget adjustments and reprioritisation have already taken place in some countries. For example, in South Africa the education infrastructure budget was reprioritised to fund COVID-19-related expenditure, including health-related expenditure and catch-up programmes in basic and higher education and training. The basic education budget has been reduced by 2 billion South African Rand (about 100 million Pound Sterling) and the higher education budget was cut by 9.8 billion South African Rand (National Treasury 2020). The Maldives COVID-19 response plan highlights that reprioritisation of funds and reallocation for health-related needs are likely to result in education budget cuts over the next two years.

Disruption to economies and the recession that is likely to follow, as well as greater budgetary demands from the health sector, will have far-reaching and long-term effects on education budgets in most countries. These budgets were already experiencing strain following the economic recession of 2008. Different ways of raising additional funding and efficient use of available funds will be needed to rebuild and recover, and to build sustainably stronger education systems.

Some innovative financing mechanisms were already in use in some of the countries surveyed. In response to the questionnaire survey, eight of ten respondents replied that they believed their governments utilised innovative financing in education.

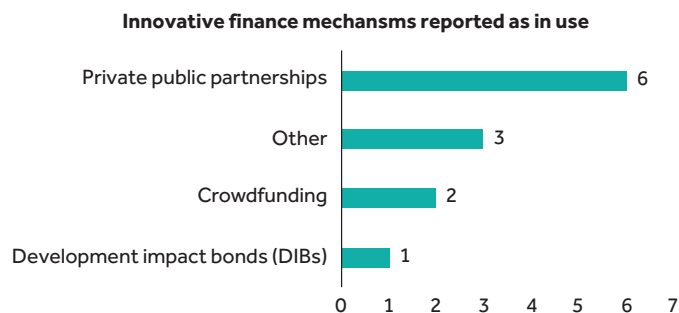
The most common innovative finance mechanism reported was private-public partnerships (PPPs), which respondents said was utilised in Zambia, eSwatini, Sri Lanka and The Gambia. The next most popular mechanism was crowdfunding, reported by a single respondent in Malawi and another in Sri Lanka. eSwatini had a disaster management trust fund which fundraised from partners, philanthropists, businesses and NGOs. A single respondent (from Malawi) reported the use of results-based financing (RBF). The RBF mechanism was described as a development impact bond (DIB) involving student accommodation in higher education.

Figure 9.5 highlights innovative financing mechanisms which questionnaire survey respondents believed were utilised by their five respective countries (note that data was not available for the 22 other Commonwealth countries in the study, and from which no questionnaire survey responses were received).

Nine respondents (all except for the respondent from The Gambia) highlighted multiple reasons for adopting innovative financing. While six cited improving outcomes as a motivation, the mechanisms they mentioned (PPPs and crowdfunding) are better suited for raising additional revenue from non-traditional sources than for results-based funding (that is, improving educational outcomes). Securing additional funding for education does not necessarily equate to improvement in educational outcomes. Other reasons cited were to promote development and to be better prepared for disasters that impacted education.

Considering education finance in response to COVID-19, Albright (2020) proposes three possible solutions: safeguarding education spending; innovating to close financing gaps; and transforming education to increase

Figure 9.5 Innovative financing instruments reported to be in use



Source: Questionnaire survey data; N=8.

efficiency, effectiveness and innovation. The following section focuses on funding to close financing gaps, while increasing efficiency, effectiveness and innovation will be addressed in the section on RBF.

9.3.5 Innovation to close financing gaps

As indicated earlier, governments are likely to remain the core source of funding despite being under strain, with likely reduced contributions to government revenues from households and ODA. Albright (2020) believes while commendable relief measures have been implemented, including delayed debt servicing on bilateral loans by the G20 for eligible countries, and offsetting of repayment costs for 25 vulnerable countries until December 2020, more should be done to provide ‘fiscal space for countries to invest in education’ including ‘relieving, postponing and restructuring debt for low- and lower-middle income countries’ (Albright 2020).

Albright (2020) and de Witt (2020) suggest that innovative finance instruments have the potential to catalyse new education finance. Looking to the future, traction could be gained on innovative financing instruments through initiatives established to mobilise new sources of funding to support education development that can benefit low- and middle-income Commonwealth countries. These include the following:

- The Global Platform for Education Finance, focused on ‘matching sustainable financing with needs, improving equity, efficiency and financial management, strengthening accountability with better data and monitoring and building capacity and knowledge’. This platform will prioritise supporting the greatest funding needs in basic education in low- and middle-income countries (World Bank 2019).
- The GPE Multiplier, targeted at low- and middle-income countries, is a US\$300 million innovative finance window set up in June 2017 and scaled in June 2018 that enables eligible countries to mobilise a minimum of US\$3 in new and additional external funding for every US\$1 from the Multiplier. This can facilitate as much as US\$25 million in additional funding from GPE (GPE undated). Two Commonwealth countries in the current study – Ghana and Tanzania – have already received Multiplier grants, while Cameroon, The Gambia, Maldives and Zambia have had expressions of interest in accessing the Multiplier approved.⁵
- The International Financing Facility for Education (IFFEd) is a new and innovative financing mechanism intending to mobilise a minimum of US\$10 billion to help achieve SDG 4. This funding will enable donors to meet the needs of lower middle-income countries

(LMICs), without compromising their allocations to low-income countries. IFFEd uses grants and guarantees to multilateral development banks (MDBs) to offset non-payment by borrowers, or provides grants to MDBs to lower the cost of finance packages to enable more affordable borrowing by LMICs, conditional on the existence of a national education plan, a commitment to improving education access for marginalised children to 'leave no one behind', a commitment to increase domestic education budgets to meet international standards, capacity to sustain additional MDB debt, and integration of results-based approaches to achieve national targets in line with the Paris Declaration on Aid Effectiveness (The Education Commission 2020).

In 2018, a feasibility study was conducted regarding the establishment of the African Education Fund, an innovative financing facility to be hosted by the African Development Bank, to raise funds from a variety of non-traditional sources of education financing, including:

member subscriptions, inclusion in an enhanced AfDB funding cycle, more efficient collection of existing taxes, corporate tax reform, philanthropy, greater use of levies and taxes on natural resources, mobilization of Africa's private capital in pension funds and elsewhere, and sequestration of proceeds of crime and tax evasion (African Development Bank, 2018).

The proposed facility was intended to complement existing funding sources, provide affordable financing and address particularly the need of low-income countries for funding. At the time of writing, it was unclear whether progress had been made regarding the establishment of the facility since the 2019 publication of the terms of reference to appoint a co-ordinator for its planning, development and launch (African Development Bank 2019). Given the huge funding gap to achieve the education SDGs and the impact of COVID-19 on African education systems, such a facility would add value.

Six of the ten survey respondents agreed that innovative financing solutions could be applied to address educational needs during and after the COVID-19 pandemic. However, the same number cited challenges mitigating effective utilisation of mechanisms, including technical expertise, while availability of financial resources was mentioned by four respondents. Contracts or memoranda of understanding (MoU) for PPPs were seen as a particular challenge. One comment was that few private sector companies were prepared to invest in big projects. In addition, it was said that using the build, operate and transfer (BOT) model used to finance large projects, especially infrastructure projects, were costly, and required heavy subsidies from government.

Technical expertise is critical to the uptake of innovative financing mechanisms, especially given de Witt's observation that government has little

internal capacity to evaluate or capitalise on innovative financing models that have been introduced in-country or which are best practice elsewhere. She recommends the establishment of an education-focused innovative finance unit at government level that can:

... evaluate and support the development of innovative financing mechanisms and market-based solutions to education gaps. The hub would also serve as a knowledge hub which would function to reduce transaction costs by making available template and exemplar contracts, data on market activity, peer learning groups, etc. (de Witt, 2020: 27).

9.3.6 RBF mechanisms and global uptake

The fact that RBF has been utilised in different sectors and that there have been some early adopters in education give impetus to recommendations to employ RBF to address key identified needs for funding in the public education system. Lessons can be learned from projects implemented in education and other sectors regarding risks that need to be mitigated in implementation of interventions that use RBF.

According to the Brookings Institution, on 1 August 2020 there were 194 global impact bonds, a form of RBF. Some 183 impact bonds were social impact bonds (SIBs) and 11 were development impact bonds (DIBs). Most of the bonds were in employment and social welfare (63 bonds each), with only 22 in education (see Figure 9.6).

The GPBRA database (accessed on 20 July 2020) documented 349 RBF projects globally across a range of sectors. Some 137 of these projects were situated in 18 of the 27 Commonwealth countries which were the focus of the study, as reflected in Figure 9.7, with India having the greatest number of projects (top bar).

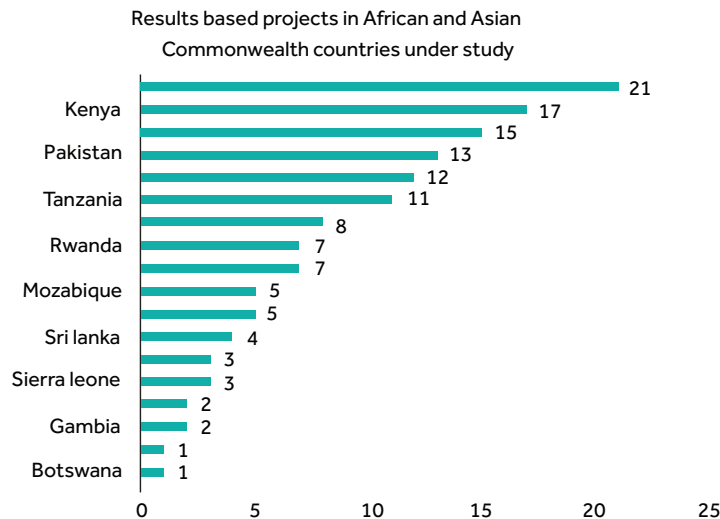
The sector with the highest number of projects was the health sector, although education had the second largest number of projects, as shown in Table 9.3.

Figure 9.6 Impact bonds by sector



Source: Brookings Institute July 2020.

Figure 9.7 Results-based projects in Commonwealth countries under study



Source: Global Partnership for Results Based Approaches (GPRBA) database July 2020.

9.4 Discussion and recommendations

The research in this chapter has highlighted the following issues in public education systems in the Commonwealth countries studied. These are likely to be problems within the next five years and beyond:

- additional funding owing to system budget cuts will also affect educational budgets;
- non-traditional education system requirements, such as personal protective equipment (PPE) and sanitising resources, are key necessities in the near and intermediate future;
- re-enrolment of marginalised learners is of great importance, particularly girls and marginalised groups such as refugees and disabled learners at highest risk of dropping out;
- nutrition programmes are likely to be in high demand because of some households' loss of income during the recession;
- tuition-free higher education and free basic education are essential, as school fees and tuition payments by parents and other caregivers may be unreliable and inconsistent owing to lower incomes, leading to reduced education revenues;
- further investment is warranted in educational technologies capable of delivering education remotely, to augment existing investment in such technology; and
- educational outcomes need to improve.

Table 9.3 Distribution of RBF projects in Commonwealth countries in the study by sector

Countries	Health	Education	Energy and extractives	Water and sanitation	Public administration	Social support	Agriculture	Multisector	Transportation	No. of RBF projects
Botswana	1									1
Malawi		1								1
Gambia	2									2
South Africa	1	1								2
Sierra Leone	1	1			1					3
Zambia	2		1							3
Sri Lanka	1	3								4
Cameroon	4			1						5
Mozambique	2	1	1					1		5
Nigeria	5	2								7
Rwanda	3	2			1		1			7
Ghana	3		1	2	2					8
Tanzania	3	4	1	1	2					11
Uganda	3		1	2	2		2		2	12
Pakistan	4	2	1		2	2	1	1		13
Bangladesh	1	6	3	1	4					15
Kenya	4	3	3	2	4	1				17
India	5	7	2	4	3					21
Total	45	33	13	14	21	3	4	2	2	137

Source: GPRBA database July 2020.

These issues are discussed below in relation to the RBF instruments best suited to address them.

9.4.1 Performance-based aid

To meet the need for more funding in the period ahead, performance-based aid (PBA) could be used to incentivise governments by paying for achieved results through grants, loans or debt buy-down. PBA financed through a grant is cash on delivery, comprising a fixed payment to government for each unit of progress achieved in service of an agreed outcome. A performance-based loan (PBL) is financed by a loan, and in terms of which tranches of the loan are disbursed to government upon attainment of agreed results. The World Bank's Programme for Results (PforR) is an example of a PBL. As Figure 9.8 shows, a debt buy-down involves a funder paying off a portion of the government's outstanding loan if mutually agreed results are achieved.

The results contingent on payment should be verified by an independent evaluator (Instiglio 2018). Additional funding received through PBA may be utilised for provision of services outside the usual domain of education expenditure, such as PPE and expansion of nutrition programmes, and increased investment in educational technologies.

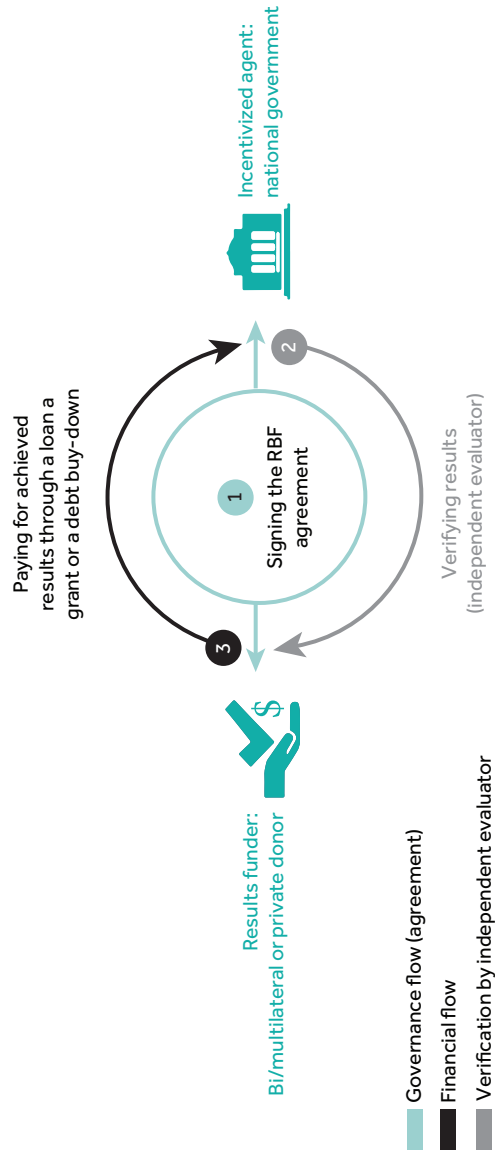
9.4.2 Impact bonds

An impact bond (IB) can be used to get learners back to school, as well as to improve learning outcomes. An intervention to improve information and communications technologies in schools could also be linked to improving education outcomes. In the case of an IB, the investor (e.g. a private investor, a foundation or a philanthropic body) carries the financial risk, as payment is determined by the results secured by the service provider. Results are pre-determined and contracts are flexible, in order to allow the service provider to innovate to achieve or exceed the agreed outcomes, which are also impartially verified by an independent evaluator (see Figure 9.9).

Incentivising for results enables ongoing monitoring during implementation and allows for corrective action to be taken to achieve even better results. For example, the DIB implemented by Educate Girls, the service provider, where both enrolment and learning achievement targets were exceeded (Instiglio 2018; interview with Educate Girls Director, June 2020).

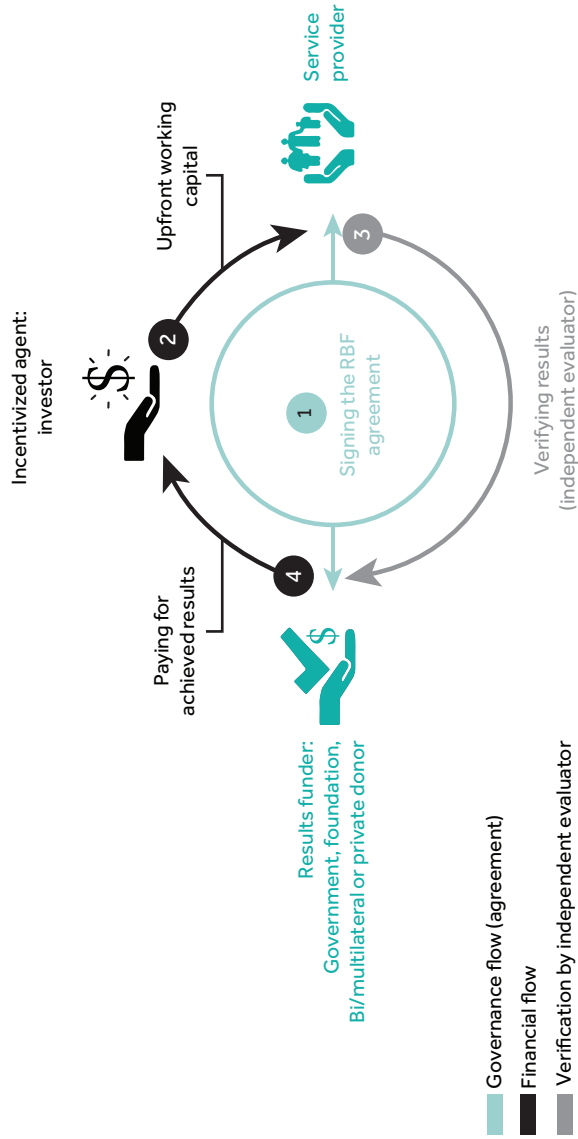
The Education Outcomes Fund for Africa and the Middle East (EOF) focuses on promoting and providing technical assistance to countries on the use of outcomes-based contracting to improve education outcomes and to strengthen national education systems. It works with governments, outcome funders, investors and service providers to achieve results. EOF will initially collaborate with Ghana and Sierra Leone, and it also has an interest in South

Figure 9.8 Structure of performance-based aid



Source: Instiglio 2018.

Figure 9.9 Structure of an impact bond



Source: Instiglio 2018.

Africa and Liberia (de Witt 2020). Commonwealth countries could utilise the skills and expertise of EOF to design interventions to improve outcomes.

An impact bond, where the government pays for at least some of the results, is a social impact bond (SIB). Its structure resembles the impact bond structure (Figure 9.9). The UK Director of Educate Girls expressed concern that government had not taken up the financing of impact bonds. She explained that a DIB should be proof of concept for government adoption of RBF through a SIB. She elaborated:

[One] of the challenges is that national governments are not yet involved. Yes, we have memoranda of understanding in order to operate but we have to see the active role of government as outcome payers, which is the role they really should be playing. And so we feel the development impact bond should be only a demonstration contract to SIB being introduced. Essentially, we see the strength of this financing tool [DIB] as a way of engaging the government as outcomes funders. Ideally for us, we would only get involved in another contract if we have the Indian government working as even just a part of outcomes payer. So DIB is kind of a journey for SIB, and that's how we feel you should kind of frame them moving forward (Interview, 30 June 2020).

Whereas impact bonds incentivise organisations, households could also be incentivised in the re-enrolment campaign to get children back to school following school closures. Conditional cash transfer (CCT) is an RBF instrument to incentivise households. It provides cash to eligible people when they achieve defined results, such as enrolling their children in school (Instiglio 2018) or improved school attendance. CCTs have been implemented for more than 25 years. Evaluations of CCTs in Brazil, Malawi, Colombia and other countries have shown that they can have a positive impact on re-enrolment, learner progression, labour outcomes and health status (Lee and Medina 2019).

9.4.3 Whether or not to use RBF instruments

Although there is evidence that RBF instruments have achieved impact regarding certain issues in some contexts, not all RBF instruments are suitable in all cases. Instiglio (2018) proposes an assessment of the suitability of RBF using four drivers of impact i.e., the distinct ways in which RBF can drive greater effectiveness. These drivers are:

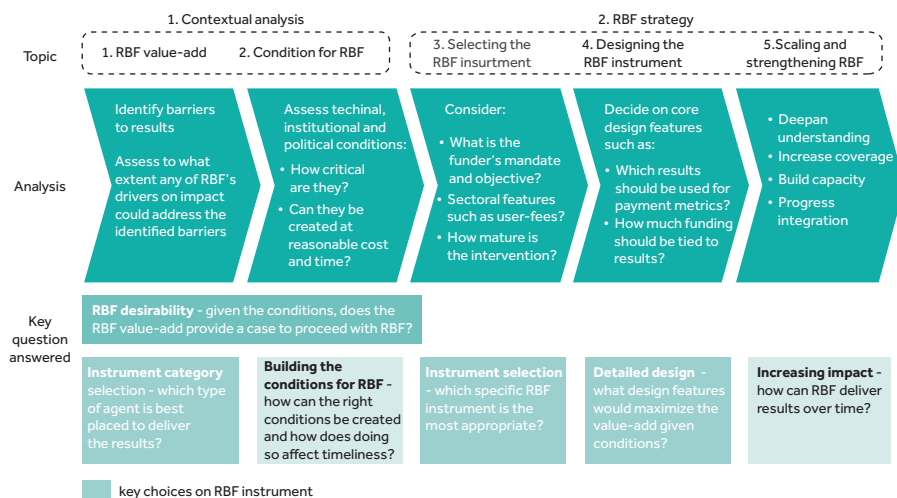
1. paying for results for what matters to stakeholders;
2. prioritising outcomes that improve the welfare of beneficiaries;
3. assessing whether intervention activities are able to be implemented in flexible ways so that the service provider can achieve better impact; and
4. enhancing the accountability of investors to beneficiaries.

Ideally, funders should assess the suitability of RBF by identifying impediments to achievement of results using a value chain analysis, to help evaluate whether they can be addressed through any of the four RBF drivers. Such an analysis may reveal that RBF is not the mechanism best suited to overcome barriers. However, if the decision is made that RBF is the most suitable mechanism to address such challenges, then work on design should follow. This could lead to the scaling up of an existing intervention or testing a new intervention through pilot implementation to decide whether scalability is possible. Other issues to resolve regarding the suitability of RBF include:

- the best-placed agent for implementation;
- what enabling conditions should be created to enhance success;
- what measuring instruments are most suitable;
- what design features would maximise value; and
- how RBF results could be sustained (see Figure 9.10).

Given a well-established approach that involves paying for services by remunerating for activities without changing the system, particularly in the early school grades, capacity-building regarding RBF instruments and change management will be necessary processes, since there may be resistance to an approach which demands that government officials demonstrate accountability. It would be useful for governments to establish technical assistance units within their structures, to provide support to RBF interventions as they are piloted.

Figure 9.10 RBF diagnostic tool framework



Source: Instiglio 2018.

9.4.4 Addressing criticisms of results-based financing

There has been opposition to RBF instruments from some quarters. The most common criticisms are as follows:

- DIBs avoid dealing with local and national authorities, which is tantamount to international governance and the promotion of a private sector focus on short-term actions and targeted populations (Alenda-Demoutiez 2019).
- SIBs lead to the extraction of private profit from public services. The private sector views individuals through a deficit lens, as in need of being ‘fixed’, with narrow or short-term metrics of what success might look like. Furthermore, the private sector is perceived as capable of amassing large amounts of data – which could be used to enable predictive profiling of targeted communities. Finally, SIBs may mute community voices from participating in governance of public services and involve relinquishment of community control (Carnoy and Marachi 2020).
- The levels of innovation in SIBs and DIBs are exaggerated since private investors fund projects that have been proved to work, minimising risks. Whitefield (2015) argues that the organisational structure of SIBs is more innovative than the services which they deliver and the methods that they use to achieve outcomes. Glacomantonio (2018) suggests that SIBs are cumbersome, that they may have high transaction costs, and that there is an absence of evidence that when SIBs succeed, they achieve better outcomes than other financing models.

Regarding criticism that involves the alleged commodification of the public sector, it is important to note that governments spend on projects which fail to achieve improved outcomes. It is also true that investors enter the public space to achieve both social impact and profit, and to provide technical assistance, in efforts to improve learning outcomes. Investors take a risk when they enter into RBF arrangements. The only alternative might be continued use of public funds for the implementation of highly localised projects, which provide no evidence of their efficacy and show minimal gains in terms of academic achievement or reduction in inequality. Investors’ focus on interventions that have proved effective is really a strength and not a weakness.

Given the fact that metrics may be narrowly defined and that interventions may occur for a limited time, organisations which promote RBF instruments, such as EOF and Government Labs (Golab website), emphasise that metrics in implementation of outcomes-based contracts should be checked, so as to reduce the risk of perverse incentives and ensure that selection of beneficiaries is not confined to those who will inevitably

smooth the way to outcomes being attained. Furthermore, RBF is based on long-term – not short-term – assessment of outcomes. The strong focus on outcomes and evaluation, which such contracts reflect, is a strength, as this ensures that future governments will invest only in projects which enhance outcomes. Starting with a DIB before a SIB provides an opportunity to pilot new interventions at low cost before funds are unnecessarily wasted on scalability.

In relation to exclusion of government, SIBs are designed with the intention that government pays in full or partly for outcomes. Outcomes-based contracts (OBCs) promote accountability by supporting governments and service providers to use data for evidence-based decision making.

Regarding claims of a lack of evidence that SIBs are more effective than other types of mechanisms, the key issue is that SIBs should be judged principally in terms of the limited fundraising potential of government and inefficiencies in the use of available resources, double pressures that SIBs address. Any other mechanisms that can catalyse increased funding and promote efficiencies would be supported by governments with limited financial resources, provided that they are able to produce sustainable and scalable solutions.

Concerning the alleged high transactional costs of DIBs and SIBs, this is a reality stemming from the fact that data systems are weak and primary data are needed to determine baselines and outcome metrics. Further, as interventions are implemented using RBF, they will remain localised until such a time as enough evidence has been built to have universally agreed outcomes. A director of Educate Girls highlighted this in the interview:

One of the problems at the moment is that these contracts [DIB] are going to remain relatively bespoke until we're looking at aligning with globally agreed outcomes, measures and targets. So, you know, say we were to make a concerted effort to align with the SDG 4, for example, then we might start to see more value for money and more effective contracts. And if some much larger funding was coming from the government towards the same outcomes, then we would start to see scale. Then I think we would start to see the efficiencies which would enable these funding mechanisms to become more mainstream (Interview, 30 June 2020).

The pooling of funding from current and new sources for larger contracts can lower transaction costs as a percentage of funds deployed. Standardised rate cards can be established with uptake of RBF instruments, to avoid lengthy negotiations with all parties to the contracts. In so doing, pricing of outcomes will adequately build in programme delivery, currency and political risks carried by investors (EOF 2018).

9.5 Conclusion

This chapter has highlighted shocks to the education system caused by COVID-19, which have had to be absorbed by a range of disparate and unequal education systems globally. Financial shocks are likely to have a differentiated effect on different countries, with the most severe impacts reserved for low- and middle-income countries, including Commonwealth African and Asian countries. Although the global community rallied quickly and mobilised emergency funding to meet the urgent needs of education systems worldwide, enabling teachers, administrators and colleagues to continue providing education and associated forms of support, these forms of funding can only meet short-term needs. They are unable to deliver on long-term requirements for recovery and strengthening of weak education systems. The needs of education systems have also expanded beyond their traditional form to embrace various aspects of health and psychosocial support.

Changes to educational systems in low- and middle-income countries will likely need to address heightened calls for free basic education and tuition-free forms of higher education, a growing demand for learner nutrition programmes, a need for catch-up programmes to redress loss of learning opportunities, strengthening of remote modes of teaching to cater for out-of-school children who fail to return to school, and re-enrolment of the most vulnerable groups, especially girls.

Agile financing is needed to satisfy short-term requirements, while educational institutions remain closed. This has been made available mostly by governments, albeit with assistance offered by development partners.

Long-term financing is necessary to augment shrinking conventional sources of funding. This research has highlighted possibilities for accessing funds through a diverse range of innovative financing mechanisms. In particular, the chapter authors recommend trying out RBF instruments, to enable assessment of their capacity to raise additional capital, while simultaneously enhancing the effectiveness and efficiency of education systems through a clear focus on well-defined outcomes. Not all challenges in education will necessarily benefit from application of RBF; lucid diagnosis will be necessary to determine whether RBF offers optimal value and fully addresses identified challenges. Given that this describes an emerging trend in terms of appraisal, implementation, and monitoring and evaluation, governments will require fully committed support and technical assistance, together with mentoring regarding change management, to enable a transition to new interventions using RBF instruments.

Education RBF projects, which were initiated as early as 1993, are mostly classified in the GPRBA database as other performance-based contracts.⁶

Of the 194 bonds recorded in the Brookings Institution database, 10 were in Commonwealth countries in this study: three in India, two each in South Africa and Cameroon, and one each in Kenya, Uganda and Nigeria. Only three bonds were in education (Brookings Institution 2020).

What was noteworthy in both the GPRBA and Brookings Institution databases was the absence of social impact bonds (SIBs), in which government funds at least some of the results, as opposed to DIBs, where the results funder may be a donor or another funder (Instiglio 2018).

Notes

1. See de Witt (2020); Bellinger et al. (2016) for an assessment of mechanisms that are not in Table 9.1.
2. Not all AU member countries.
3. Countries not listed here may nevertheless have plans which could not be easily accessed using desktop research.
4. Ironically, the cost of water provision has been a key driver of healthcare costs during COVID-19.
5. See GPE Multiplier, available at: <https://www.globalpartnership.org/funding/gpe-multiplier>
6. Unfortunately, the database does not define what other performance-based contracts are.
7. Instiglio (2018), *A guide for effective results-based financing strategies*, available at: <https://www.gprba.org/knowledge/publications/guide-effective-results-based-strategies>
8. Bellinger et al. (2016).
9. Bellinger et al. (2016).
10. World Bank, available at: <https://openknowledge.worldbank.org/handle/10986/29052>. (accessed 5 July 2020).

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Section IV

Adaptation and Well-being
in Challenging Times
and Environments

Chapter 10

The Role of Adaptive Leadership in Non-State Education Organisations' Response to COVID-19

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10.1 Background and context

According to UNESCO, school closures have impacted 63 million teachers and 1.3 billion students globally, including 700 million in developing countries. With many states facing prolonged school closures, and uncertainty surrounding public health guidelines once schools reopen, many non-state actors in education (civil society and non-profits) have been forced to adjust their priorities, programming and future plans. The organisations that achieved positive results in this respect, have adopted principles and practices of adaptive leadership.

'Adaptive leadership' is a practical leadership framework that helps individuals and organizations adapt and thrive in challenging environments. It is being able, both individually and collectively, to take on the gradual but meaningful process of change'. (Cambridge Leadership Associates)

The study design for this chapter was framed within the field of adaptive leadership and addressed the following research questions:

- What are the emerging insights and opportunities from this period?
- How can non-state actors in education leverage adaptive leadership principles and practices to position themselves to brace for the mid- to long-term impact of the pandemic?

Leadership is the ability to form and guide a group of people towards the achievement of common vision or set of goals (Robbins and Judge 2008). Human life has always gone hand in hand with leadership to organise, to codify ways of living together, to solve problems, to extend their limits, to conquer and subdue their environment (Charan et al. 2001). Many leadership

models and practices have therefore emerged with time, from theocratic, autocratic, paternalistic, democratic and collegial, to situational or adaptive leadership.

Perception of leadership nowadays is much different from that in past years. The idea where one heroic individual single-handedly generates results by enforcing their will is considered outdated. Leadership is now considered to be a 'team sport'. Company managers and other people in leadership positions now work together with their employees to accomplish goals and initiate change. Yet, considering how volatile and uncertain the corporate world can be, executives often find it difficult to keep abreast of all the changes. To survive and thrive in the business world, one needs to be more than high performing. Corporate leaders need to adopt new strategies and techniques to overcome any challenges that stand in their way. This is where adaptive leadership comes in.

10.1.1 Definition of adaptive leadership

Adaptive leadership is the practice of mobilising people to tackle challenges and thrive (Heifetz et al. 2009); it is the act of mobilising a group of individuals to handle tough challenges and emerge triumphant in the end (Heifetz and Linsky 2002). Adaptive leadership is also a leadership model which helps organisations to adapt to new or existing realities (Jamison 2006). It involves changing behaviour in appropriate ways as the situation evolves. Adaptive leadership is based on the premise that leadership is more of a process rather than a personal capability (Heifetz et al. 2004). Hence, adaptive leadership requires learning new ways to interpret what occurs around individuals, in both a personal and organisational context, and incorporating new ways to carry out work (Heifetz et al. 2009).

Through adaptive leadership, leaders and followers focus on the specific problems at hand and work collectively to fine-tune the process of finding a solution. This can be accomplished by revising the way in which the problem is approached and handled. Moreover, this type of leadership approach should lure all parties involved to work towards a common solution through creative thinking, and identification of rewards, opportunities and any challenges that may surface. Hence, the adaptive leadership model explores three key activities: examining events and patterns surrounding individuals in both a personal and organisational context; translating what individuals are observing by developing numerous theories about what is taking place; and creating interventions centred on the observations to address the adaptive challenge one has identified (Heifetz et al. 2009). These three model components offer leaders the opportunity to determine and evaluate situations through repeat improvement of observations, interpretations and

interventions (ibid). By engaging in such a process, the adaptive leader can define the problem and engage accordingly.

10.1.2 Scope and description of adaptive leadership model

Changes in the external environment can either be gradual or unexpected, as in the case of the COVID-19 pandemic. Irrespective of which, such a change will present a significant emerging threat or opportunity to an organisation, either of which could require changes in its daily operation. To successfully acclimatise to the changes, the organisation must innovate, creating a new strategy rather than merely refining the existing strategy of using a predetermined contingency plan (Yukl and Mahsud 2010). This innovation and roll out of a new working strategy are what we refer to as being 'adaptive', and it is mostly pegged on a clearly outlined model that guides the organisation moving forward.

In different organisations, most leaders are responsible for diverse daily tasks that require them to quickly shift from one activity to another (ibid). This calls for an adaptive leadership skill that will enable one to manage the diverse functions and respond accordingly to arising challenges and changes in the external environment. Although, as stated earlier, leadership is more of a process than a personal attribute (Heifetz et al. 2009), an adaptive leadership model is relied upon to help guide smooth transition under the prevailing changed external environment. The main purpose of the model is to ensure that the organisation emerges from any given external change or shock, for example, COVID-19, with the least possible negative effects or with the most possible positive gains in terms of its organisational vision and mission.

For example, under the COVID-19 pandemic, an education-centred organisation may adapt its model to ensure the continued learning of students under the safest preventive environment against the virus. Therefore, the adaptive leadership model seeks to create a new way of doing things in a manner that is open, participatory and peer-driven, and is shared with or can be accessed by all those affected by the external changes in the environment (Heimans and Timms 2014).

During this period of COVID-19, the scope of an alternative leadership model in a given organisation (for example, an education-based organisation) can be best described through its purpose; that is, management of complexity (COVID-19), building organisational resilience (in the education sector), and enabling adaptation both of the organisation and the education sector at large (Amkel and Englander 2018). Key to this is the ability to align organisational goals, objectives and the activities of everyone involved through the creation of a shared vision. Amkel and Englander (2018) noted that the development

of a shared vision should be the starting point of any alternative or adaptive leadership model that seeks to create change, especially in the education sector. As such, a leader should ask themselves three questions at the start of an alternative leadership model development:

1. Have I spent enough time envisioning bold and creative possibilities?
2. Have I spent enough time in enlisting others in developing a shared vision?
3. Have I used all the resources available to me?

If these questions can be answered in the affirmative, then the organisation is at a place where it can effectively develop and roll out the new leadership model for use under the existing external change. Remember, adaptive leadership is not about ruling over others; it is about working together with all stakeholders for the benefit of everyone. Given this, an effective adaptive leadership model will empower people to develop and enhance their skills in the new environment. It will make others better because of its presence, and its impacts will last in its absence (Sandberg 2013).

10.1.3 Outcomes of adaptive leadership

O'Driscoll (2020) opines that evolution of organisations is critical if they are to keep up with an ever-accelerating rate of change. He states that, 'If organisations cannot adapt, they die'. It is a critical role of leaders in organisations to ensure that their survival is guaranteed in the face of increased uncertainty and adversity, such as the global COVID-19 pandemic.

Uncertainty places leaders and organisations with a complex paradox whereby, on the one hand, they must continue running their core business as efficiently as possible and, on the other hand, they must develop and implement strategies to change their organisations in response to changes in the ecosystem. This, therefore, reinforces the call for leaders to be adaptive and develop systems that will endure and succeed in the altered ecosystem. However, apart from ensuring organisation stability in the face of uncertainty, adaptive leadership has further diverse and distinct outcomes such as the process of system diagnosis that involves the leader. Outcomes also include system mobilisation: for the system to be successful, it must be accurate and adaptive. This is achieved by the leader. After mobilising the system, a leader gets to view themselves as a complete functioning system, for example, by identifying their many identities, understanding their roles, articulating and prioritising their purposes. Deployment is the final outcome, during which a leader should stay connected to the purpose, negotiate the ethics of leadership and purpose, inspire people, take risks, grow support systems and thrive (Heifetz et al, 2009).

10.2 Methodology and findings

10.2.1 Methodology

The study that is the focus of this chapter was conducted across Commonwealth countries. In terms of research design, mixed methods were used: quantitative methods included digital data collection through a survey designed utilising Google forms, while focus group discussion was a qualitative method used as another means to collect data.

The study population involved a community of civil society organisations (CSOs) and non-governmental organisations (NGOs) who were active in the education sector during the ongoing COVID-19 crisis. The study was designed to build understanding of how these organisations were coping with the complexity of the crisis, and how they were responding programmatically to ensure education continued.

The research employed a purposive sampling procedure since the researchers were solely interested in interviewing CSOs and NGOs that were working in the education sector.

Data collection methods

A close-ended survey was created through Google forms and shared with the identified respondents. Focus group discussions were conducted to identify emerging issues of discrepancy and consensus on the role of non-state actors in the education sector in responding to the Covid 19 pandemic. Two focus group discussions were conducted online, with participants receiving an invite on Zoom. The researchers used a focus group discussion guide.

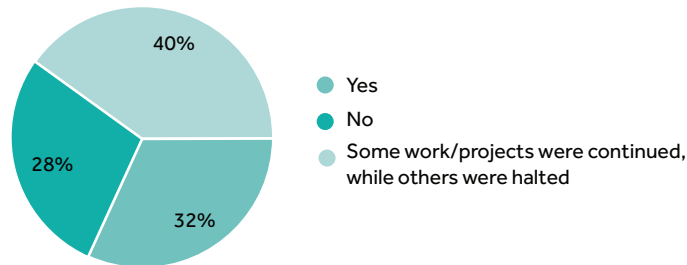
Participants in the focus group were individuals who held leadership positions in non-state or civil society education organisations. The participants were drawn from different Commonwealth regions and countries such as Bangladesh, Ghana, Nigeria and Tanzania.

In the development of the study, secondary sources used included follow-up with different CSOs and NGOs. The research team also conducted a broad literature review to form a base for the study.

The collected data were analysed automatically through the Google forms. In addition, the qualitative data were analysed by pairing similar themes and organising the data to inform the study.

Regarding ethics, the purpose and nature of the study were explained to participants. The researchers obtained informed consent prior to participation and respondents were kept anonymous.

In terms of problems and limitations: while conducting the focus group discussions, there were challenges with internet stability. Some participants were unable to take part due to other costs, time and infrastructure barriers.

Figure 10.1 Has the COVID-19 affected programme implementation?

10.2.2 Findings

Our online survey aimed to understand how the COVID-19 pandemic had affected non-state actors working in the education sector in various Commonwealth countries. The survey tool was designed to identify and probe changes in programmes, operations, evaluation and resourcing.

According to the responses received, 32 per cent of the NGOs and CSOs had continued their programme implementation without any significant disruption; 40 per cent said that some programme implementation continued, while some was halted; 28 per cent said that COVID-19 significantly hindered their work (see Figure 10.1). Thus, it could be said that there was a significant impact of COVID-19 on non-state actors in the education sector. Some NGOs and CSOs continued their operations only after adaptation and necessary changes to their process of service delivery.

Nature of projects conducted by NGOs/CSOs despite COVID-19

Box 10.1 Case study: World Literacy Foundation (Australia)

The World Literacy Foundation (WLF) is a leading international literacy charity. It strives to ensure that every young individual, regardless of geographic location, can acquire literacy skills to reach their full potential, succeed at school and beyond. It provides free access to quality education materials and innovative solutions that target wide-scale illiteracy. It envisions a world in which everyone can read and write, in which there is free access to education for all.

The World Literacy Foundation:

- provides books and educational resources, so the children can discover the joy of reading;
- empowers people to advocate in their local community for this cause;
- provides tutoring and literacy support to disadvantaged children who are struggling to read;

- brings together innovative technology, e-books, games and locally curated content to advance the learning of children in remote communities in their mother tongue and English; and
- gathers literacy and educational leaders and organisations around the world to share ideas and collaborate within the sector.

In terms of its response to COVID-19, WLF has launched new digital learning content on the Sun Books tablet to support children in five different countries in Africa. It has focused on helping the many children who have been studying remotely. These children can access 400 e-books and educational content, regardless of internet or mobile connection.

Sun Books is a registered charitable not-for-profit organisation and is part of WLF. Many children across the globe are taught in classrooms with no internet and limited access to educational resources. The Sun Books App is preloaded on a solar-powered tablet with an e-library of content available offline and/or through other devices. It enables reaching children in remote areas and supports access to top-quality, free learning tools, regardless of location.

Sun Books believes that understanding the local culture, language and education system is crucial for the successful implementation of the programme. The incorporation of local culture content, stories, sounds, images and the active participation of the community it is working in, is the key to educational success.

Role of non-state actors working on education in combating COVID-19
NGOs and CSOs working on education identified that they should play an active role in helping to combat the COVID-19 pandemic: 76 per cent of respondents reported initiating, partnering for or collaborating in programme implementation that would address arising needs in communities.

Focus group participants reported delivering skills-based training to empower people, including projects that focused on women's entrepreneurship and youth empowerment. Others described providing educational materials for marginalised children or conducting community outreach focused on increasing access to computers for underprivileged students.

Box 10.2 Case study: COBURWAS International Youth Organisation to Transform Africa (CIYOTA) (Uganda and DRC)

CIYOTA is a grassroots initiative empowering displaced youth to build resilient communities in Africa. What began as a youth-club, has now become a youth-led organisation operating in Uganda and Democratic Republic of the Congo (DRC). CIYOTA recognises the power of education as a pathway out of poverty, as well as a means to heal conflict, create social cohesion and spur economic growth. Education for youth through methods that also build corresponding commitment and support of families and the community is therefore the focus of CIYOTA's work.

In Kyangwali refugee settlement, in Kikuube District in western Uganda, there were six primary schools founded and run by refugees. These schools were educating about 5,000 children without any external donations.

When COVID-19 caused the closure of schools around Uganda, the school leaders came together to re-imagine how to safely continue to deliver education to learners who had no access to the radios or technology they needed to learn.

They worked with Parents Teachers Associations to provide mentorship and guidance to secondary school students; provided upper primary school lessons using a combination of hand-written notes, recorded WhatsApp audios and videos; and enabled children to access online lessons provided by the Ministry of Education. Youth also volunteered to give families accurate information on COVID-19 and reached out to refugees who had resettled in developed countries to request contributions of food, soap and other basic support for the most vulnerable members of the community.

The team in Kyangwali planned to scale up their learning adaptations, and to support other organisations in the community to ensure that school children did not drop out due to the crisis. To achieve this, the team planned to:

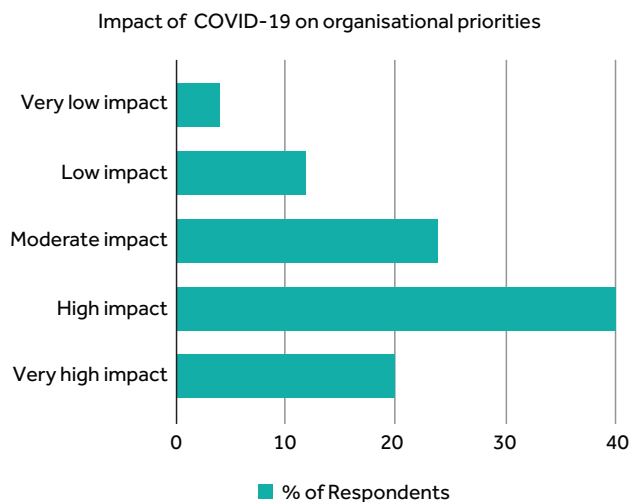
- Develop a Kyangwali Education Task Force with head teachers, academic heads of refugee schools and community leaders to oversee education content preparation and delivery, while ensuring that health guidelines on COVID-19 are observed.
- Recruit and train community educators and volunteers. Teachers, refugee high school and college graduates would develop lessons and deliver home schooling at the village level to reach all children, in partnership with parents and guardians.
- Conduct scheduled communal story telling for lower primary school learners, guided by the curriculum and the contextual environment of the refugee camps.
- Work with refugee tech-scholars to create an e-learning platform. This would be a smaller tech-enabled school model that worked in the context of refugee learners.

The Impact of COVID-19 on NGO and CSO activities

The COVID-19 pandemic has had a significant impact on non-state education actors and their activities. Several reported having to change their organisational priorities, programme delivery, programme evaluation and funding or resource models.

Only 4 per cent of respondents said that there had been a very low impact on organisational priorities. A majority (60%) of respondents said that there was a high or very high impact on their organisational priorities (see Figure 10.2).

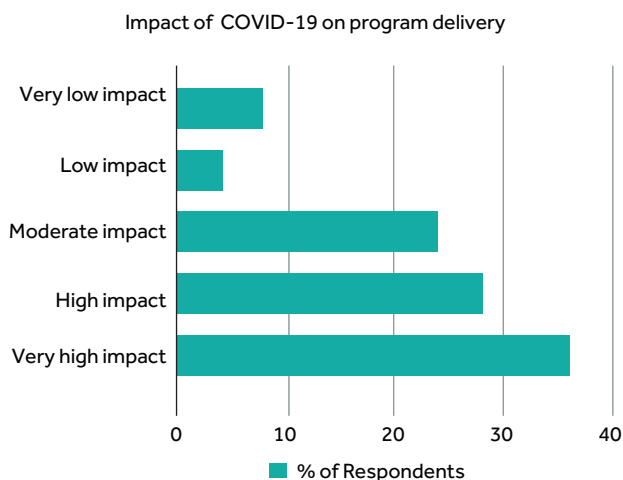
During the focus group discussions, some organisations even reported the addition of new programme priorities (arguably completely unrelated to education). Respondents noted working on health hygiene issues, such as

Figure 10.2 Impact of COVID-19 on organisational priorities

teaching learners on how to take care of themselves, proper washing of hands and distribution of sanitary pads.

Focus group participants also discussed the emerging and increased importance of inclusion. They spoke of the need to engage and educate the public as stakeholders in new solutions for public health.

As a result of COVID-19, and resultant school closures and public health guidance, programme delivery methods available to non-state actors in education changed drastically. Most CSOs and NGOs had to move from physical delivery to online. According to the survey findings, only 8 per cent of respondents claimed very low impact on programme delivery methods. A majority (64%) said that there had been a high or very high impact on programme delivery (see Figure 10.3).

Figure 10.3 Impact of COVID-19 on programme delivery

Likewise, participants in the focus groups shared that they were providing access to education through online and offline channels, as opposed to school- and classroom-based learning. This had involved rapid development of digital content that was then shared with students, using various means such as YouTube, WhatsApp and the radio. Interestingly, some reported increased opportunities to partner with government on projects designed to combat the negative effects of the pandemic.

Box 10.3 Case study: Room to Read (South Africa)

Room to Read is a leading non-profit organisation focused on girls' education and children's literacy in Asia and Africa. This organisation seeks to transform the lives of millions of children in low-income communities by focusing on literacy and gender equality in education. Working in collaboration with local communities, partner organisations and governments, it develops literacy skills and a habit of reading among primary school children, and supports girls to complete secondary school with the relevant life skills to succeed in school and beyond.

Room to Read South Africa offers a comprehensive literacy programme that combines home-language classroom instruction with high-functioning libraries.

The team is led by staff members who are expert in crisis response and who live and work in the 16 countries where Room to Read operates. They are local nationals with a deep understanding of complex community needs and cultures, plus strong government relationships that allow them to partner for maximum impact and provide learning using the most powerful tools and media available locally.

In response to the COVID-19 pandemic, and to ensure that children in the most remote and low-income areas could continue learning, the team prioritised interventions that did not depend on internet connectivity but, rather, human connectivity. The staff provided distance learning via channels that were most accessible to low-income children, including telephone, radio and TV broadcasts, and the distribution of hard copies of educational materials.

Activities included the following:

- designing new methods to facilitate distance learning (radio and TV education broadcasting in areas without internet access); distributing print materials in local communities;
- providing mentoring to girls by phone to support them emotionally through the crisis, encouraging them to continue their studies at home, informing them on how to stay safe and healthy, and helping them navigate challenges related to returning to school;
- revising the organisation's risk and response tool; using an early warning system that helped staff identify and immediately act on risk factors for girls who may be forced to cut their education short;
- expanding their book supply chains, government partnerships and other local relationships to find ways to get books to children who could not visit libraries;
- launching their digital learning platform, Literacy Cloud, a rich online library of storybooks sorted by reading level and language, plus read-aloud videos and professional development resources for teachers – all for free;

- preparing to support schools, educators and students to adjust timelines and close any learning gaps when schools reopened;
- supporting its own technological infrastructure, which allowed the organisation to work remotely and continue to support its programmes across the globe; and
- ensuring its financial integrity and transparency by continuing to deliver financial audits in times of office closures.

Programme evaluation

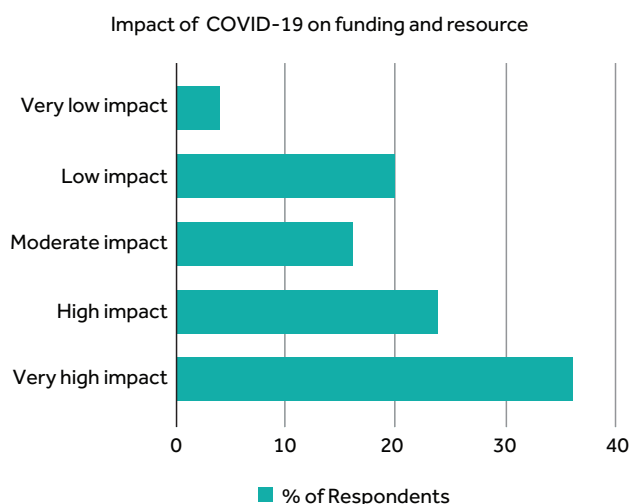
Due to COVID-19, programme evaluation methods for CSOs and NGOs also changed drastically. According to the survey findings, only 16 per cent of respondents said that there had been a very low impact on the programme evaluation. Many of the respondents (52%) said that the crisis had had a high or very high impact on programme evaluation (see Figure 10.4).

Focus group participants shared ways in which monitoring and evaluation had changed as a result of the global pandemic. For some organisations, formal methods of evaluation, including external evaluations, had to be cancelled or deferred because of restricted access to study subjects. Other organisations were able to move evaluations online, leveraging online survey and learning assessment tools. For those leveraging online assessment, parental engagement became a new and necessary support mechanism.

Resource models

Further, because of COVID-19, funding and resource models for CSOs and NGOs also had to change. According to the survey, only 4 per cent of respondents said that there had been a very low impact on funding and

Figure 10.4 Impact of COVID-19 on funding and resources



resources. Most of the respondents (60%) said that there had been a high or very high impact in this area.

Focus group participants had some interesting perspective to add to the survey findings. They shared that some project timelines or beneficiary reach had been adjusted considering reduced budgets. Some suggested this may have been because of a shift in organisational priorities rather than reduced resources, or even a combination of both factors. Some organisations did report having diverted funds to health education initiatives, food distribution and mask production. Others reported donor diversion of funds to government initiatives to combat the pandemic.

As a result, non-state education actors reported more actively collaborating with other non-state actors to be able to complete project implementation. Others spoke of the need to pool resources and apply for new funds in partnership with others. Many participants shared that staff salaries had been reduced, and there were no longer funds to support volunteer stipends.

Technology was found to be a new priority as part of budget adjustments to ensure that project implementation could run smoothly, and that emerging issues were addressed. According to one focus group participant:

The greatest lesson is inclusion of technology in all our systems for all stakeholders and this initiative should go beyond this pandemic, we can share our views and build on one another.

10.3 Discussion and conclusion

The findings indicate that there have been significant changes in the way non-state actors in education have operated since the onset of COVID-19. Perhaps the 32 per cent of survey participants who indicated that they continued project implementation with minimal disruptions could attribute this to previous use of technology, and project design that did not rely on physical human presence. This resonated in the focus group discussion, where one participant – whose organisation had been doing online teaching that pre-dated the pandemic – shared:

When schools were closed, we had more parents registering kids on our platform, we developed content for parents to refer their children. We have been doing live sessions through social media where parents help their children to learn. We have also been liaising with radio and network providers for free access[...] these were in place and the only difference is that we have put more effort.

Adaptive leadership demonstrates one's ability to adapt to and effectively respond to changing environments. The coronavirus pandemic has highlighted the need for adaptive leadership in national and global

responses to crises. Therefore, it has required the capacities that this form of leadership offers, such as openness and transparency about learning, the use of collective decision-making processes, and the building of trust with communities and individuals.

Many NGOs and CSOs have had a decrease in participant engagement, which has affected community engagement. The pandemic has also resulted in budget adjustments, salary reductions and a change of focus in organisations' regular programming. In their efforts to close the widening education deficits in their communities, many have had to move their activities online, optimised the use of digital media platforms, designed new methods to facilitate distance learning, distributed print materials in local communities, prepared to support schools, educators and students, and have adjusted timelines to close any learning gaps. Others have created sensitisation campaigns and promoted the need for transparency in the state management of COVID-19 finances, ensuring financial integrity.

From the research findings and case studies identified, there are some outstanding characteristics of non-state education leaders. They have applied the principles of adaptive leadership to not only survive but to thrive in the midst of the global pandemic and the complexities it brings.

Leaders who have adapted and embraced changes in programme delivery, programme evaluation and even resource allocation, have leveraged strong, pre-existing networks, including networks with other actors, stakeholders, including parents and governments.

Organisations who have led the way in this time of uncertainty are those that are strongly and intentionally rooted in local communities and have an excellent understanding of context. This sets them apart from other actors. These deep, local roots have enabled them to respond in meaningful and impactful ways, while maintaining the relevance of their organisations.

Finally, leaders who have truly led during the global pandemic are those who have been willing to address complexity rather than ignore it or wait for it to end. Leaders of non-state education organisations who have found their priorities, programme delivery, programme evaluation and organisation resources disrupted have addressed that disruption directly. They have focused on the core of their organisational vision and mission and sought ways to navigate the disturbance.

In conclusion, a critical factor in whether non-state education actors survive, or even thrive, in response to the COVID-19 pandemic, is leadership style and capacity. Therefore, a recommendation of this study, would be the need for an increased focus on leadership development within the civil society and non-state education sector.

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Chapter 11

Interrogating Well-being: A Push for Intersectional and Intersectoral Approaches

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11.1 Background and context: conceptualising well-being

Investigations around educational experiences, particularly learning and well-being, remain critical for building effective educational systems (Durlak et al. 2011; UNESCO 2016). However, well-being remains a discursive, politicised and elusive concept. It is one which – while often referenced as a goal or strategic objective within educational systems – is yet to be fully interrogated, measured and implemented for effective action (Mehrotra et al. 2013; Spratt 2016). What we see, for instance, is that notions of well-being remain conceptually and methodologically divided (Alatartseva and Barysheva 2015; Dos Santos et al. 2018).

In many cases, well-being has been intricately connected to notions of agency, freedom and capacity, where the essence of such exploration has been on the functioning or the freedoms that persons enjoy (or not) in their understanding of their own beings (Sen 1992; 1999). Oftentimes, such discussions have been extended to refer to the quality of life; often couched across various life dimensions such as life satisfaction, living conditions, standard of living or as expressions of happiness (Cobb 2000; Stiglitz et al. 2009). Where these conditions and/or perceptions of well-being are poorly constructed and/or designed, then a noted conversation within the literature is that of the socioeconomic and political conditions that both create and sustain varied forms of social deprivation and inequalities (Rapley 2003).

No doubt, such multifaceted and loosely conceptualised aspects of well-being call for deeper investigation and reflections on the complexities within. Of key concern is the congruence between the goal of improving well-being and the social interventions that are designed to initiate this or the desired outcomes of that process. This examination of well-being is particularly necessary in contexts where regional and international programmes have been introduced to address concerns for social vulnerability, empowerment and development (O'Brien et al. 2009). Yet there has been

little evaluation of the outcomes of those processes. Concerns for the impact of social interventions are particularly situated within the global agenda and documents such as the Dakar Framework for Action which places emphasis on life skills and their integration within education systems to promote individual capacity and substantive freedoms (UNESCO 2000; UN 2005).

Even so, well-being is a relative state of being and becoming, which cannot be universally applied and implemented. It is against similar concerns for the narrowness of well-being measures and interventions that UNESCO (2020) is arguing for more inclusive notions and interventions that consider diverse social groups: in particular, learners and persons in minority or marginalised communities. It is therefore critical that we examine some of the key structural inequalities that affect access to improved well-being, the effects of these inequalities (whether social or economic), and some of the efforts that have been leveraged to address the experiences for learners within the education system.

This chapter attempts to fill in this gap by drawing on some of the ways in which structural inequalities affect individual ability to access key resources, systems of support and opportunity for agentic expressions. However, we set this discussion on intersectional inequalities against a critical review of interventions or programmes that have been designed to address or enhance well-being. We have limited our study to the African region. We note in our analyses that many of these empirical investigations and/or intervention programmes lack more nuanced considerations of the multiple nodes of power and broader systemic issues that affect children in these contexts. It is here that intersectional frameworks provide a useful analytical tool through which we can both understand and positively affect individual well-being.

The next subsection looks at the potential use of using intersectional lenses within investigations of well-being.

11.2 Methodology and findings

11.2.1 Methodology: taking an intersectional approach

As a theory, a methodological framework and a political tool, intersectionality allows for a nuanced assessment of how social issues (that is, those related to identity and lived experiences) connect to those of power, privilege and oppression within a given context (see Dill et al. 2007; Jones and Abes 2013). For Cho et al. (2013, 795), what makes an analysis intersectional is its ‘... intersectional way of thinking about the problem of sameness and difference and its relation to power’.

When applied to analyses of educational institutions, intersectionality brings to the fore key questions around diversity, inclusion/exclusion, social axes of

difference, educational (in)equalities and social justice. While this theoretical approach may seem limited to developing countries, intersectionality has been used to examine the ways in which structures of difference (along the lines of race, class, gender, age, ethnicity, just to name a few) marginalise and disadvantage persons within the education system, and to make policy recommendations as well as identify strategic interventions that circumvent these.

The complexities within the methods of analysis and the attention to the diverse experiences of social groups, based on where they are positioned along what Hill-Collins (2001) refers to as 'the matrix of domination', remain a key benefit of taking this intersectional approach. By so doing, such a framework allows for necessary acknowledgement of privilege and how these are juxtaposed against marginalisation. Given the practical implications of intersectional approaches for addressing inequalities and injustices within the education system, the following research questions emerged on the matter of well-being within certain contexts, for example in countries in Africa:

- To what extent have researchers addressed issues of difference (based on, for instance, race, gender, age or class) for the well-being of school-age children?
- What are some of the strategies that have been implemented to improve their well-being in such contexts?
- How has the COVID-19 crisis challenged the goal of democratising well-being for diverse populations?
- How can intersectional analyses and the use of an intersectoral approach help mitigate the impact of COVID-19 on learning and well-being?

Within an intersectional framework, the key objectives of this meta-synthesis, therefore, were to critically assess the existing discourse and the empirical work around well-being within African contexts, to discuss some of the advances and drawbacks of existing work, and to explore some of the implications for learning within an education system.

Meta-synthesis

Meta-synthesis is essentially a method for systematically synthesising existing data on a given phenomenon. The expectation of using this analytical method is to produce a critical review and interpretation of existing research within a specific area or a given phenomenon of interest.

In the present study, the meta-synthesis offers an interpretative synthesis (Weed 2008) of existing work or material on the well-being of school-age children in African contexts. The work or material formed the primary source of data for this paper.

This study involved a review of key data sources, such as: media reports, educational policy documents and empirical studies that directly and indirectly address issues affecting well-being, related experiences, challenges and outcomes within African contexts. Key objectives were to thematically address some of the advances within the field, to speak to some of the common themes and discordances, to identify some of the gaps that persist and to provide new insights, theoretical thrusts or innovative questions that could advance the research field. This analytical frame allowed the researchers to reconceptualise a given phenomenon: in this case, the well-being of school-age children and the presentation of new evidence, perspectives and recommendations for moving ahead.

We noted three core limitations to this process: the limited extent of intersectional applications, particularly for developing countries; a lack of access to literature or scholarly work that focused on the multiple sources of difference; and the extent to which these limitations directly affected well-being.

11.2.2 Findings: how well-being is conceptualised and examined within the African context

This section addresses the conceptualisation of well-being in developing regions. It is analysed using a multi-dimensional approach to defining well-being and includes emotional and spiritual, cognitive and psychological, as well as cultural and social well-being.

Emotional and spiritual well-being

Our review of this dimension of well-being within African contexts revealed that this type of conceptualisation remained sparse, with narrow applications to the study of at-risk youth. On a broad level, many of the studies focused on the experience of youth and children (Van Deventer et al. 2011) and not specifically on children attending schools. Where this focus did exist, emotional well-being was researched based on investigations of perceived vulnerable groups. For example, there were specific examinations of the circumstances facing adolescents living with HIV (Petersen et al. 2010) and in orphanages (Caserta et al. 2016; Littrell et al. 2011; Ntuli et al. 2020). One study, however, examined the attachment relationship between mothers and toddlers (Van Deventer et al. 2011).

Other studies called attention to the sociodemographic and historical differences across countries within this context. For example, three studies underscored the inherent differences within and between provinces in the South African context (Van Deventer et al. 2011; Petersen et al. 2010; Ntuli et al. 2020). Caserta et al. (2016), on the other hand, investigate the impact of the Rwandan genocide on emotional well-being. The contextual analysis of

these studies highlighted the differences between countries, particularly the relative roles of ethnicity and race in emotional well-being within and across contexts.

On the issue of spiritual well-being, there is a lack of consensus on how this is conceived within the wider application of existing interventions. Our meta-synthesis of available data showed that, in most cases, the core emphasis was on quality of life, often referenced in terms of relationality and spirituality. The relative roles of faith-based organisations and other religious entities in the promotion of healing as well-being within everyday life surfaced within this sub-measure of well-being, with two related but separate connections between spirituality and religiosity within the body of literature (Moodley et al. 2012). Such muddling of concepts also extended into the lack of systemic analyses of the structural factors that affect spiritual well-being. Thus, while Moodley et al. (2012) investigated the roles of varied intersectional variables (such as age, gender and religion/spirituality), this kind of intersectional interrogation of well-being was generally absent.

Given the perceived importance of spiritual well-being, Roux (2006) called for more participatory action research that celebrates the wellness of persons through art, music and science. If capacity is to be developed through this type of participatory approach, then issues of spiritual freedom and functioning remain relevant. However, where spiritual well-being and learning hinge on how children experience and make sense of their world, it is imperative to make connections between cultural norms, practices, values and spiritual choice. We noted through the review of work in this area that the role of 'spirituality' in life skills education remained underexplored and poorly designed.

An intersectional approach may prove useful here. Key benefits would be an analysis that works with existing interconnections, focusing on the level and intensity of vulnerabilities as they emerge and on the collective or nuanced effects on diverse social groups. Such analysis could generate data that feeds back into culturally relevant or gender-sensitive frameworks to address specific challenges of vulnerable groups. In the case of a gender-sensitive approach to Behavioural Change Communication (BCC), this involves engaging communities in the construction and promotion of positive behaviours. The aim is to incorporate notions of well-being and happiness that are informed by members of the community into intervention programmes for the education sector.

Key aspects of behavioural intervention programmes, therefore, include a positive self-image, a personal life-purpose, healthy interpersonal relationships, improved academic achievement and better coping strategies for managing life's emotional, mental and physical challenges. This is particularly important, since African children in Africa and elsewhere in the

Commonwealth face the task of growing up in a society affected by change, whether it is economic, social, cultural and/or political. Where these changes contribute to stress, depression, feelings of hopelessness and helplessness, and threaten the well-being of children, it is important that researchers address what Sen (1999) describes as the capacities and freedoms to develop notions of spiritual well-being.

Psychological and physiological well-being

In the articles retrieved on social well-being, mental health was often referenced in relation to depression. We noted the interchangeable use of 'mental health' and 'psychological well-being'. Often, the notion of psychological well-being within the literature highlighted the need for reduced levels of depression, anxiety and anger, and improvement in mood and a state of happiness, all of which contribute towards academic excellence in the context of education (Rugira et al. 2013).

Based on our review of available material, we noted that researchers referred to psychological well-being as a combination of emotional regulation, personality characteristics and identity. A central point of examination was that of one's sense of purpose, usually associated with positive emotions and a general satisfaction with life (see, for instance, Edwards et al. 2004). Of the eight articles reviewed under this dimension of well-being, three researchers explored self-esteem and satisfaction with life among South African mothers and children (Roman et al. 2008; Rugira et al. 2013; Sawyer et al. 2009). The study found that satisfaction with life was significantly related to self-esteem levels among participants (Roman et al. 2008).

On the other hand, the literature on physiological well-being in African contexts was sparse. Two articles assumed physiological well-being to be universally understood as the overall healthy state of the physical human anatomy (Sawyer et al. 2009; Scully et al. 1998). In 2008, *The New Times*, Rwanda's daily newspaper, reported on the need for children to have regular physical exercise to build strong bones and muscles. The article stressed the importance of exercise for children's health, cognitive ability, sharpness of mind and social alertness.

In reference to the education system, psychological and physiological well-being are subject to the academic environment. Students face various challenges, including academic demands, multicultural adjustments, and the need for flexible responses to changing patterns associated with physical and social movement. The difficulties of adapting to a new environment affect well-being which, in turn, has further impacts on their academic efforts (Sawyer et al. 2009).

Several researchers have linked improved psychological well-being with religious influence through a student's spiritual affiliation. These reports

present evidence that pastoral programmes help students increase their sense of belonging and thus improve their happiness (Rugira et al. 2013).

Psychosocial well-being

We noted that when mental well-being was measured, this was specifically referenced in relation to the functioning of the household, family and/or friends (Dos Santos et al. 2018). In the present research, these emerged as psychological and social factors that affect the well-being of individuals. Flisher (2007), for instance, addressed the use of social indicators to monitor child well-being in the South African context. This suggests that there should be co-ordination between the health, educational and social development sectors to provide accessible and quality mental health services for children and adolescents in need.

Where issues of mental health have been examined, an overwhelming number of researchers have drawn attention to the relative importance of risky behaviour. One line of argument was that risk factors (associated with certain types of behaviours, socioeconomic status, quality of state schools, etc.) affect the mental well-being of children. One of the findings was that there seemed to be a high correlation between mental disorders and substance abuse in children and adolescents. Thus, the push would be for indicators that measure the intensity of the problem of substance abuse among children and adolescents, across wider contextual settings, enabling the development of context-specific and relevant mental health interventions (Flisher 2007). In that regard, Flisher (*ibid*) further notes that adolescents with a strong sense of well-being are less likely to engage in substance abuse, compared to those with a weaker sense of well-being.

Other researchers discussed the processes through which social or relational factors affect mental health. Some key aspects included examinations of social cohesion, co-operation and concepts of community within contexts in countries in Africa. For instance, Dos Santos et al. (2018) found that, although there were significant differences in children's satisfaction and interpersonal relationships influenced by gender, type of school and housing contexts, there were no differences in satisfaction with interpersonal relationships influenced by age. On the other hand, a related finding was that children who attended private schools projected higher levels of satisfaction with their families and school friendships, while those who attended public schools expressed greater satisfaction with their friends.

Some strategies and outcomes related to well-being

This section examines strategies and policies for student well-being and how different stakeholders such as governments, schools, communities and civil society organisations approach it. In most cases, the studies included the development of programmes that ensured the psychological and

physiological well-being of students. These programmes gave insight into the mechanisms of building and maintaining well-being from a positive psychological point of view, rather than on curing participants with mental health disorders or serious diseases (Rugira 2013).

The general aim of these interventions was to provide realistic expectations of the programmes. Such is the case of sub-Saharan Africa where the '2009 Child Protection Code' (UN 2009) provides a strong legal basis for the protection of children across many areas. This Child Protection Code (ibid) provides prohibitions and significant punishments for child abuse and exploitation of several forms, including child labour, arbitrary arrest, rape and sexual violence, and torture. This encompasses the overall well-being of a child, including physiological and psychological aspects. In Nigeria, another study was conducted to address areas of improvement in physical education to help primary schools achieve their teaching objectives (Ibeziako et al. 2008). In this study, Ibeziako et al. (ibid) discovered that programmes for physical education within the school system promoted activities beyond the school day (including sport, dance and outdoor education), improved the effectiveness of learning and teaching, and had an impact on both the physiological and psychological well-being of students. To address this, what emerged was a school-based mental health service, which reached out to children who would otherwise not have access to this service.

Other institutional initiatives have emerged to address the well-being of marginalised children. Such is the case of the Healthy Schools for Healthy Communities (2021), the KaziBantu project, which was implemented to ease the burden of poverty-related infectious diseases common in low- and middle-income countries, and to address non-communicable diseases, which are rapidly gaining importance within South Africa (Rugira 2013). The project objective was to improve and promote health literacy for active and healthy lifestyles through a school-based health intervention package, which consisted of physical education, moving-to-music, and specific health and nutrition education lessons. At the time of writing, the project was ongoing, with noted extension in the development of teaching materials and resources that promote physical activity and literacy in schools. Rugira (ibid) reported that this project had reduced risk factors in school settings and had had a positive impact on the physical well-being of students. This in turn stimulated improved psychological well-being.

A few initiatives have emerged to address the psychosocial aspects of well-being among children. In Kenya and Malawi, the NGO Save the Children has partnered with a local telecommunications company to provide interactive psychosocial support and social-emotional learning activities (Save the Children 2020). This is presented as a way of improving literacy

and numeracy levels across these two countries. Similarly, Childline provides psychosocial support services to children across South Africa and has trained around 200 community health workers who visit internally displaced people's camps across the country. While evaluations of these initiatives have yet to take place, we recognise that the programme also offers training that addresses court preparation, therapeutic interventions and the legal frameworks that surround children.

We also observed some key interventions at the government level that have met with some level of success. In our examinations of strategic documents by ministries of education, we noted the overwhelming focus on enhancing the school environment. These documents touched on multiple points across the spectrum of well-being, including school infrastructure, hygiene, feeding facilities and gender parity, and acknowledged the challenges they face in terms of poverty, conflict, violence and displacement. While these efforts are commendable, they lacked common guidelines for all schools and all stakeholders. Additionally, there was an absence of evaluative work addressing outcomes.

In our review, we noted several UN-supported reports that were limited to areas of community well-being. To give a deeper insight into a community's perception of well-being, the UNICEF and US Agency for International Development (UNICEF and USAID 2018), in collaboration with the Government of Zambia, offered a report, which examined key aspects affecting children's well-being. These included access to free education and healthcare, having both parents, spiritual support, and access to safe spaces free from abuse or exploitation. Even though the paper acknowledged the importance of mental health, this aspect was not represented as being critical to well-being.

Based on our review and the nuances across countries considered in the study, it was clear that there is no 'one-size-fits-all' approach to improve the physiological and psychological well-being of every student in any context. Intersectional factors such as race, class, gender, socioeconomic background and disabilities, render every student's circumstances unique. Hence, strategies to improve student well-being need to consider an intersectional approach. For example, in the KaziBantu project mentioned above, students from families of low socioeconomic status were less likely to have access to healthcare or health insurance, increasing risks of illnesses, school absences and ultimate academic failure. Additionally, students with disabilities and special needs require different pedagogical approaches that ensure meaningful engagement and equity in the delivery of the curriculum.

In this matrix of influences, we must also consider how religious and cultural influences affect the psychological well-being of female students.

For example, Kisanga and Katunzi (1997) have argued that female genital mutilation (FGM) is a common practice causing psychological and physical trauma for victims. A key point is that of the persistence of gender discrimination that continues to sustain psychological and physical trauma due to the practice of FGM. Other researchers have shown social class as an added barrier affecting the psychological and physiological well-being of students (Arhin et al. 2019; Rugira 2013). These conclusions strengthen the need for continued investigation of the social conditions that connect to well-being and the design of interventions that cater to these complexities.

The effects of COVID-19 on learning and well-being

In most recent times, the COVID-19 pandemic has forced people to isolate and physically distance themselves to contain its spread. This raises many questions about the types of vulnerabilities that either emerge or intensify, and the specific groups or cohorts of persons that are significantly affected by a pandemic of this nature. Where the concern is for children, the interventions and roles of non-governmental and governmental organisations come into play.

Save the Children's policy paper (2020) shows how COVID-19 has had an impact on children's well-being in Africa. This paper underscores that, although children do not represent a high-risk group for direct COVID-19 fatality, the pandemic has created far-reaching secondary impacts that heighten risks to children's rights and well-being. It gives a more multi-dimensional picture of current times, covering malnutrition and school closures, increased risk of gender-based violence, and the effects of poverty and migration, which are all deeply connected with children's well-being. One of the key strengths of the document is its effort to discuss the holistic aspects of health and learning that form the core of children's well-being. This is reflected in their inclusion of the importance of mental well-being and psychosocial support services, especially for the most vulnerable populations.

However, a missing aspect in this and similar policy briefs is that of clear indicators of success for different stakeholders and for different aspects of student well-being. While we recognise that research is limited within this area, we note that well aligned, thorough, easily accessible programmes for schools with basic clarity on implementation procedures are needed. For example, William (2017) contends, that, even though education priorities in Rwanda have been identified as a political issue because they are 'technical or developmental', the entire approach is insufficiently conceptualised and not deeply grounded in local needs or the realities of the planning process. Such interventions should be designed with engagement of all stakeholders including communities (William 2017).

It is important for social and policy interventions to also address the changing landscapes and challenges for learning and for enhancing the

well-being of children, in the context of COVID-19. However, a key concern remains that of the inattention of empirical literature to the intersection of gender, race and socioeconomic status, for example, on the well-being of students. This empirical void creates many challenges for analysing the multi-layered and complex impact of the health pandemic. Hence, it is imperative for educators to enter into a dialogue on the notions of spirituality, religion, cultural and social experience, well-being, and the type of education received within the school system. Where there are existing programmes aimed at addressing the well-being of children, it is important as part of the intervention process for researchers and/or policy-makers to obtain data that interrogate and measure notions of well-being. A potential approach is to examine how culturally defined notions of well-being have factored into the experiences of children and young persons during this pandemic.

Limitations of interventions that address well-being

Since these interventions lack attention to diversity, inclusion and freedom, there were some broad limitations to the literature reviewed.

- **Lack of uniformity in capturing integral, diverse aspects of student well-being across sectors (government and NGOs):** Even though definitions and aspects of well-being were scattered through many official documents, there was a dearth of comprehensive plans targeting student well-being. This also suggests the need for an intersectoral approach, where there is larger co-ordination and collaboration among key stakeholders engaged in addressing issues of well-being.
- **Lack of delineation between the theory and practice of well-being:** While many governmental reports disseminated ideas on inclusivity, there was an absence of research into the interventions used to address these, the role of key stakeholders in the process, and the impact of these interventions where applied.
- **Lack of contextualisation in defining notions of well-being:** We noted that any stakeholder, local or not, who plays a significant role in shaping the discourse around student well-being, in Africa and other regions, must be conscious of contextualising and understanding actual needs rather than imposing what they believe is best. There is an indisputable need to adopt an intersectional lens and broaden the scope of education or inclusive education to address the different needs of all students. This lens is significant in understanding and recognising how multiple exclusionary, marginalising factors and identities can lead to discriminatory practices within and beyond education systems.

- **Unclear links between existing policy frameworks and implementation:** There appeared to be a disconnect between the design and implementation of intervention policies on well-being and the type of consultation needed for implementation. What this requires is more collaborative engagement of all stakeholders to include grassroots communities, co-ordination of key efforts and participation of different actors in order to have a positive impact on student well-being. These stakeholders could be communities, students themselves, parents, teachers, small/local NGOs, local authorities, religious leaders, etc. Even if it takes time, the aim should be the reflection of inclusion and intersectionality in data to ensure that diverse needs have been successfully incorporated.
- **Absence of data that address the impact of COVID-19** on the well-being of school-age children, and the impacts of these on diverse groups: This limitation affects the potential relevance of policy and social interventions that are being designed to address the well-being of children.

11.3 Recommendations

Moving forward, there is a clear need for overarching and coherent structures encompassing existing, ongoing and developing work focused on student well-being. Based on this meta-synthesis of literature or material on well-being among school-age children in some African contexts, we recommend the following:

- **Sustained research:** As noted earlier, empirical research on the complexities affecting the well-being of children, especially within countries in Africa, remains limited. Where existing research fails to address the social inequities that affect well-being, it is important to engage in further or continued research that addresses the intersectional realities around well-being. Further research is also necessary on the impact of COVID-19 on the social vulnerabilities and well-being of children. It is necessary for researchers, educators and policy-makers to address this empirical gap and to apply the findings of such research in the production of evidence-based interventions and/or policies.
- **Cross-cultural comparisons:** We noted that many studies focused on countries in West Africa. Savahl et al. (2017) attempted a cross-cultural comparison study of the subjective well-being of adolescents in three African countries (Algeria, Ethiopia and South Africa), to determine the validity of the two multi-dimensional

scales they used to measure well-being. Key contributions from this study were the subjective evaluations of well-being that children formulate and the need to capture the culturally diverse ways in which this occurs. This is a step in the right direction.

- **Culturally relevant interventions** (Govender et al. 2019): Our review showed that most of the measures adopted to understand well-being were imported from western settings. In many cases, cross-cultural validity had not been established, introducing the possibility of measurement bias, as the definition of well-being was determined by the focus of the research study. An opportunity for further research could seek to explore how governments, through effective and contextually relevant interventions, could enhance the capacity of households to provide for the basic needs of children and ensure their rights are realised at the micro (ground) level. This could then mitigate the negative effects of other social determinants of health (well-being), such as poverty and deprivation. NGOs, in collaboration with other organisations, could hold governments to account and assist in regulating interventions for children's well-being. In sub-Saharan countries such as Somalia and Democratic Republic of the Congo, where conflicts persist, this has proved to have a significant impact on learners' well-being (UNESCO 2011).
- **Application to rural Africa:** Rural communities are often characterised by poor or non-existent infrastructure and little provision of other critical social services. Given that social inequalities (along the lines of race, gender and class) have a great impact on the quality of education, the effects are even greater for persons in rural areas, especially for girl children where cultural norms demand that they become caretakers of the home (Agbor 2012). This contributes to low performance and high drop-out rates at school, worsening gender disparities. As Sternberg (2004, 336) observed, 'when cultural context is considered, individuals are better recognised for, and can make use of, their talents'.
- **Better access to basic education:** Sen (1992) reminded us that being educated remains a critical aspect of developing individual capacity, inadvertently increasing well-being. In this sense, education is foundational for other capabilities by providing access to basic learning outcomes, such as the abilities to read and write (Unterhalter 2002). However, one could argue that any learning that stops at providing only basic reading and writing skills would be insufficient to advance sustainable development and fight poverty (Radja et al. 2003).

- **Collaboration and co-operation between key players to address notions of well-being:** In many cases, the studies identified school interventions initiated by researchers, governmental and non-governmental agencies (see, for instance, Savahl et al. 2017; Patel et al. 2017). While many of these articles reflected research findings, there was a lack of co-ordination of activities by stakeholders.
- **Greater consideration given to the role of building capacity and the freedom to choose the meanings and expressions of well-being:** Moving forward, therefore, we must push for continued conceptualisations and applications of well-being that centre on issues of equity, justice, capacity and freedom. Intersectional and intersectoral approaches provide critical frameworks through which these agendas can be substantively addressed. Applying this intersectional lens to capacity, freedom and well-being is likely to be a complex task; nevertheless, it could ensure more socially and culturally grounded understandings and inclusive interventions, with the potential to enhance individual well-being.
- **Strengthen and sustain the freedom and agency of all individuals:** In the present study, the goal of institutions and stakeholders must be to recognise the existence of socially unjust outcomes and to assess what people who experience social injustice and marginalisation are able to do, to become and to achieve. At structural, institutional, local and national policy levels, the aim should be to strengthen and sustain the freedom and agency of all individuals. This requires a paradigm shift, where systems, strategies and structures do not promote well-being based on popular discourse but have a clear vision and a roadmap to ensure that *all* individuals and communities have equal opportunities to flourish. Simultaneously, focus needs to shift towards setting tangible goals and targets, with consistent assessment and evaluation of interventions, and towards supporting different aspects of student well-being (learning, mental and physical health, healthy relationships, etc.). It is important to ensure that evidence-based and context-specific actions are taken and intended outcomes are being reached. In so doing, the roles of schools and governments need to be more clearly defined. This is particularly necessary for how we design teaching and learning interventions for sub-Saharan contexts and beyond. It is important to have collaborative, bottom-up decision-making built on partnerships with civil society, NGOs, community activists and others (UNESCO 2020).

11.4 Conclusion

As part of advancing the Sustainable Development Goal of promoting well-being within schools, UNESCO (2016, 8) has developed strategic priorities, which are ‘part of a comprehensive school health approach that encompasses policy and systems, skills-based health education, safe learning environments and links to health services’. As our examination of the available literature on well-being within African contexts shows, the understanding of and interventions related to well-being within the school system remain *ad hoc*, uncoordinated, sparse, and largely addressing perceived vulnerable groups, mostly outside of the school system. While many of these reports and studies provide critical starting points for understanding the contextual realities of school-age children within these contexts, efforts at enhancing their well-being remain inadvertently limited by the lack of both data and co-ordination of existing interventions.

Given the need for intersectional analyses that capture the diversity in sociocultural contexts and the systems of marginalisation that affect school-age children, there is an urgent need to expand explorations of well-being, taking into consideration multi-dimensional aspects of well-being and the engagement of other sectors within this effort. Our review suggests that critical stakeholders should include the health, educational and community development sectors. This would also require strong partnerships between key stakeholders. Improving well-being, while mitigating the effect or impact of COVID-19, requires an intersectional and intersectoral approach.

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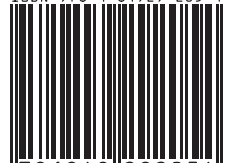
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The COVID-19 pandemic has exacerbated and underlined existing educational inequalities through mass school and university closures, with learning opportunities and attainment affected by lockdowns, variable home-learning facilities, and changing assessment methods. The long-term impact of lost learning on young people is yet to be quantified. In many low-income countries there are signs that COVID-19 school closures could deepen inequality, in access to quality education and learning, especially for those in rural localities, of a lower socio-economic background and disadvantaged groups.

The Impact of COVID-19 on Education Systems in the Commonwealth explores these and other issues including the intersections of the pandemic with poverty and gender. It highlights initiatives and provides possible solutions. The publication is organised in four sections: systemic response and education sector resilience; access, equity and inclusion; innovative solutions; and adaptation and well-being in challenging times and environments. It is the result of a collaboration to engage early career and senior researchers in the agility of rapid research on the impact of a health crisis on the education sector. It provides an insight to stakeholders on early interventions and mitigation strategies set in place some two months into the pandemic, with findings that were to be accentuated as the pandemic spread and reversed educational gains.

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