Susy Ndaruhutse with Anna Riggall, Ella Page,
Elnaz Kashefpakdel and Sonia Guerriero

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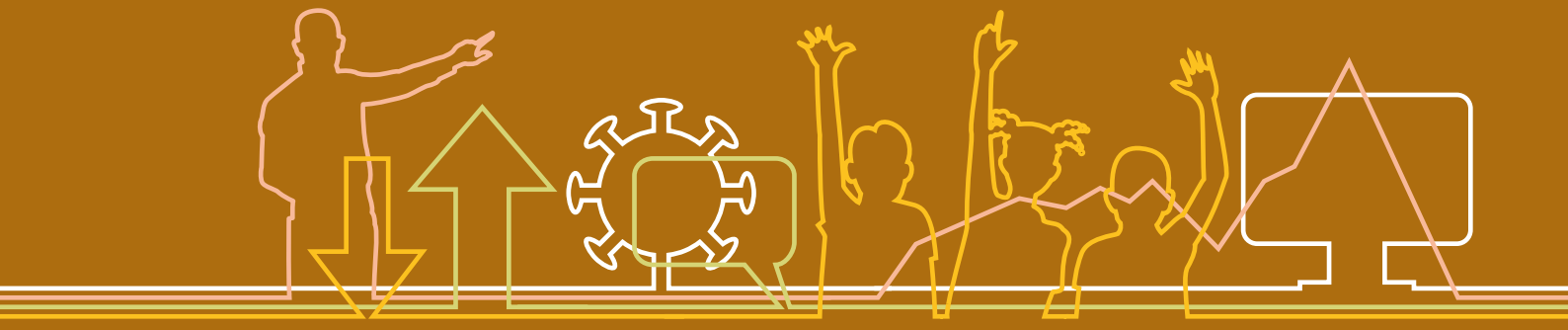
Learning loss, learning gains and wellbeing: a review of policy and grey literature



Education Development Trust

In support of
COVID-19
Global Education Coalition
Launched by UNESCO

Contents

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Education Development Trust

Education Development Trust is an international, not-for-profit, organisation working to improve education outcomes and the transition from education to work, through expert research on what works, and the intelligent design and delivery of highly contextualised improvement programmes which operate at scale.

At Education Development Trust, our vision is a world in which all lives are transformed through excellent education. We combine global research and our longstanding expertise with regional knowledge to inform education policy and practice and deliver programmes around the world. Through our work and expertise – which spans from early years education right through to postschool careers – we seek to strengthen education systems, transform teaching and learning, ensure effective transitions into work, and contribute to global responses to key education challenges.

We improve national learning outcomes by informing education policy and putting our knowledge into action in our programmes and consultancy work. We work in varied contexts all over the world, in education systems as diverse as those in Brunei, Kenya, England, Rwanda and Dubai. This often includes challenging environments, hard-to-reach localities and marginalised communities where the need is greatest. In all these locations, we use evidence-based methods to raise education standards, deliver innovation in schools, help teachers to improve their teaching quality, empower educators to effect sustainable and cost-effective transformation in their schools, and reduce disparities in educational outcomes.

We are a trusted partner of governments, academics and multilateral agencies across the globe. Our work helps to drive global understanding of education solutions, and we support global dialogues among international policymakers on education system improvement.

Our expert knowledge, programme design and implementation expertise are also deployed in delivering Ofsted-rated Outstanding careers services in England, and in owning and managing a family of independent schools, in which we put our knowledge about excellent teaching and learning into practice.

To achieve all this, we draw on our programme of public domain research that highlights 'what works' in education reform and invest in research and development to create globally leading and innovative methodologies, helping to make government ambitions for better education systems a reality.

Please visit **www.educationdevelopmenttrust.com** for more information.

Education Development Trust and UNESCO: a collaborative research programme

Education Development Trust is a member of UNESCO's Global Education Coalition.

> *The Global Education Coalition launched by UNESCO is a platform for collaboration and exchange to protect the right to education during this unprecedented disruption and beyond. It brings together more than 175 members from the UN family, civil society, academia and the private sector to ensure that #LearningNeverStops.*[1]

Covid-19 has caused considerable disruption to education around the world. Disadvantaged and marginalised learners are being particularly hard hit. Naturally, throughout the pandemic, the focus of much attention has been on how to open schools safely with a preoccupation with the hygiene and social distancing considerations. A shift is noticeable and welcome. With schools in many jurisdictions reopening partially or fully there is a growing interest in the immensely important area of recovering the lost learning that has occurred while learners have been away from face-to-face education.

Teachers are already in the spotlight more than ever, and the post-Covid-19 return to face-to-face learning will see this increase. Our teachers, globally, will be charged with leading learning recovery. As school systems continue to reopen, teachers will need to respond to students' academic losses (and gains), but also to their socio-emotional wellbeing. To assist teachers to support learning recovery there is the need to:

- Understand the extent of learning loss (or instructional TIME loss) and learning gains resulting from protracted school closures
- Understand how the suddenness and uncertainty around the health crisis and school closures have impacted students' social-emotional wellbeing – and how this may be affecting learning
- Investigate the responses of schools and teachers to support learning recovery.

Education Development Trust and UNESCO are collaborating on a research initiative to explore these themes with a focus on the most marginalised students. Our work will provide information to help teachers, schools and governments:

- Tackle a range of issues from levelling learners to the transformation that education systems must undergo to make this possible
- Understand and respond to the impact of crises and interruptions in educational pathways (for example from poverty and marginalisation) that lead to learning loss
- To assist teachers to support students as they return to school.

This report documents an analysis of policy and grey literature. It is one output from the first phase of our collaboration and links are made to two other outputs:

[1] See https://en.unesco.org/covid19/educationresponse/globalcoalition

1. A rapid evidence assessment (REA) of the academic literature

2. An overarching summary paper drawing out key messages and introducing the next phase of the collaboration.

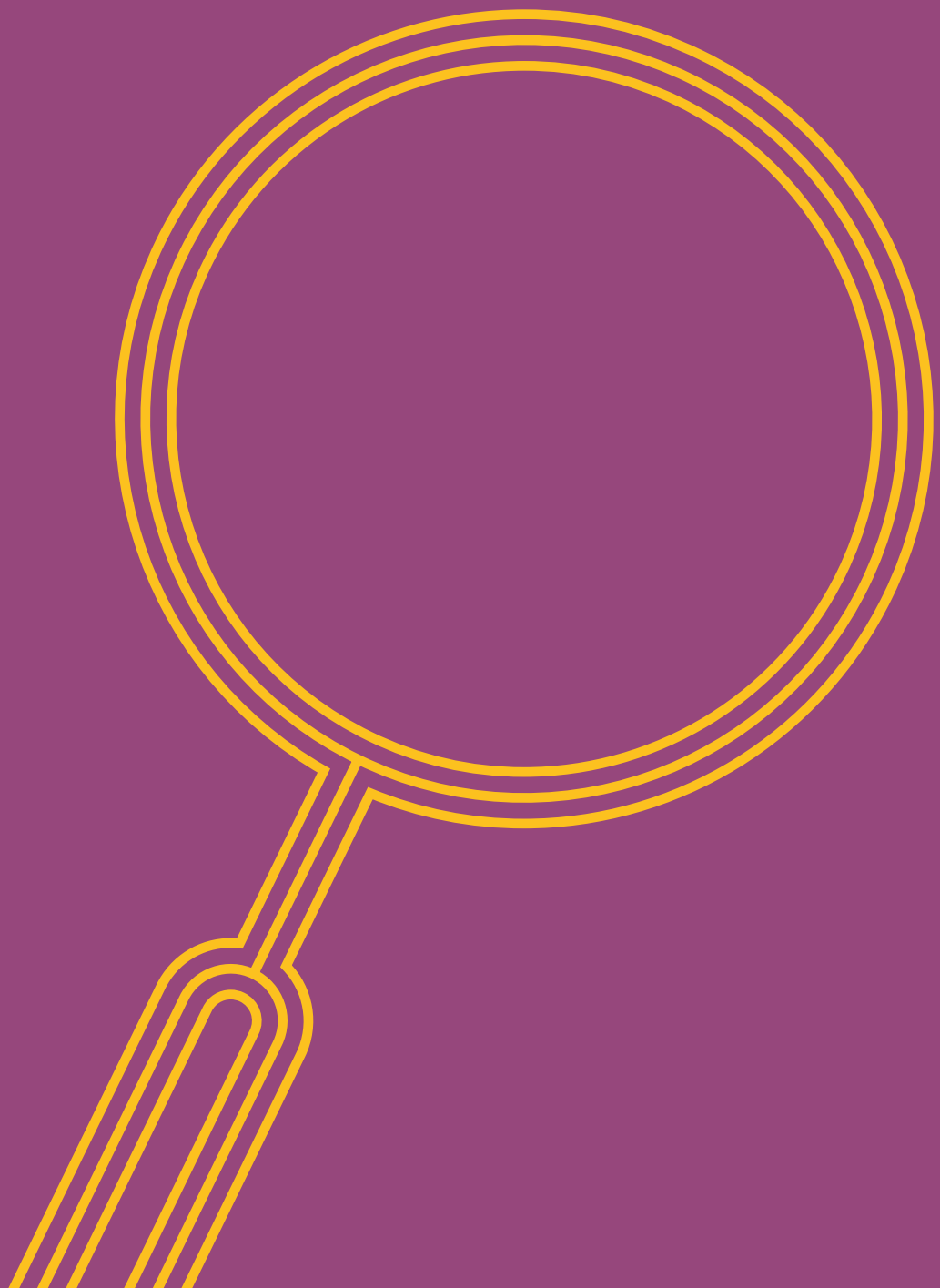
The work reported here has benefited from feedback and discussions with colleagues from UNESCO's Division for Policies and Lifelong Learning Systems and the UNESCO Institute for Statistics.

Acronyms

AEP	Alternative Education Programme
AEWG	Alternative Education Working Group
ALS	Alternative Learning System (The Philippines)
ATP	Annual Teaching Plan
BE-LCP	Basic Education – Learning Continuity Plan (The Philippines)
CASEL	Collaborative for Academic, Social, and Emotional Learning
CBE	Complementary Basic Education
CDI-S	Children's Depression Inventory-Short
EGRA	Early Grade Reading Assessment
GAGE	Gender and Adolescence: Global Evidence
ICT	Information and Communications Technology
ILO	International Labour Organisation
INEE	Inter-Agency Network for Education in Emergencies
LFPS	Low-Fee Private Schools
LMICs	Low- and Middle-Income Countries
MBW	My Better World (CAMFED programme)
MENA	Middle East and North Africa
MoE	Ministry of Education
NGO	Non-Governmental Organisation
NIDS-CRAM	National Income Dynamics Study – Coronavirus Rapid Mobile Survey (South Africa)
PISA-D	Programme for International Student Assessment for Development
REAL	Research for Equitable Access and Learning (University of Cambridge)
RISE	Research on Improving Systems of Education
SDG	Sustainable Development Goal
SEL	Socio-Emotional Learning
SMS	Short Message Service
STEM	Science, Technology, Engineering and Mathematics
TaRL	Teaching at the Right Level
TIMMS	Trends in International Mathematics and Science Study
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development

Chapter 1

School closures and learning – the status quo

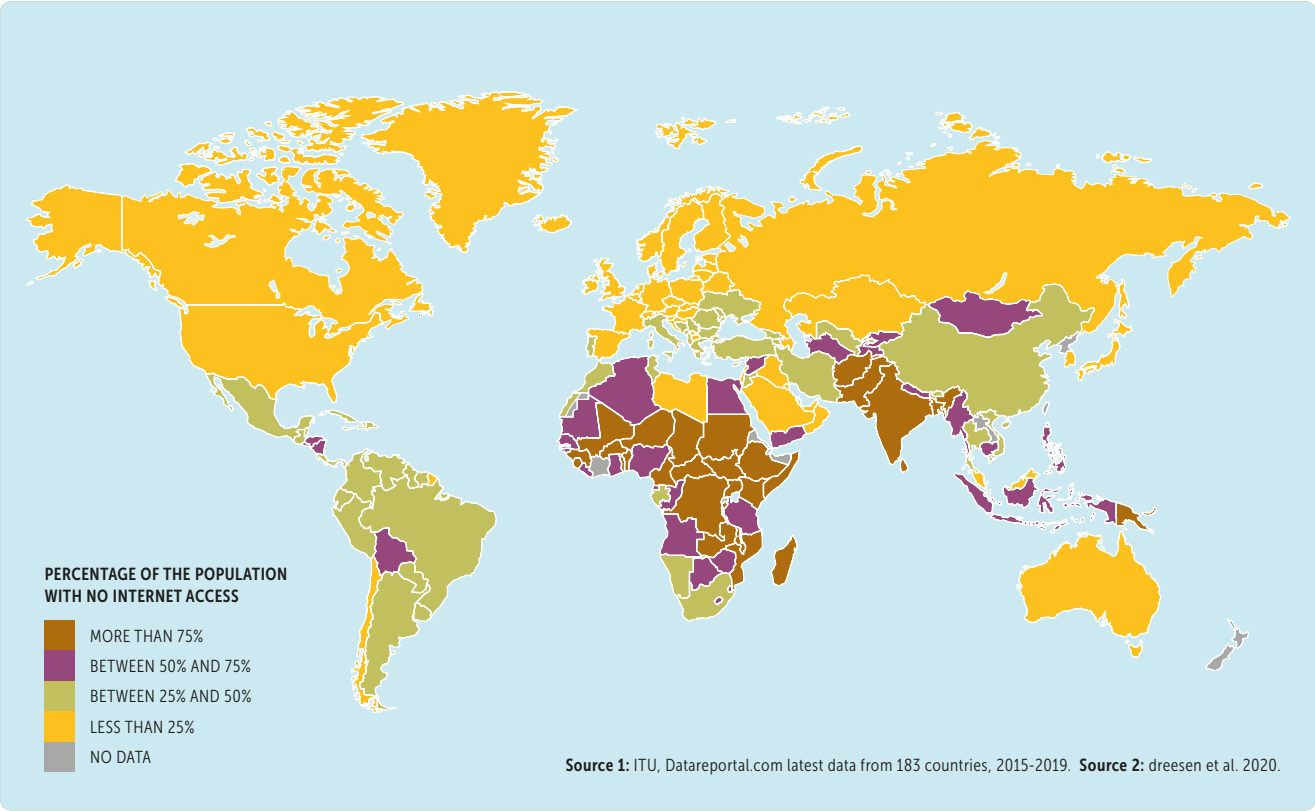


As Covid-19 became a pandemic in early 2020, schools were closed in the majority of countries across the world affecting over 1.5 billion learners.[2]

There were already 258 million children and youth out-of-school. In most countries, ministries of education (MoEs), schools and teachers moved to providing some remote teaching and learning through different technologies. However, with the significant digital divide both between and within countries, in many low- and middle-income countries (LMICs), especially outside of the big cities and towns, the majority of learners had limited or no access to formal learning due to lack of connectivity and/or no computer, mobile device, television, radio or electricity in the home. This was even more of a stark challenge in Sub-Saharan Africa, where the World Bank's *Facing Forward* report[3] which reports on four categories of education system maturity in Africa (established, emerged, emerging and delayed), highlights the big discrepancies in access to distance learning and information and communications technology (ICT) between established systems (e.g. Kenya and South Africa) and emerging or delayed systems (especially francophone countries). Even within Kenya, one of the most established systems, there is a big digital divide.[4]

> The significant digital divide both between and within countries, in many low- and middle-income countries (LMICs), meant the majority of learners had limited or no access to formal learning.

FIGURE 1: THE DIGITAL DIVIDE – PERCENTAGE OF POPULATION WITH NO INTERNET ACCESS



Source 1: ITU, Datareportal.com latest data from 183 countries, 2015-2019. **Source 2:** dreesen et al. 2020.

[2] https://en.unesco.org/covid19/educationresponse [3] World Bank, (2018) [4] Miller, (2020)

In July 2020, **UNESCO**[5] estimated that across 180 countries and territories, 10.9 million learners at primary and secondary level were at risk of not returning to school in 2020. They estimated that in Sub-Saharan Africa, adolescent girls face a higher risk of not returning to school due to their increased vulnerability during school closures to early and forced marriage, sexual exploitation and abuse, early and unintended pregnancy, and female genital mutilation.

In August 2020, the **Mastercard Foundation** specifically looked at the impact of Covid-19 on secondary education in Africa.[6] It highlighted how there is increasing demand for secondary education due to more children completing primary education and a growing youth population with Africa's youth population expected to nearly double by 2050. Yet at the same time, economic growth in Africa is projected to decline as a result of Covid-19 which will impact negatively on the financing of secondary education at a time when it most needs increasing investment. The disadvantaged are likely to suffer more acutely due to the loss of livelihoods that will then impact on families being able to afford to send their children to secondary school. They will also be impacted more by the digital/technology divide which exacerbates disadvantage for young people as they are less able to access distance learning despite the effort of many governments to implement multi-faceted strategies – on-line, radio, television, newspaper and distribution of printed materials – to ensure continuity of learning. Depending on the length of the period of school closures, the Covid-19 pandemic could also set back recent gains in access and learning, with adolescent girls and young people living with disabilities being particularly vulnerable.

The Covid-19 pandemic could set back recent gains in access and learning, with adolescent girls and young people living with disabilities being particularly vulnerable.

In November 2020, the **World Economic Forum**[7] looked at the impact of Covid-19 on children in Africa, basing its analysis on a UNICEF report[8] from the same month, and it concluded:

1. African nations have done relatively well in their fight against the pandemic.

2. However, the economic impact on Africa has been huge.

3. The impact on children has also been acute:
a. The child poverty rate has increased 10% since the start of 2020;
b. An estimated 250 million children received little or no education during school closure;
c. Up to 50 million children lost their one meal a day that had been provided at school with over 40 million of these children affected for at least six months; and
d. There has been an increase in early marriage, transactional sex and teen pregnancy as well as in sexual, physical and emotional abuse.

4. There has been very little financial support for at-risk families.

5. Mobile money provides an opportunity to leapfrog the road to recovery by enabling cash transfers to reach vulnerable families, many of whom live in informal settlements and do not have bank accounts.[9]

[5] UNESCO, (2020a) [6] Mastercard Foundation, (2020) [7] Holmes à Court, (2020) [8] UNICEF, (2020a) – for later sources quoting similar findings see also UNESCO, (2021a) and UNESCO, (2021b).
[9] Africa had 181 million active mobile money users in 2019. Just over half of the 1 billion registered mobile money accounts are registered to users in Sub-Saharan Africa or the Middle East and North Africa. See https://www.mckinsey.com/industries/financial-services/our-insights/mobile-financial-services-in-africa-winning-the-battle-for-the-customer for more information.

West and Central Africa

In West and Central Africa, around one third of the world's out-of-school children and adolescents were out of school before the pandemic, equating to 41 million. In October 2020, six months after schools closed under lockdown measures, only seven out of 24 countries[10] had been able to reopen. UNICEF found that in spite of efforts to support remote learning, almost 50% of school children across the region were not able to access it.[11] Furthermore, in Burkina Faso, Mali and Niger, 776,000 children were unable to attend school during the entire year due to insecurity.[12]

East Africa

In East Africa, Kenya cancelled the 2019-20 academic year and only reopened schools in January 2021.[13] In Rwanda, schools started reopening in November 2020 after eight months of closure, with the start of the academic year changing from January to September, a reform the government had been thinking to implement for a while. This resulted in students returning to the grade they were in before schools closed, so in effect, repeating the school year.[14] In Nwoya district in northern Uganda, between April and June 2020 when schools were closed, rates of child labour tripled and cases of both teenage pregnancies and child marriage doubled.[15]

> In Rwanda, schools of excellence, were more confident than other schools that their schools were delivering effective learning.

A study by the **REAL Centre**[16] on learning during lockdown in Rwanda summarises findings from phone surveys with school leaders and Science, Technology, Engineering and Mathematics (STEM) teachers. Schools are categorised by whether or not they are schools of excellence (which are well equipped with ICT equipment) to enable reporting on differences between these types of schools. Interviews took place in August 2020. The majority of teachers in both types of schools reported that remote lessons were effective.[17] However, there was a stark difference in teachers' confidence in their school's ability to deliver effective learning. Nearly two thirds of teachers in schools of excellence expressed confidence compared to less than a third of teachers in other schools. The latter group highlighted limited technical equipment and Internet connectivity as the main reasons for their low confidence.

Despite this, across both types of schools, 75% of teachers reported being confident in delivering distance learning with younger teachers feeling more confident that older teachers. However, nearly 60% of school leaders and teachers believed that students from poor families were benefitting least from distance learning. During the period of school closure, 48% of school leaders and 31% of teachers in the sample reported engaging in continuous professional development. The three biggest challenges expected by head teachers and teachers in Rwanda on school reopening were:

1. Students dropping out;[18]

2. Student performance worsening (learning losses);[19] and

3. Teenage pregnancy.'[20, 21]

[10] Benin, Burkina Faso, Cabo Verde, Chad, the Republic of the Congo, Equatorial Guinea and Sierra Leone. [11] Hodal, (2020) [12] Norwegian Refugee Council, (2020) [13] Deutsche Welle, (2020) [14] Laterite, (2021) [15] Wagner, (2021) [16] Carter et al., (2020) [17] 56% for radio lessons, 74% for television lessons, 77% for online lessons and 67% for unstructured supplementary service data-based quizzes [18] 32% of school leaders, 41% of teachers [19] 18% of school leaders, 21% of teachers [20] 12% of school leaders, 16% of teachers [21] Ibid, page 16

The **Education Development Trust-led Building Learning Foundations programme**[22] in Rwanda conducted an inequity impact assessment of primary Grade 2 and 3 students. It found that the majority of parents were unaware of the existence of the range of learning platforms (radio lessons, telephones, television and other web-based channels) that were available during the period of school closures. While radio ownership is understood to be widespread, only 30% of surveyed families said they had a radio while 42% of children stated they had followed radio lessons. Just under 50% of parents reported doing any kind of supplemental learning in their households which highlights the likelihood of learning losses especially for the most disadvantaged children. As an example, 26% of parents who had a child with a disability said their children were learning nothing at home.

South Africa

In South Africa, the African nation with the highest incidence of Covid-19 cases,[23] a report in July 2020[24] in the early months of the pandemic highlighted that even before school closures, 2.5 million children were experiencing hunger and nearly one third were malnourished. It concluded that these figures have worsened during the lockdown as many workers lost their income and children missed out on school meals due to schools being closed. The percentage of respondents reporting receiving no income increased from 5.2% before lockdown to 15.4% six weeks into lockdown and was due to their businesses closing or a decrease in demand for goods and services.[25] The percentage of respondents reporting experiencing hunger increased from 4.3% to 7% (this is lower than the national average outlined in the General Household Survey).[26]

In South Africa, even before school closures, 2.5 million children were experiencing hunger and nearly one third were malnourished.

This example from South Africa highlights the importance of recognising the indirect impact of the pandemic on education, which through reduced family income and increased hunger may impact further on learning losses over above any direct effect due to school closures.

The non-state education sector

Research by the **Global Schools Forum** explored the impact of Covid-19 on the non-state education sector, particularly low-fee private schools (LFPS), in LMICs. It drew on examples from Ghana, Kenya and Nigeria and showed the vulnerability of LFPS, many of which serve informal settlements and other low-income communities. Most LFPS have small revenue streams which have been impacted due to school closures because many parents were unwilling or unable to pay school fees due to losing work opportunities as a result of economic shutdowns. This has resulted in challenges paying staff and has forced some schools to close down. For example, in Kenya, 191 schools have closed, impacting 51,000 learners

[22] Cozzolino et al., (2021) [23] https://covid19.who.int [24] Van der Berg, (2020) [25] Niazi and Doorly, (2020) [26] Statistics South Africa, (2020)

and making 1,400 teachers and non-teaching staff unemployed.[27] Across Sub-Saharan Africa, nearly half of all teachers in private schools (around 15% of all teachers) are projected to have experienced a 50% salary cut.[28] On 1 April 2020, Bridge International Academies, a large chain of LFPS in Kenya, sent teachers and staff on compulsory leave with them not expected to work or receive salary, although they would continue to receive healthcare insurance and a monthly gratuity equivalent to 10% of their salary. This was initially for a period of two months but with the possibility of extension.[29]

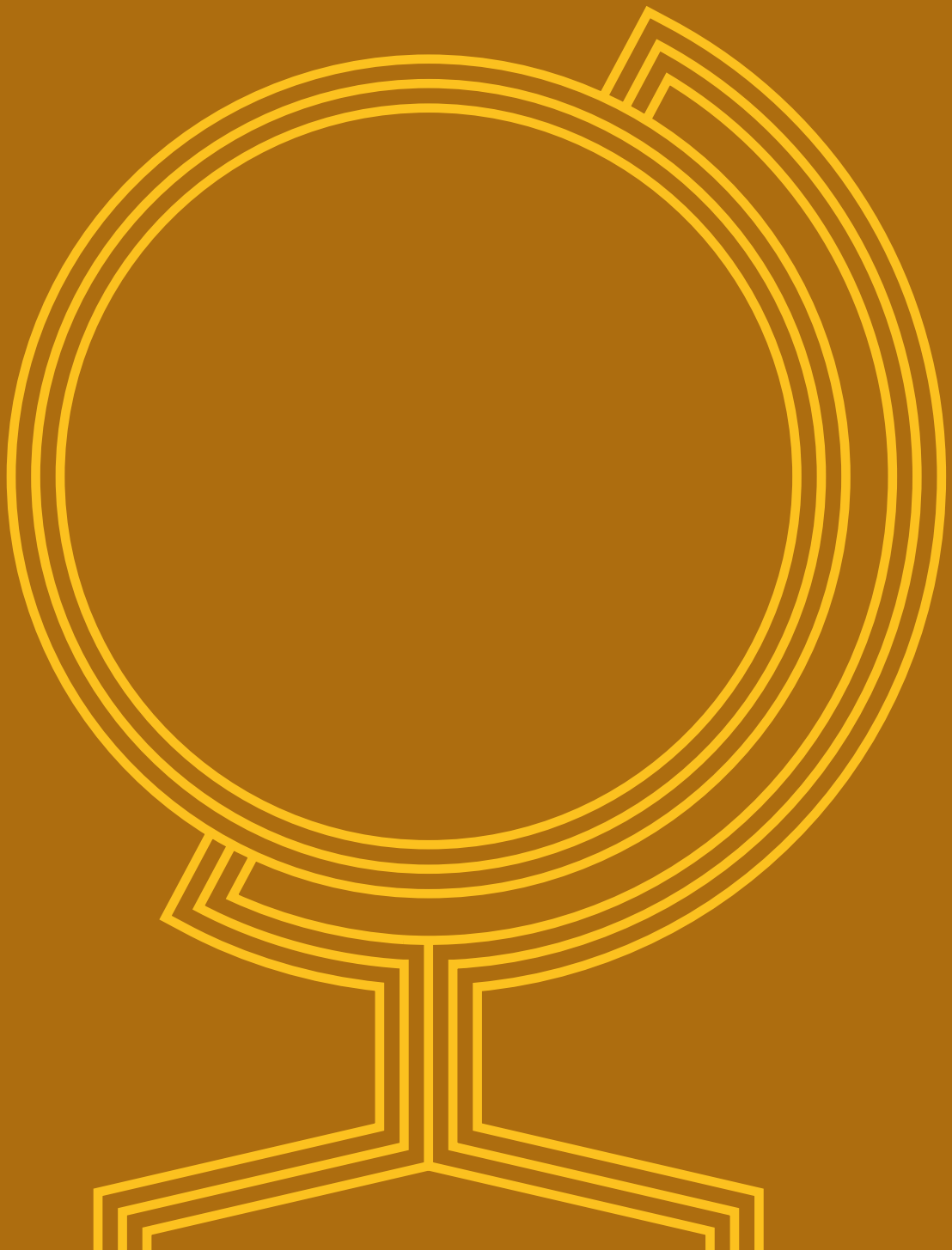
LFPS and the students they serve have poor access to technology which has made it very difficult for much remote learning to take place. This will inevitably result in reduced instructional time and a potential increase in the risk of dropping out of school for those students who did not have access to technology.

Permanent closures of many LFPS could result in children trying to transfer to public schools, putting additional pressure on these schools when they reopen and potentially causing some students to drop out.

[27] Otieno, (2020) [28] Teachout and Zlpfel, (2020), pages 5-6 [29] Wafula, (2020)

Chapter 2

Global and LMIC projections of academic learning losses



Global and LMIC studies project significant, sustained learning losses due to Covid-19.

There are five main global or LMIC studies that estimate or project expected learning losses due to Covid-19 and all project similar results. The studies are as follows:

1. World Bank study uses data from 157 countries;

2. Research on Improving Systems of Education (RISE) study uses Programme for International Student Assessment for Development (PISA-D) data from seven LMICs;

3. RTI study analyses Early Grade Reading Assessment (EGRA) data originally from eight LMICs;

4. UNICEF research paper focusses on Multiple Indicator Cluster Surveys (MICS6) with data from five LMICs;

5. An academic study which draws on EGRA data from five African countries.

World Bank study

The World Bank[30] study presents the results of simulations of learning loss considering a period of three, five and seven months of school closure and different levels of mitigation effectiveness, resulting in optimistic, intermediate and pessimistic global scenarios. The simulations reveal that Covid-19 could result in a loss of between 0.3 and 0.9 years of school adjusted for quality, bringing down the effective years of basic schooling the average student completes in their life from 7.9 years to between 7.0 and 7.6 years. The study also projects that nearly 7 million primary and secondary students could drop out of school just due to the income shock of Covid-19.[31] The current cohort of students could face a reduction of between US$ 355 and US$ 1,408 in yearly earnings equating to lost lifetime earnings of between US$ 6,472 and US$ 25,680. Inequality and exclusion are likely to be worsened if students from disadvantaged or marginalised groups are more adversely affected by school closures. Financially, a global school shutdown of five months could generate learning losses that have present monetary value of US$ 10 trillion, which equates to governments losing around 16% of their investments in basic education for the current cohort of students. Even the most optimistic simulations would result in a significant setback in achieving both Sustainable Development Goal 4 (SDG4) for Education' and the goal of halving the percentage of learning poor, unless rapid and dramatic remedial action is taken.

In a scenario where no remediation is provided and there is low mitigation effectiveness for the effects of school closures, simulations project learning poverty[32] increasing globally from 53% to 63% of primary school age children.[33] Sub-Saharan Africa was the region that had the highest learning poverty before Covid-19. Reducing learning poverty in this region post-Covid-19 will be a significant challenge with many students coming out of the pandemic in a worse learning crisis than in other regions of the world.

Key findings from World Bank study

- Covid-19 could result in a loss of between 0.3 and 0.9 years of school adjusted for quality.
- Nearly 7 million primary and secondary students could drop out of school.
- The current cohort of students could face a reduction of between US$ 355 and US$ 1,408 in yearly earnings equating to lost lifetime earnings of between US$ 6,472 and US$ 25,680.
- Simulations project learning poverty increasing globally from 53% to 63% of primary school age children.

[30] Azevedo et al., (2020) [31] UNESCO figures estimate similarly high rates of drop out are to be expected. They estimate that in 2021 alone drop-outs could total 4.3 million learners (UNESCO, 2021a). [32] 'Learning poverty' is defined by World Bank and UNESCO Institute for Statistics as inability to read and understand simple text by age 10. The approach to calculating learning poverty includes the share of children who have not achieved minimum reading proficiency (as measured in schools) and is adjusted by the proportion of children who are out of schools and assumed not able to read proficiently) – see Learning Poverty (worldbank.org) for more details. [33] Azevedo, (2020)

RISE study

The RISE study[34] uses PISA-D assessment data from Cambodia, Ecuador, Guatemala, Honduras, Paraguay, Senegal and Zambia and a calibrated pedagogical production function model[35] to estimate potential long-term losses to children's education due to Covid-19 school closures. Without mitigation, children could lose over a year's worth of learning from a 3-month school closure period, with learning losses continuing to accumulate even after children return. The model factors in potential gains from two mitigation strategies:

1. Remedial support; and

2. Remedial support with reorientation of the curriculum.

Remedial support on return to school could reduce this loss by half. Remedial support coupled with long-term reorientation of the curriculum to be more aligned with children's learning levels could mitigate the long-term learning loss. It could also exceed the counterfactual of no shock by more than a year's worth of learning, i.e. long-term system improvements could surpass pre-Covid learning trajectories by "building back better". The paper is clear the model may be optimistic for three reasons:

1. Simulations assume enrolment and completion rates maintain pre-Covid levels which means learning loss estimates may be optimistic with any reduction in children returning to school resulting in greater learning losses.

2. The model does not build-in macroeconomic shocks e.g. cuts in government spending on education or in parental income (the reality is that the World Bank forecasts that budgets could fall by as much as 4.2% in Sub-Saharan Africa).

3. The model does not allow differentiation across countries as it is based on average learning across PISA-D assessments. In reality, some countries, especially many in Sub-Saharan Africa, would be performing even pre-Covid at lower-than-average PISA-D levels.

Key findings from RISE study

- Without mitigation, children could lose over a year's worth of learning from a 3-month school closure period, with learning losses continuing to accumulate even after children return.
- Remedial support on return to school could reduce learning loss by half.

RTI study

The RTI study[36] has been growing and now includes 87 datasets from 15 countries. It builds on previous research undertaken in the USA and in Malawi[37] which both examine the learning loss that takes place over the long summer holidays. The study takes measures of learning in two successive grades of primary school to estimate normal expected year-on-year growth in reading, factoring in learning loss that takes place over the longer summer holidays.

An initial analysis covered 27 existing datasets including eight LMICs – Egypt, Jordan, Kenya, Malawi, Nepal, Philippines, Tanzania and Uganda – with a focus on oral reading fluency by grade with data preceding the Covid-19 crisis. The analysis examined full distributions of scores rather than just looking at averages. Starting with the Philippines, and using a simplified analysis approach, the authors found 75% of the school population experienced year-on-year learning gains of

[34] Kaffenberger, (2020) [35] Kaffenberger and Pritchett, (2020) developed a pedagogical production function which models the learning gained by children at different points in a student distribution in a year of schooling. [36] See DeStefano, Piper and Stern, (2020), Cummiskey and Stern, (2020) and Cummiskey, Stern and DeStefano, (2020) – a series of three blogs that discuss their analysis. [37] Slade et al., (2017)

a constant amount. For those at the bottom tail of the distribution (the other 25%), learning losses are greater, and for those at the top tail learning losses are smaller, demonstrating inequity in learning losses. Similar patterns were found across the datasets and in other countries, with the learning losses from approximately 75% of people being in the middle of the distribution. More work needs to be done on estimating learning losses for the tails. For Covid-19 related learning loss, the projections also take into account country-level information on the amount of time missed, when the period of school closure took place (beginning, middle or end of the school year) and what other learning opportunities were provided for students during school closures. The key message is that, in terms of learning/content:

> *"students can be expected to return to school up to half a year behind where they were when the school year was interrupted and more than a year behind where they would have been without school closures".*[38]

There are two main contributors to these losses:

1. Disruption of learning during the later part of the school year (mid-March); and

2. Not having access to other learning opportunities during school closures.

This means skills will atrophy more and more as time away from school has increased.

The projections show that for countries where schools closed late in the school year (e.g. students in Ethiopia and Liberia had completed around two-thirds of the school year and were out of school for 34 and 30 weeks respectively), students are likely to have regressed in their learning to some point nearer the beginning of the school year. By contrast, for those countries where schools closed early in the school year (e.g. Uganda where only 17% of the school year had been completed and schools were predicted to be shut for 45 weeks), students are likely to have regressed to some point near the middle of the previous grade. For other countries that closed later in the year, like Tanzania, because schools were only closed for 17 weeks, the learning loss will be minimal. However, for the early grades in Tanzania and in most of the other countries, the projections imply there are likely to be more children returning to school having forgotten how to read, and that this will be a particular issue for those at the lower end of the learning distribution as well as for disadvantaged learners, thus threatening to worsen learning inequality.

Key findings from RTI study

- Students can be expected to return to school up to half a year behind where they were when the school year was interrupted and more than a year behind where they would have been without school closures.
- For those countries where schools closed late in the school year, students are likely to have regressed in their learning to some point nearer the beginning of the school year.
- For those countries where schools closed early in the school year, students are likely to have regressed to some point near the middle of the previous grade.

TABLE 1: SUMMARY OF THE IMPACT OF LATE AND EARLY SCHOOL CLOSURE DISRUPTION

Timing of Covid-19 disruption	Country	Language	Grade	% of schooling completed at Covid-19 break	Weeks of Covid-19 break*
Late disruption	Jordan	Arabic	3	67%	47
	Ethiopia	Amharic	3	67%	35
	Liberia	English	3	67%	39
	Philippines	Bahasa-Sug	3	94%	29
Early disruption	Uganda	Luganda	3	17%	45
	El-Salvador	Spanish	3	17%	34
	Tanzania	Kiswahili	3	21%	15
	Kenya	English	2	27%	41

Note: School return dates have not been finalised in all countries. **Source:** Cummiskey, Stern and DeStefano, (2020).

[38] Cummiskey, Stern and DeStefano, (2020)

UNICEF research paper

A UNICEF Innocenti research paper[39] estimated the effects of school closures on foundational skills using 2017-2019 data from the Foundational Learning Skills module of the Multiple Indicator Cluster Surveys (MICS6) which tests reading skills for children in and out of school. The analysis focused on five countries (Bangladesh, the Democratic Republic of the Congo, Madagascar, Pakistan (Punjab region) and Zimbabwe) covering two age groups (9-11 years and 12-14 years). Regression analysis found that children aged 9-11 who were out of school at the time of the survey but in school the previous year were between 11 and 43% less likely to acquire foundational reading skills than those children who remained in school. Children aged 12-14 were likely to be between 5 and 54% behind children who remained in school.

Key finding from UNICEF research paper

- Children aged 9-11 who were out of school at the time of the survey but in school the previous year were between 11 and 43% less likely to acquire foundational reading skills than those children who remained in school, whilst children aged 12-14 were likely to be between 5 and 54% behind children who remained in school.

Academic study

A study estimating learning loss in Africa due to Covid-19 school closures,[40] drawing on EGRA data from Ethiopia, Kenya, Liberia, Tanzania and Uganda, suggests that children in these countries have lost over a year's worth of learning. In looking at the potential longer-term impacts of this, the projections show that this could increase over time. The projections suggest learning deficits for a child in Grade 3, if not remedied through targetted instruction and structured pedagogy reforms, could result in lost learning of 2.8 years by Grade 10.

Key findings from the academic study

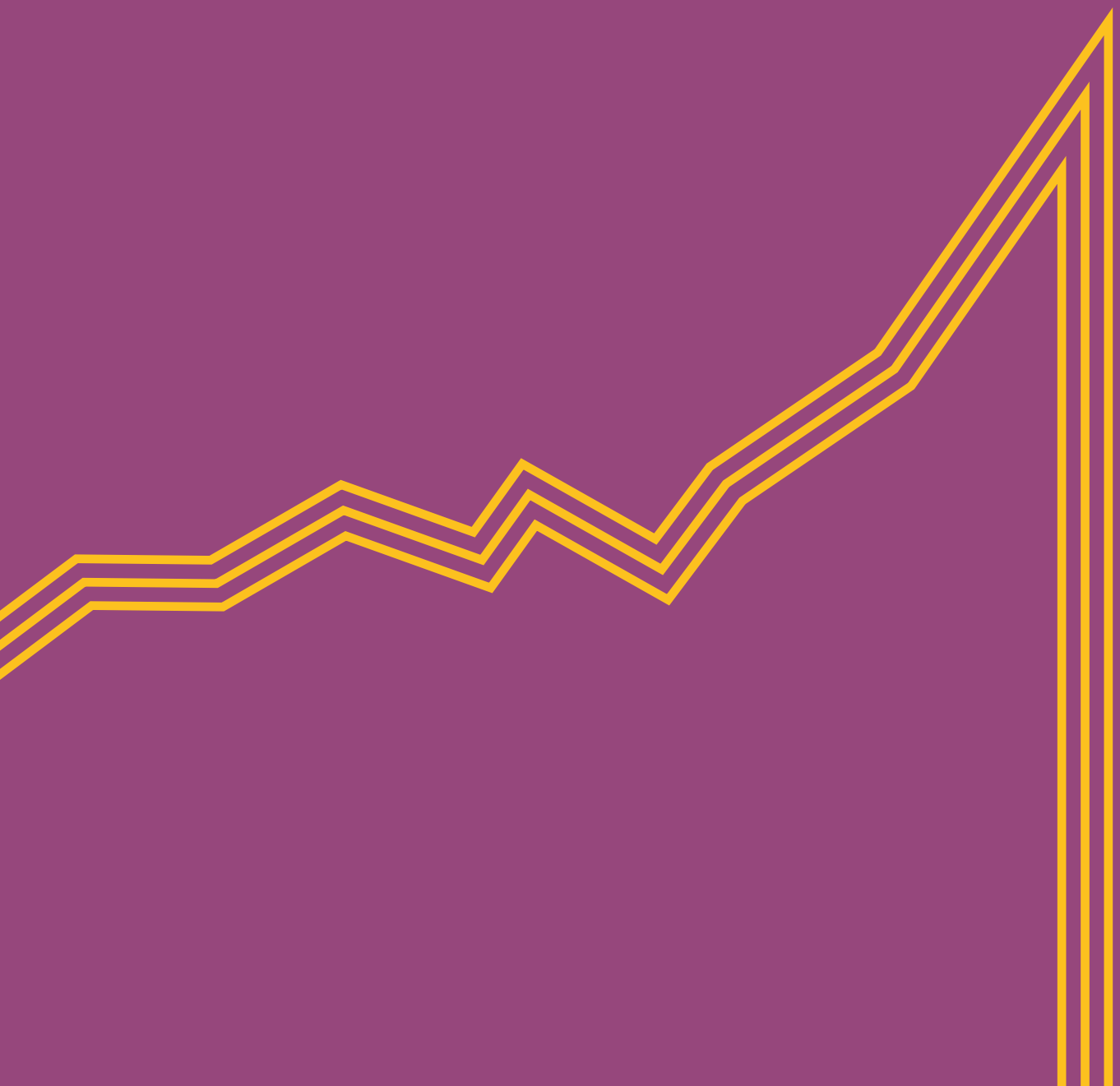
- Children from Ethiopia, Kenya, Liberia, Tanzania and Uganda have lost over a year's worth of learning.
- Learning deficits for a child in Grade 3, if not remedied through targetted instruction and structured pedagogy reforms, could result in lost learning of 2.8 years by Grade 10.

[39] Conto et al., (2020) [40] Angrist et al., (2021b)


English
Pupil's Book
English Pupil's Book 1

Chapter 3

Country projections of academic learning losses



There are a number of interesting country-specific studies from LMICs as well as one from the United States that project quantitative estimates of learning losses due to Covid-19 school closures.

REAL Centre study, Northern Ghana

One study by the REAL Centre[41] focuses on learning losses amongst disadvantaged children in Northern Ghana who were previously out of school but then spent a year in a Complementary Basic Education (CBE) programme followed by a year in government schools. They were able to improve foundational skills. The overall research objective was to explore the learning loss experienced by marginalised children during the transition between CBE and formal schooling (children had a three month break between finishing the CBE programme and starting formal schooling). The study found that the estimate of learning losses is from just over half to more than 100% of the gains attained during the prior year. Overall, this equates to between 20 and 35% less learning progression than expected per month that students are not in school. Household and individual factors play a role in learning loss with the largest relative losses in learning for students being due to:

- Lacking motivation to study;
- Being unable to ask for help from adults in the household; and
- Lack of books and opportunities to engage in learning activity at home.

A key conclusion of the study is:

> *"Learning in schools will have to be only one way to continue to support children's learning. Learning at home and in communities has to be reimagined if rapid gains are to be achieved in the post-Covid 19 era."* [42]

Key finding from REAL Centre study

- The estimate of learning losses is from just over half to more than 100% of the gains attained during the prior year. Overall, this equates to between 20 and 35% less learning progression than expected per month that students are not in school.

RISE study, India

A study by the RISE programme[43] using data from the state of Utter Pradesh in India, has projected likely learning losses due to Covid-19 based on modelling from:

- Learning loss during normal summer vacation periods;
- Learning expectations for children in primary grades during a normal year;
- Realistic assumptions around how much catch-up is possible with appropriate remedial actions to tackle learning loss.

Key finding from RISE study

- Dedicated interventions that focused on foundational learning that have been implemented at scale in government schools can result in around a year of learning in just three months.

[41] Sabates, Carter and Stern, (2020) [42] Ibid, pages 27-28 [43] Banerji, (2020)

It found that dedicated interventions that focused on foundational learning that have been implemented at scale in government schools can result in around a year of learning in just three months, providing some hope of recovery and catch-up post-Covid-19.

Human Sciences Research Council study, South Africa

A study by the Human Sciences Research Council[44] projected learning losses due to school closures and disruptions in South Africa, applying the World Bank's learning curve scenario methodology to the South African Trends in International Mathematics and Science Study (TIMSS) data. The study compared projected learning losses in fee and no-fee schools. Projections showed higher learning losses in no-fee schools compared to fee schools with a larger proportion of students in no-fee schools obtaining mathematics scores below the cut-off score of 300 compared to fee schools. In fee schools, around 50% of children have a computer and 75% an Internet connection whereas in no-fee schools, the figures are 20% and 50% respectively. Around 50% of students in fee schools compared to around a third of students in no-fee schools have parents who have completed post-secondary education.

Key finding from Human Sciences Research Council study

- Projections showed higher learning losses in no-fee schools compared to fee schools.

National Income Dynamics study, South Africa

Another study from South Africa[45] projects learning losses based on data from the National Income Dynamics study – Coronavirus Rapid Mobile Survey (NIDS-CRAM).[46] It estimated that learning losses due to Covid-19 could last until at least 2023 (with remedial support enabling catch up to pre-pandemic trajectory after three years) and possibly as long as 2031 (without remedial support) depending on the success of efforts of the education system and teachers in helping students to catch up. Simulations indicate that actual days of school missed translate to 25% additional days of lost learning (e.g. 40 days of school closure could result in 50 days of equivalent lost learning). One potential extra mitigation factor for South Africa is that the school year is relatively long so school closures could result in a smaller percentage of the school year being lost in South Africa compared to other countries. The World Bank's simulation tool projections, coupled with historically high levels of unemployment in South Africa, suggest that drop out will not be the most serious outcome of the pandemic; however, Covid-19 nutrition shock could exacerbate learning losses for children who are malnourished and hungry.

Key findings from National Income Dynamics study

- Learning losses due to Covid-19 could last until at least 2023 and possibly as long as 2031, depending on the success of efforts of the education system and teachers in helping students to catch up.
- Covid-19 nutrition shock could exacerbate learning losses for children who are malnourished and hungry.

NWEA study, United States

An NWEA study[47] in the United States projected Covid-19 learning loss based on:

- Estimates from absenteeism literature; and
- Analyses of summer learning patterns of 5 million students.

[44] Reddy, Soudien, and Winnaar, (2020) [45] Gustafsson and Nuga, (2020) [46] The National Income Dynamics Study – Coronavirus Rapid Mobile Survey (NIDS-CRAM) is a nationally-representative panel survey of 7,000 South African individuals. Each person is phoned monthly and asked a range of questions on their income and employment, their household welfare, receipt of grants, and about their knowledge and behaviour related to Covid-19. [47] Kuhfeld et al., (2020a)

Its projections showed that students returning to school in September 2020 were likely to start with 63 to 68% of learning gains in reading and 37 to 50% of the learning gains in mathematics relative to a typical school year. However, it is important to note that this average is likely to mask inequalities with the top third of students potentially making reading gains and the bottom third are likely to experience even bigger average losses. A follow up study in September 2020 after schools reopened, which measured actual learning losses, found that for reading, students in Grades 3 to 8 performed similarly to the same-grade students at the beginning of the 2019 school year. However, in mathematics, the achievement was between 5 and 10% lower compared to the same-grade students the previous year. Interestingly, although it was projected that there were would be worse losses for those with more limited access to parental and technology support, there was no observable change in the student distribution relative to the pre-pandemic 2019 distribution.[48] This again provides some reason for optimism that actual learning losses may not be as high as projections have suggested.

Key findings from NWEA study

- The top third of students will potentially make reading gains and the bottom third are likely to experience even bigger average losses.
- For reading, students in grades 3 to 8 performed similarly to the same-grade students at the beginning of the 2019 school year.
- In mathematics, the achievement was between 5 and 10% lower compared to the same-grade students the previous year.
- Although it was projected that there would be worse losses for those with more limited access to parental and technology support, there was no observable change.

University College London blog, Netherlands and UK

A University College London blog[49] summarised who could be the winners and losers in education from Covid-19. This is more about which students are likely to lose or gain as a result of Covid-19, rather than directly about their learning. They cite a study from the Netherlands which found that the 8-week period of primary school closure resulted in average learning loss of 20% of the school year – equivalent to the period of school closure. The learning losses for students from less-educated families were actually around 55% higher whilst there was no sizeable difference in learning loss between low performing and high performing students. The Dutch government is funding national catch-up programmes for students who have experienced learning losses. The UK government is offering a similar scheme through a national tutoring programme and the provision of a catch-up premium to schools. The blog highlighted that as a result of Covid-19, the losers in the Netherlands were likely to be students in year 1 of secondary education in 2020-21 as it is estimated that 8% of students (including a disproportionate number of students with parents with low levels of education) were placed in a lower track than they would have been if they had sat the national primary school exam. By contrast, the winners were likely to be 2019-20 secondary school leavers going to university as estimates suggest 8% of these students would have received a lower outcome if they had sat the exam and many opted to re-sit their school-based assessments in three subjects (an option given by the Dutch MoE to all students to give everyone a fair chance) which resulted in a pass rate of over 98%. In the case of the UK, winners and losers are less obvious especially at the transition points (primary to secondary, secondary to higher and into the labour market) and the implementation of catch-up programmes is likely to be impacted by on-going interruptions to regular schooling, meaning the disadvantaged fall further behind.

Key finding from University College London blog

- Learning losses for students from less-educated families were actually around 55% higher whilst there was no sizeable difference in learning loss between low performing and high performing students.

[48] Kuhfeld et al., (2020b) [49] Ehren, Meeter and Kortekaas, (2021)

Chapter 4

Studies measuring actual academic learning loss as a result of Covid-19 school closures

A small number of studies have estimated actual learning loss due to Covid-19 and show losses are greatest for the most disadvantaged.

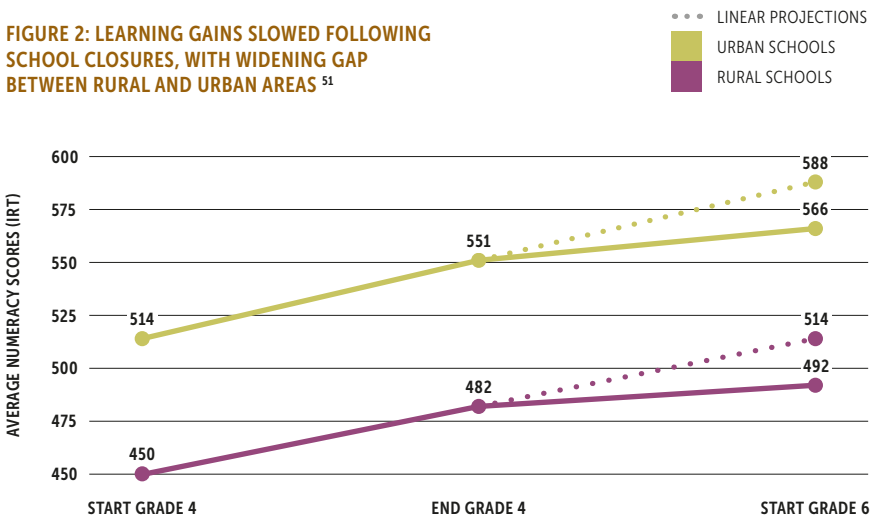
RISE Ethiopia/REAL Centre study, Ethiopia

A recent RISE Ethiopia/REAL Centre study[50] looked to measure the actual impact of Covid-19 on learning in Ethiopia. Schools were closed in March 2020 and started to open in phases from October 2020 with priority given to rural schools. Children continued into the next grade (e.g. those previously in Grade 5 joined Grade 6). As schools reopened, 45 days of catch-up classes were provided with the objective of covering key areas from the curriculum which were missed during the period of school closures. After the catch-up classes, the research team tested 3,050 students who had been assessed at the beginning of the 2018-19 school year. They found that 87% of students who reached the end of Grade 4 in 2019 returned to Grade 6 when schools reopened. This equates to a 13% dropout rate. There were no significant differences in return rates between boys and girls, or those in rural and urban areas. In analysing the learning levels of returning students, there was some improvement in numeracy scores after the catch-up classes since the children were previously tested, but learning levels were lower than expected assuming there had been no disruption to education. For children in urban areas, their learning progressed at under half the expected speed and for children in rural areas, their learning progressed at only one third of the expected speed, demonstrating a widening of learning inequalities between urban and rural children. There was no significant change in the gap between boys and girls.

Key finding from RISE Ethiopia/ REAL Centre study

- For children in urban areas, their learning progressed at under half the expected speed and for children in rural areas, their learning progressed at only one third of the expected speed, demonstrating a widening of learning inequalities between urban and rural children.

FIGURE 2: LEARNING GAINS SLOWED FOLLOWING SCHOOL CLOSURES, WITH WIDENING GAP BETWEEN RURAL AND URBAN AREAS [51]

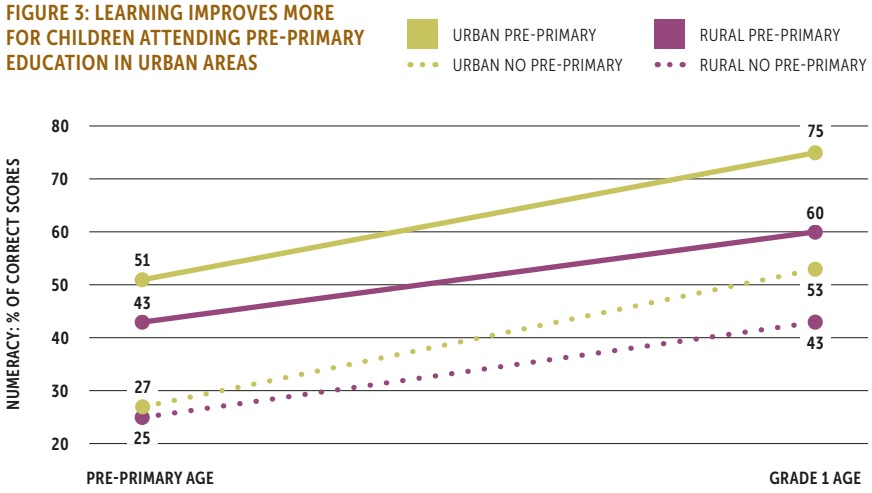


Note: The numeracy test was developed using a combination of questions from the previous Young Lives Ethiopia School Survey.
Source: RISE Ethiopia/REAL Centre study.

[50] Kim et al., (2021) [51] Ibid

The team of researchers also re-tested 2,645 children aged six and seven years old in schools and households who had been previously assessed in November-December 2019 prior to starting primary school. Most of these children had been attending a government pre-primary class prior to school closures with 22% returning to O-Class[52] and 70% entering Grade 1 of primary school. There was evidence that their numeracy scores had improved but inequalities widened between rural and urban children. The gap between urban and rural children nearly doubled for those who had attended pre-primary education, and was five times wider amongst children who had not attended pre-primary education. A similar pattern was found for those in different wealth quintiles but there was no significant change in the gap between boys and girls.

FIGURE 3: LEARNING IMPROVES MORE FOR CHILDREN ATTENDING PRE-PRIMARY EDUCATION IN URBAN AREAS



Note: The numeracy test was from the Measuring Early Learning Quality and Outcomes (MELQO), an international measurement tool for early childhood development, adapted for Ethiopia in 2017/18. The MELQO numeracy test was developed, piloted and validated in consultation with the National Educational Assessment and Examination Agency, the Ministry of Education and the Global MELQO technical board. The adaptation process showed that there is a strong link between the test items and the pre-primary curriculum in Ethiopia. **Source:** RISE Ethiopia/REAL Centre study.

Given households in rural areas had more limited access to technology, and rural teachers and families faced other challenges that meant they were less able to provide support to children's learning during the period of school closures, the widening of learning inequalities is not a great surprise, but is an urgent area for policymakers to address.

World Bank early systematic review, multi-country

A World Bank early systematic review on learning loss during Covid-19[53] identified eight studies between them calculating learning losses at different levels of education in Australia, Belgium, Germany, The Netherlands, Switzerland, Spain and the United States. Seven of them found evidence of learning loss among at least some of the students while one also found evidence of learning gains for a particular sub-group (university students in STEM subjects at one university in Spain). Four of the studies found increases in inequality with certain groups of students experiencing more severe learning losses than others.

Key finding from World Bank review

- Four of the eight identified studies found increases in inequality with certain groups of students experiencing more severe learning losses than others.

[52] O-Class in Ethiopia is a one-year preparatory program for children aged six, the year before entering Grade 1. [53] Donnellly and Patrinos, (2021)

University of Oxford and Swedish Institute for Social Research study, The Netherlands

A joint University of Oxford and Swedish Institute for Social Research study[54] looking at the effect of school closures on the performance of primary school students in The Netherlands took advantage of the fact that national examinations took place before and after lockdown so could be used to compare performance of students for the same period over the previous three years. The Netherlands has an equitable system of school funding, the world's highest rate of broadband access and schools were only closed for eight weeks. Using a data set of around 350,000 primary students, and comparing the two sets of examination results, the analysis revealed average learning loss of about 3% or 0.08 standard deviations, equivalent to one-fifth of the school year, so equivalent to the period of school closures. For students from less educated households, losses are up to 60% greater.

Key finding from University of Oxford and Swedish Institute for Social Research study

- Analysis revealed average learning loss of about 3% or 0.08 standard deviations, equivalent to one-fifth of the school year, so equivalent to the period of school closures. For students from less educated households, losses are up to 60% greater.

Education Endowment Foundation-funded study, England

An Education Endowment Foundation-funded study undertaken by the National Foundation for Education Research[55] tested how Grade 2 primary students' attainment in reading and mathematics were impacted by partial school closures during the first national Covid-19 lockdown in England from March to July 2020. Interim findings suggest that Grade 2 pupils were two months behind in reading and mathematics compared to Grade 2 pupils in previous years. For disadvantaged children, the gap in both reading and mathematics was seven months and appears to have widened compared to previous estimates.

Key finding from Education Endowment Foundation-funded study

- Grade 2 pupils were two months behind in reading and mathematics.
- For disadvantaged children, the gap in both reading and mathematics was seven months and appears to have widened compared to previous estimates.

[54] Engzell et al., (2020) [55] Rose et al., (2021)

Chapter 5

Potential mitigation strategies for reducing academic learning losses

While the global and country level projections paint a stark picture of probable learning losses as a result of Covid-19, which are likely to be exacerbated for disadvantaged students, the extent to which remote learning has been effective and the size of the losses will only be fully understood once children return to school.

Effective mitigation strategies could help to reduce the size of these losses and minimise the long-term effects.

At the end of June 2020, out of a total of 168 countries surveyed by UNESCO, UNICEF and the World Bank, nearly 70% of countries reported that they were planning to use remedial programmes to recover lost teaching time. However, only just over one third of countries planned to use accelerated learning programmes to help recover learning loss and just under one third included monitoring re-enrolment and attendance on school reopening in their plans.[56]

Nearly 70% of countries reported that they were planning to use remedial programmes to recover lost teaching time.

There is a range of different terms used for programmes that can help reduce academic learning loss. The main definitions are introduced in Table 2:

TABLE 2: TERMS USED FOR PROGRAMMES THAT CAN HELP REDUCE ACADEMIC LEARNING LOSS

Terminology	Definition
Accelerated education programme (AEP) (generally replacing the term accelerated learning programme)	A flexible, age-appropriate programme, run in an accelerated timeframe, which aims to provide access to education for disadvantaged, over-age, out-of-school children and youth. This may include **those who missed out on, or had their education interrupted by, poverty, marginalisation, conflict and crisis**. The goal of such a programme is to provide learners with equivalent, certified competencies for basic education using effective teaching and learning approaches that match their level of cognitive maturity. The programme is able to accelerate learning by **condensing the curriculum**, concentrating on basic skills and competencies, having smaller classes and allowing more time on learning tasks.[57]
Catch-up programme	A short-term transitional education programme for children and youth who had been actively attending **formal school** prior to an educational disruption, which provides students with the opportunity to learn content missed because of the disruption and supports their re-entry to the formal system.[58]
Remedial programme	Additional targeted support, concurrent with regular classes, for students who require short-term content or skill support to succeed in regular **formal programming**.[59]
Bridging programme	A short-term, targeted preparation course that supports students' success taking various forms such as language acquisition and/or other existing differences between home and host education curricula and systems for entry into a different type of certified education.[60]

[56] Nugroho et al., (2020), pages 4-5 [57] AEWG, (undated) [58] Ibid [59] Ibid [60] UNESCO, (2021c)

The Accelerated Education Working Group (AEWG)[61] has produced guidance on pathways for the return to school post-Covid. It draws on evidence from a rigorous education literature review[62] that finds six evidence-based practices to re-engage learners. These include:

1. Back-to-school campaigns including provision of education materials;

2. Cash transfers, school vouchers and in-kind support;

3. Female teachers;

4. Having water, sanitation and hygiene (WASH) facilities in schools;

5. Community monitoring; and

6. Consistent and reliable messages about school re-opening (dates, registration and safer operations).

In order to then help students to catch up on lost learning, the AEWG guidance outlines four interventions:

1. Extended instructional time
This involves slightly adapting the academic calendar and schedule (e.g. longer school days for a period or reducing the length of the long school holiday). This may be appropriate when learners have only missed a short period of school or were kept broadly on track with distance learning.

2. Catch-up programmes
By contrast to extending instructional time, this involves a condensed curriculum and is a full programmatic intervention.

3. Remedial education
This involves additional targeted support alongside regular classes and can be provided in formal and non-formal education, catch-up programmes, or accelerated education programmes.

4. Accelerated education programmes (AEPs)
These allow students to obtain equivalent, certified competencies and transition into formal education (primary, secondary, technical and vocational training) or into livelihoods. They are appropriate if learners have been out of school for a year or more and are over-age for their grade.

The AEWG guidance has a decision tree to identify which interventions might be most useful in different contexts.

These interventions are also reflected in a UNESCO report on Covid-19 response[63] which showed that the most effective interventions were acceleration (teaching only what must be learnt at a given level), micro-teaching/micro-schools (teaching a small group of students) and tutoring.

[61] AEWG, (2020a) [62] Burde et al., (2015) [63] UNESCO, (2020b)

Mitigation 1: Catch-up and remedial programmes

Chile, India and Mexico

A 2016 3ie systematic review of the impact of education programmes on learning and access in LMICs[64] found that remedial education and additional instruction time were "promising" interventions for improving learning outcomes, but the review said that more research is needed to assess these interventions. Only four studies were included which targeted students from disadvantaged communities or those lagging behind their peers. These studies were from Chile, India and Mexico.

Botswana

Preliminary results from a randomised control trial in Botswana during Covid-19 school closures show the potential of parental support combined with low-tech delivery of the curriculum. A non-governmental organisation (NGO), Young 1ove is working with the MoE to scale up a Teaching at the Right Level (TaRL) approach in primary schools across multiple districts. Education support is delivered to households through:

- A short message service (SMS) containing numeracy problems each week; and
- An SMS coupled with a 20-minute phone call from a teacher.

After 4-5 weeks, both interventions significantly improved learning and halved the number of children who could not do basic mathematical operations. Evidence from a similar intervention being implemented on a youth skills programme run by the NGO Educate! in East Africa found a 29% increase in youth participation from those who received the text messages.[65]

The Philippines

The Philippines already uses an Alternative Learning System (ALS) – a parallel learning system which caters for those who cannot access formal education in schools. The government's Covid-19 Learning Continuity Plan for the ALS aims to sustain gains in relevant, quality second-chance basic education programmes for out-of-school youth and adults. An extensive list of options for blended approaches that focus on ensuring inclusion of women, persons with disabilities, members of indigenous peoples and marginalised communities is outlined in the guide. The London School of Economics recommends that the ALS be strengthened and broadened to accommodate learners who have not re-enrolled in school at the beginning of the academic year as a result of the crisis.[66]

Ethiopia

In Ethiopia, every region in the country has undertaken mass sensitisation campaigns coupled in some regions with outreach to encourage children to return to school. Classes have then returned three days a week for face-to-face instruction in smaller class sizes, with teachers giving children work to do at home for the alternate three days when they are not in school.[67]

Key findings from Mitigation 1

- Remedial education and additional instruction time were "promising" interventions for improving learning outcomes.
- In Botswana, interventions significantly improved learning and halved the number of children who could not do basic mathematical operations.
- In East Africa, there was a 29% increase in youth participation from those who received intervention in the form of text messages.

[64] Snilstveit et al., (2016) [65] Bhula and Floretta, (2020) [66] Uaminal, (2020) [67] Regional data collected under the EdDevTrust TARGET programme in January 2021.

Rwanda

In Rwanda, school leaders and teachers reported that they believed the best way to catch up on missed time in school was through reducing the holidays in the second term and reducing the curriculum. Other suggestions included adding more days or moving to 6-day weeks.[68] During the first term of the 2020-21 school year, the MoE has adopted remedial and catch-up programmes to support learners who are at risk of dropping out or repeating the year, so that they can reach the required learning level.[69]

Mitigation 2: Condensed curriculum

Another mitigation measure is to look at condensing the curriculum to enable students to spend more time to catch up on and then focus on core content. This can be an important element of national catch-up programme or non-formal options, such as accelerated education[70] and is something that has already been planned in Ecuador, the Philippines and South Africa.

South Africa

In South Africa, a research paper[71] reviews some options for a recovery curriculum. It suggests that a review is needed of the purpose of schooling, exploring specifically what knowledge is most worthwhile for school education in South Africa in light of Covid-19, and the belief of some that the curriculum is overloaded. It outlines three innovative curriculum solutions:

1. Using multi-disciplinary engagement in learning about Covid-19;

2. Focusing on progression competence within the existing curriculum; and

3. Reviewing how the curriculum is taught, reducing the need to teach all subjects at the current frequency.

This could then result in "a relevant *core* and *responsive* curriculum" for South Africa's schools which should include communicative literacy, numerical literacy, financial literacy, environmental literacy and digital literacy, and would entail a shift from "education for all" to "education for relevance".

The government has started implementing a three-year curriculum recovery plan for learners to help recover learning losses. This includes recovery Annual Teaching Plans (ATPs) focusing on a narrower curriculum and on core content knowledge, skills, attitudes and values that are required at each grade and in each subject. The government will provide 300,000 young employees to support basic education schools for several months after the reopening of schools through the Basic Education Employment Initiative, which is part of the Presidential Employment Stimulus Programme. Up to 200,000 of these employees will support teachers and learners in the classroom with 100,000 assisting schools to comply with Covid-19 protocols.[72]

The Philippines

The Philippines Department of Education published the Basic Education Learning Continuity Plan (BE-LCP) in June 2020 as an emergency measure for the 2020-21 school year.[73] The BE-LCP streamlines the K-12 curriculum into the most essential

Key finding from Mitigation 2

- Accelerated education and is something that has already been planned in Ecuador, the Philippines and South Africa.

[68] Carter et al., (2020) [69] Mbabazi, (2021) [70] AEWG, (2020b) [71] Ramrathan, (2020) [72] BusinessTech, (2020) [73] Department of Education, (2020a)

learning competencies, to be delivered through multiple learning modalities and platforms. Guidance has been given to schools and education institutions to help prepare ahead of the first day of learning.[74] The days prior to re-opening were expected to be used to provide learners with assignments to explore foundational topics, orientation on the utilisation of alternative learning delivery modalities and corresponding learners' materials, and mental health and psychosocial support activities.

Ecuador

In Ecuador, the MoE has published a Prioritised Emergency Curriculum (el Currículo Priorizado para la Emergencia)[75] to be implemented in all schools during the 2020-21 school year.

The AEWG has produced guidance on condensing a curriculum. The goal of the guidance is to help MoEs, districts, curriculum developers and implementing partners to prepare a condensed curriculum. The focus is on literacy, mathematics, thinking and problem-solving at primary school level and ideally also includes socio-emotional learning. An MoE can decide whether to reduce or eliminate instructional time for other subjects for the duration of the pandemic response. Condensing means focusing on priority outcomes and can be done in two ways:

1. Selecting priority outcomes from the standard curriculum; or

2. Developing priority outcomes by synthesising learning outcomes in the standard curriculum.

The guidance provides five planning tips:[76]

1. Use clear criteria to establish priority outcomes;

2. Determine a learning sequence that focuses instruction on the attainment of priority outcomes and includes revision of prerequisite knowledge and skills;

3. Develop a pacing guide that includes the suggested number of lessons for each part of the learning sequence;

4. Build socio-emotional learning activities that support the wellbeing of both teachers and learners into the condensed curriculum; and

5. Create sample lesson plans that show inclusive and engaging instructional practices that can be used in physically distanced and distance learning settings.

Mitigation 3: Potential low-tech solutions

Botswana

The evaluation of two low-tech solutions in Botswana[77] provides some experimental estimates of reducing the negative impact of Covid-19 on learning. About 4,500 families with primary-school-aged children across the country were assigned to either a control or two intervention groups. The first intervention was SMS messages sent to families with a few numeracy problems each week. The second intervention was live phone calls averaging 15-20 minutes from instructors supplementing the SMS messages and explaining the learning activities. The experiment found large, statistically significant differences in learning between

Key finding from Mitigation 3

- The first intervention (SMS only) had no effect on learning. The second intervention (SMS plus phone calls) increased learning by 0.121 standard deviations. For families participating in all sessions, learning gains increased to 0.167 standard deviations.

[74] Department of Education, (2020b) [75] Ministerio de Educación, (2020a) [76] Ibid [77] Angrist et al., (2021a)

the control and the two intervention groups, specifically the second one. The first intervention (SMS only) had no effect on learning. The second intervention (SMS plus phone calls) increased learning by 0.121 standard deviations. For families participating in all sessions, learning gains increased to 0.167 standard deviations. The second intervention was found to be highly cost-effective with learning gains of between 0.63 and 0.89 of a standard deviation for every US$ 100 spent. Overall, 99% of families expressed interest in continuing the program after the first month. These findings suggest that low-tech solutions used in this experiment could help to limit children's learning loss during school disruptions. This is especially relevant given that 70 to 90% of households in LMICs own at least one mobile phone, a much higher coverage than households with Internet access.

Mitigation 4: Tutoring directly linked to classroom content

United States

Evidence from the United States has shown that tutoring programmes can help to accelerate learning in mathematics and reading for students who are struggling.[78] Schools that have provided approximately two hours of tutoring to students on a daily basis as part of an extended school day have managed to close gaps in achievement – one programme led to gains of between one and two additional years of mathematics in a single school year over and above what students would typically learn in a year.

Mexico

In Mexico, a government-run mobile tutoring programme sends recent university graduates to work in schools serving rural and marginalised communities in the region of Chiapas in Mexico as Mobile Pedagogical Advisors. Advisors are assigned two schools and spend 50% of their time in each school each month providing one-to-one tutoring to the most needy students, visiting families to encourage their engagement, and providing pedagogical support to the local teachers who have no formal teaching qualification and minimal training. Two important tweaks were made to the programme in 2014 – firstly, ensuring that advisors who were assigned to communities spoke the indigenous language of that community and increasing the salary of the advisors' supervisors in exchange for a required increase in the number of times they visited the communities to monitor the programme; secondly doing the first tweak coupled with increasing the initial training for tutors to two weeks rather than one week (with an increased focus on reading and mathematics) and arranging bi-monthly peer-to-peer meetings to discuss challenges and solve problems. A randomised control trial was set up using a control group, the original intervention group and an enhanced intervention group. The evaluation found that the programme:

- Helped to improve children's literacy skills in the two intervention groups (0.135 standard deviations in the first intervention group and 0.227 standard deviations in the second intervention group);
- Did not have any statistically significant impact on mathematics skills;
- Helped improve the socio-emotional skills of children for the second intervention group;

Key finding from Mitigation 4

- In Mexico, a government-run mobile tutoring programme sends recent university graduates to work in schools serving rural and marginalised communities.

[78] Allensworth and Schwartz, (2020)

- Helped improve the transition rate of students from primary to secondary school by 14% for the second intervention group compared to the control group.[79]

Australia and UK

In Australia, a recommendation has been made to launch a six-month tutoring programme to support 1 million disadvantaged students to catch up[80] while in the UK, a £1 billion investment has been set aside for catch-up including a National Tutoring Programme worth £350 million to help the most disadvantaged during the 2020/21 academic year.[81]

What is known not to work

A UNESCO study[82] on effective catch-up learning strategies drawing from evidence in the United States found three common strategies that do not work. These include:

1. Retention

Where students that have fallen behind their peers are required to repeat an academic year

2. Social promotion

Where students continue with their age peers regardless of their academic performance

3. Repetition

Teaching again content that students previously failed to learn

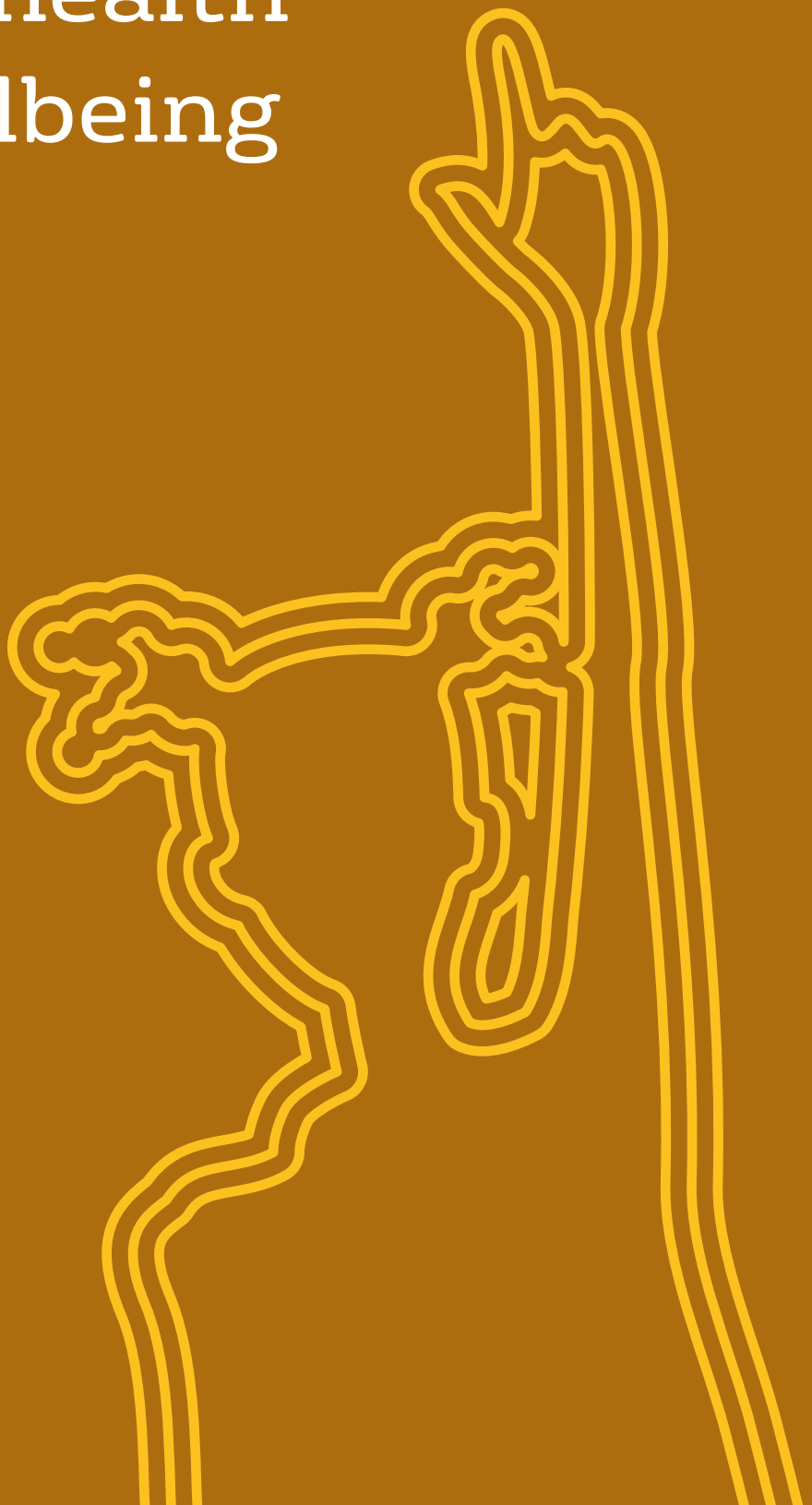
Retention or repetition is a commonly used approach in francophone and lusophone education systems and is still prevalent at primary level across parts of Sub-Saharan Africa. A review drawing on broad evidence has shown that this practice has few pedagogical benefits, is financially inefficient, and can cause psychological and socio-emotional harm to students.[83]

Retention or repetition has few pedagogical benefits, is financially inefficient, and can cause psychological and socio-emotional harm to students.

[79] World Bank, (2020) and World Bank, (2016) [80] Sonnemann and Goss, (2020) [81] UK Government, (2020) [82] UNESCO, (2020b) [83] Ndaruhutse, (2008)

Chapter 6

Global data on children's mental health and wellbeing



Medical research has shown that crises and disasters – whether natural, environmental or conflict-related – are nearly always accompanied by increases in a broad range of mental and behavioural disorders including depression, post-traumatic stress disorder, abuse of substances, poor mental health, domestic violence and child abuse.

The impact can be immediate and persistent.[84] What is less well known is what the long-term mental health effects of large-scale disease outbreaks are on children and young people. There has been some research that was undertaken during the severe acute respiratory syndrome outbreak in 2003, but this focused on patients and healthcare workers.[85]

Covid-19 first broke out in Hubei province of China in late 2019. Just over a month after the area went into lockdown and schools were closed, research[86] was carried out with students from Grades 2 to 6 in Wuhan (the capital city of the province) and in Huangshi (a city about 85km from Wuhan). Nearly 1,800 students participated in the study which measured depressive and anxiety symptoms using the Children's Depression Inventory-Short Form (CDI-S) and the Screen for Child Anxiety Related Emotional Disorders. Students had been restricted to home for a mean of 33.7 days when they completed the survey. Results showed that 22.6 and 18.9% of students reported depressive and anxiety symptoms respectively, with students in Wuhan having significantly higher CDI-S scores than those in Huangshi, with a greater risk of depressive symptoms. The main limitation of the study is that it could not evaluate how long-lasting these effects will be.

In China, students had been restricted to home for a mean of 33.7 days when they completed the survey which revealed 22.6% and 18.9% of students reported depressive and anxiety symptoms respectively.

Data gathered by Save the Children, LMICs

Save the Children[87] gathered interview data in mid-2020 from 37 LMICs[88] on mental and emotional health during Covid-19 school closures. Their research covers a representative sample of over 8,000 children and over 17,500 parents and caregivers from these countries, though the sample is biased against the most marginalised and deprived.[89] The large majority of children reported an increase in negative feelings due to Covid-19 which increased with the length of school closures. As school closure periods continued, parents and caregivers reported increasing sleep changes, changes in appetite, changes in their children's ability

[84] Galea, Merchant and Lurie, (2020) [85] Lee, (2020) [86] Xie, Xue and Zhou, (2020) [87] Save the Children, (2020) [88] This included 11 countries in Sub-Saharan Africa – Burkina Faso, Ethiopia, Kenya, Malawi, Mozambique, Niger, Senegal, Sierra Leone, Somalia, South Sudan and Uganda. [89] The sample was skewed toward people who could read or write in the survey language and with those who had stable Internet or phone access.

to handle their emotions including more aggressive behaviour. Over 50% of children who were not in touch with friends reported being less happy, less safe and more worried. By comparison this figure was only 5 to 6% of children who did have contact with friends either virtually or in person. For adolescents, these figures were higher than for younger children. The interviews found that Covid-19 has impacted negatively on family income for many families resulting in 89% of parents and caregivers reporting worsened mental health and wellbeing due to the pandemic. In over 30% of households, either a child or parent/caregiver stated that violence had occurred in the home including children and/or adults being physically or verbally abused. Amongst children with disabilities, 7% had an increase in bed wetting and 17% an increase in unusual crying and screaming, compared to 2% and 5% respectively of children without a disability.

Key finding from Save the Children interview data

• The large majority of children reported an increase in negative feelings due to Covid-19 which increased with the length of school closures.

UNICEF and partners survey, Middle East and North Africa

UNICEF[90] and its partners completed a survey of 7,000 households in seven countries in the Middle East and North Africa (MENA) region[91] reaching almost 13,000 children in the period April to July 2020. Over 50% of respondents said that their children have been struggling emotionally and mentally and approaching 40% had concerns about how Covid-19 was impacting their children's education. Nearly half of all households did not consider that distance education was effective and almost 20% stated that Covid-19 had impacted negatively on their finances and they have less money to spend on food.

Key finding from UNICEF and partners survey

• Over 50% of respondents said that their children have been struggling emotionally and mentally and approaching 40% had concerns about how Covid-19 was impacting their children's education.

RISE Ethiopia research, Ethiopia

The RISE Ethiopia[92] team is currently undertaking research on Grade 3 and 6 students to look at how Covid-19 has impacted on socio-emotional learning of students in Ethiopia and findings will be published in due course.

International Youth Federation survey, Tanzania

The International Youth Federation[93] undertook a survey of 103 youth in Dodoma and Dar es Salaam in Tanzania who were normally attending technical and vocational education and training institutions. The survey found that disruption to education and training were causing some anxiety and stress and required adaptability among students to find alternative sources of income.

Key finding from International Youth Federation survey

• Disruption to education and training were causing some anxiety and stress and required adaptability among students to find alternative sources of income.

Overseas Development Institute study, Tanzania and Vietnam

An Overseas Development Institute study[94] on the impact of Covid-19 on adolescent mental health in Tanzania and Vietnam found that school closures and online learning have led to young people feeling isolated, lacking stability due to the loss of structured school environments and resulting in stress about examinations and future job prospects (especially for older youth). It also found

[90] UNICEF, (2020a) [91] Algeria, Egypt, Jordan, Morocco, Qatar, Syria and Tunisia. [92] Yorke, (2021) [93] Mushi, (2020) [94] Chakraborty and Samuels, (2021)

that increase in time spent on screens and on social media has caused disruptive sleep patterns as well as a rise in anxiety and depression. Some young people were also exposed to abusive household conditions and online child abuse material leading to a growing demand for services to help address domestic and online abuse.

Online survey, Bangladesh

An on-line survey using purposive sampling was conducted among 384 parents with children in Bangladesh[95] after completing 30 days of quarantine following the government's lockdown declaration on 26th March 2020. Children's anxiety was assessed using the Generalised Anxiety Disorder (GAD) scale supported by the Spence Child Anxiety Scale for Parents (SCAS-P) and parents were asked to complete a Child Behavior Checklist (CBCL). The results of the survey showed that:

- 43% of children had sub-threshold mental health disturbances;
- 30.5% had mild disturbances;
- 19.3% had moderate disturbances; and
- 7.2% had severe disturbances.

Significant differences were found for children with more educated parents, those in urban locations, where a relative or neighbour of the child had tested positive for Covid-19, for children whose parents needed to go to the workplace, for children whose parents smoked, for children whose parents were at risk of losing their job, for children who used electronic devices for two to four hours per day, and for children in families where emotional neglect took place.

These results show that the majority of children suffered some form of mental health disturbance in Bangladesh during the lockdown period but also highlighted that parents' reactions could play an influencing role in building resilience in their children.

Gender and Adolescence: Global Evidence (GAGE) study, Bangladesh

A Gender and Adolescence: Global Evidence (GAGE) study[96] in Bangladesh implemented in partnership with the South Asia Gender Innovation Lab explored the effects of Covid-19 related economic and educational disruption on adolescent wellbeing. Planned field-survey data was collected during February to March 2020 on 2,095 adolescents with a follow-up virtual survey taking place during May to June 2020. Findings showed that school closures have resulted in reduced access to learning for adolescents, negatively impacted future career aspirations of adolescents and increased the amount of time adolescents are spending on household chores. Girls and adolescents from vulnerable households have been more severely impacted. These factors have negatively impacted on adolescent mental health.

Key findings from Overseas Development Institute study

- Young people feel isolated and lack stability due to the loss of structured school environments, resulting in stress about examinations and future job prospects.
- Some young people were exposed to abusive household conditions and online child abuse material.

Key findings from online survey, Bangladesh

- Differences were found for children with more educated parents, those in urban locations, where a relative or neighbour of the child had tested positive for Covid-19, for children whose parents needed to go to the workplace, for children whose parents smoked, for children whose parents were at risk of losing their job, for children who used electronic devices for two to four hours per day, and for children in families where emotional neglect took place.
- Parents' reactions could play an influencing role in building resilience in their children.

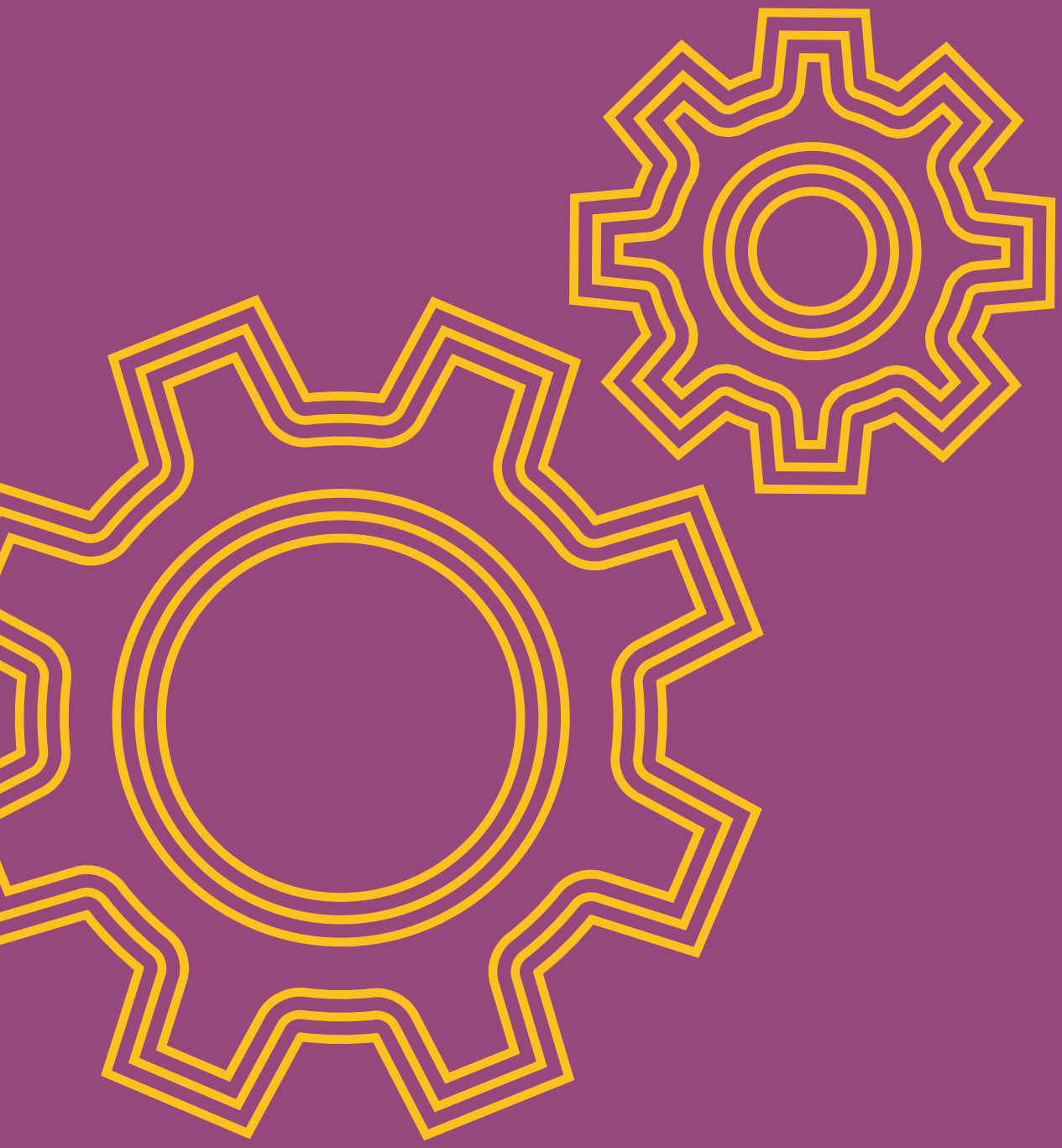
Key findings from GAGE study

- Reduced access to learning for adolescents, negatively impacted future career aspirations of adolescents and increased the amount of time adolescents are spending on household chores.
- Girls and adolescents from vulnerable households have been more severely impacted.

[95] Yeasmin et al., (2020) [96] Baird et al., (2020)

Chapter 7

Wellbeing interventions



As policymakers consider the likely learning losses that Covid-19 related school closures may bring, it must not be forgotten that these may well be accompanied and impacted by mental and behavioural challenges for children and young people requiring effective psychosocial support.

Three early intervention measures recommended[97] include:

1. Using digital technologies to enable people to feel connected, and for children, develop and implement a routine for each day especially while schools remain closed;

2. Putting in place mechanisms for monitoring, reporting and intervening in cases of violence and abuse; and

3. Bolstering the mental health system to deal with a greater caseload.

There are several examples of countries and programmes putting a more explicit focus on psychosocial support and socio-emotional learning (SEL) in their Covid-19 educational responses.

Three USAID-funded programmes in Liberia, Tanzania and the Philippines have pivoted during school closures to ensure a continued and explicit focus on SEL.

USAID-funded programmes in Liberia, Tanzania and the Philippines

Three USAID-funded programmes in Liberia, Tanzania and the Philippines have pivoted during school closures to ensure a continued and explicit focus on SEL.[98] USAID's *Read Liberia* programme provides technical support to the MoE for curriculum content and in recording radio education sessions as part of the MoE's Education in Emergency Plan. This builds on Read Liberia's EGRA model which includes a core approach to SEL as well as reading, adapted from the Collaborative for Academic, Social, and Emotional Learning's (CASEL) competency model. It integrates this into collaborative language arts lessons on the radio where children are encouraged to explore and express their feelings and parents are engaged to provide support at home. USAID's *Tusome Pamoja* programme in Tanzania is engaging with teachers and developing their SEL skills during school closures. The programme uses WhatsApp groups to provide weekly SEL activities and builds on a workshop "Enabling a Safe School Environment Through SEL" that took place with teachers before school closures. There has been 100% teacher participation in the WhatsApp group and activities and it has helped provide motivation and

[97] Ibid [98] Bulat, (2020)

momentum with teachers. USAID's *ABC+: Advancing Basic Education* programme in the Philippines has developed a social and mass media communications plan to help teachers, parents and others provide support to children with literacy, numeracy and SEL.

UK-government funded Girls' Education Challenge projects in Sub-Saharan Africa

UK-government funded Girls' Education Challenge projects in Sub-Saharan Africa are benefitting from collaboration between projects led by CAMFED and Impact(Ed) International and national governments, enabling CAMFED's *My Better World* (MBW) curriculum to reach a larger audience. Impact(Ed) International has taken the MBW life skills and wellbeing workbook and created an animated video series targeting adolescents. This video series is being broadcast on television in Ghana (average 1.7 million weekly viewers), Kenya, Malawi and Nigeria (average 1.4 million weekly viewers) reaching millions of young people. The content has also been adapted for radio broadcasting and is being used to reach tens of thousands of children in Zambia. The series follows the lives of African adolescents as they face different scenarios and make decisions related to education, family relationships and friendships. There is a particular focus on the power of peer support to help young women to navigate challenges. This mirrors content being delivered by CAMFED Learner Guides, young women trained by CAMFED who act as "big sisters" to disadvantaged students. These Learner Guides use their life experience to help students develop socio-emotional skills, resilience and self-confidence.[99] Pre-Covid-19, they worked to keep vulnerable children in school, following up with children who dropped out and working with local communities to keep young girls safe from child marriage.[100] These Learner Guides have also been an integral part of CAMFED's community outreach during Covid-19 school closures and will be a critical resource to ensure adolescent girls return to school once schools reopen.

Education Quality Agency, Chile

In Chile, the Education Quality Agency (Agencia de Calidad en Educación) has developed an integrated diagnostic tool to measure socio-emotional and academic learning needs in the context of the Covid-19 pandemic. The tool seeks initially to support schools to assess the socio-emotional state of their students and then to assess learning in reading and mathematics so that teachers can use this evidence to design appropriate pedagogical and psychosocial support for their students during the rest of the school year. Participation in the assessment is voluntary and results will only be used internally by schools.[101]

In Chile, the Education Quality Agency (Agencia de Calidad en Educación) has developed an integrated diagnostic tool to measure socio-emotional and academic learning needs in the context of the Covid-19 pandemic.

[99] Tao, (2021) [100] https://camfed.org/our-impact/learner-guide-program/ [101] https://diagnosticointegral.agenciaeducacion.cl

Chapter 8

Support for teachers

As schools reopen or continue to provide remote or blended learning, teachers will need to assess the extent of learning losses and to understand how students are doing from a psychosocial perspective, to ensure that students can be provided with appropriate support.

International Task Force on Teachers for 2030 (Teacher Task Force)

The International Task Force on Teachers for 2030 (Teacher Task Force)[102] has created a fact sheet outlining national teacher responses to ensure teaching continues in primary and secondary schools during the pandemic. Based on the survey results from two waves of data collection during 2020, it found that as schools were reopening in sub-Saharan Africa:

- 58% of countries implemented fully in-person classes compared to 31% that used a hybrid approach;
- Only 4% of countries received professional and psychosocial support;
- No professional support was provided to 1 in 5 countries;
- 42% of countries imposed shifts in schools to ensure teachers' health and safety; and
- Text messaging was the main means of communication with students and their parents, reported by 65% of countries.

It concludes by recommending that governments provide guidance, tools, professional and psychosocial support to teachers.

Teacher Task Force found that only 4% of countries received professional and psychosocial support.

UNESCO, the Teacher Task Force and the International Labour Organisation

UNESCO, the Teacher Task Force and the International Labour Organisation (ILO)[103] have produced guidance for policymakers on seven measures related to teachers and other education staff:

1. Social dialogue and communication across all levels of the system and with teachers, school staff, parents, communities and students;

[102] Teacher Task Force, (2021) [103] UNESCO, International Task Force of Teachers for Education 2030 and ILO, (2020a)

2. Safety and health for teachers and education support staff;

3. Teachers' psychological and socio-emotional wellbeing;

4. Teacher preparation and learning including on any curriculum adjustments;

5. Teacher deployment, rights and working conditions to ensure teachers are not overburdened;

6. Financial resources and investments to support quality teaching and psychosocial support for teachers; and

7. Monitoring and evaluation of health risks and working conditions of teachers.

To accompany this, they have also produced a toolkit[104] which contains a checklist with guiding questions for school leaders linked to each of the seven areas.

UNESCO

UNESCO[105] has produced guidance on support for teachers and education personnel which outlines three overarching principles for the on-going Covid-19 response:

1. Inclusive education systems need to consider the needs and rights of all teachers and learners, particularly the most vulnerable;

2. The humanitarian principle of do no harm should be applied to decisions about when and how to reopen schools; and

3. The Inter-Agency Network for Education in Emergencies (INEE) Minimum Standards provide guidance on how to respond to education during and after crises.

It then offers a series of practical tips to support teachers and education personnel.

UNICEF MENA regional office

The UNICEF MENA regional office has developed a training package to prepare teachers for school reopening. It is a self-paced training tool that can be used in a flexible and adaptable way depending on the local context. It contains three modules that can be used independently but which are also interconnected and complimentary. The three modules cover:

1. Safe school operations;

2. Wellbeing and protection (school, teacher wellbeing, learner wellbeing); and

3. Back to learning (managing lost school learning, implementing hybrid learning strategies and building a supportive learning environment).[106]

[104] UNESCO, International Task Force of Teachers for Education 2030 and ILO, (2020b) [105] UNESCO, (2020c) [106] UNICEF MENA, (2020)

Department of Education, the Philippines

In the Philippines, the Department of Education's BE-LCP includes a commitment to providing and supporting teachers and school leaders to manage and implement blended learning delivery models. A professional development programme was planned to start in June to introduce teachers and school leaders to the most essential learning competencies in the condensed curriculum and the range of delivery modalities they can use depending on specific context and the needs of teachers and learners. The training plan includes guidance for teachers and staff to deal with issues of wellbeing and provides psychosocial support to learners. The professional development was to be delivered using a multi-modal approach leveraging technology where possible and is informed by the results of a survey on the physical readiness of teachers, school leaders and households for remote learning.[107] Teachers, school leaders and supervisors have access to on-demand technical and administrative advice and guidance through a "helpdesk, coaching, professional learning community, [...] resource materials, and other forms of support that can be made available in real or virtual platforms."[108] However, as of March 2021, schools have not yet reopened in the Philippines.[109]

In the Philippines, the Department of Education's Basic Education – Learning Continuity Plan includes a commitment to providing and supporting teachers and school leaders to manage and implement blended learning delivery models.

Ministry of Education, Ecuador

In Ecuador, the MoE developed a five-module training programme to support teachers in delivering education as it is conceived in the education continuity plan delivered via the "I train myself" virtual learning platform. The modules cover:

1. Psychosocial support
Education in emergencies, disasters and catastrophes; first response for psychosocial support for the educational community; evaluation, environment, support and strengthen the return to school;

2. Self-care and hygiene protocols
Contextualising Covid-19, biosecurity measures, water, sanitation, hygiene;

3. Implementation of the Prioritised Emergency Curriculum
Quality education, teaching methods, interdisciplinary projects, student evaluation;

4. Digital content creation
Word clouds, interactive walls and presentations, videos, podcasts, infographics, concept maps, timelines, interactive activities; and

5. Support for children with special educational needs
Characteristics of education for students with special educational needs, curricular adaptation/alignment in planning.[110]

It has also reduced teachers' weekly schedule from 40 to 35 hours during the emergency period.

[107] Alea et al., (2020) [108] Department of Education, (2020a) page 41 [109] Reliefweb, (2021) [110] Ministerio de Educación, (2020b)

Building Learning Foundations programme and Rwanda Education Board, Rwanda

For those countries where children are restarting the school year (e.g. Kenya and Rwanda), consideration will need to be given to who will teach the new intake of students in the first year of primary school, as these will effectively form an additional school cohort. Policymakers will also need to consider how to support teachers in the provision of remedial support and catch-up classes so that teachers are not overburdened with an unsustainable workload.

In Rwanda, *the Building Learning Foundations* programme has worked with the Rwanda Education Board to develop remedial and catch-up teacher guides for English and mathematics to help support learners. Over 30,000 teachers in primary schools have been orientated on the guide and programme staff visit schools every month to provide coaching and mentoring to teachers. Remedial activities are provided during school hours and at weekends.[111]

For those countries where children are restarting the school year, consideration will need to be given to who will teach the new intake of students.

[111] Mbabazi, (2021)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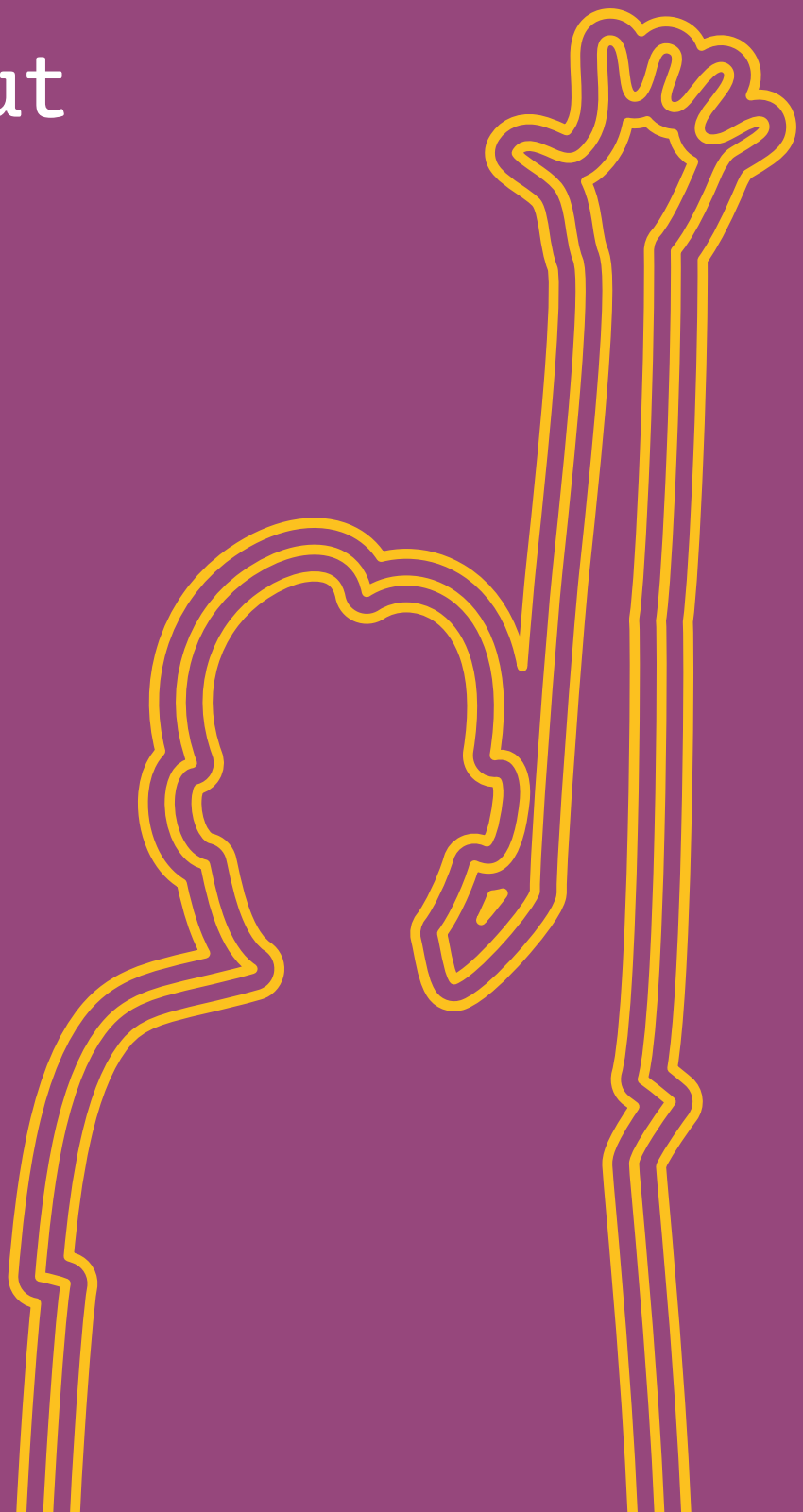
Chapter 9

Support for the most marginalised to prevent dropout



A Save the Children[112] report claims that up to 9.7 million children are at risk of dropping out of school due to increasing levels of child poverty as a result of Covid-19 with twelve countries being at extreme risk of falling behind in achieving SDG4.[113]

Weak learners, girls, over-aged students and very poor students are the four groups of students that teachers in Rwanda identified as being most likely to drop out of school. With the main actions schools can take to ensure students return are local authority sensitisation, 1-1 follow-up with students by the teacher and allowing parents to stagger school fee payments. The learning areas that teachers and school leaders expect to be most impacted by school closures include:

- Children's motivation for learning;
- Discipline;
- English proficiency; and
- Courses with a strong practical element (e.g. lab-based Science).[114]

> *"Strategies are also needed to catch students up on learning missed during school closures, especially for those who benefited least from distance learning such as students from poor families and those from rural areas. Using teaching methods and platforms that are interactive, engaging and improving students' motivation for learning will be important in this catch-up."*[115]

Such strategies will also need to consider out-of-school children and youth including the nearly 50% of school-aged refugee children and youth who were not in school before Covid-19 so will not have been included in the Covid-19 educational response. The economic impact of Covid-19 is likely to be worse for refugee families who are 60% more likely to work in sectors negatively impacted by Covid-19 economic downturn.[116]

The economic impact of Covid-19 is likely to be worse for refugee families who are 60% more likely to work in sectors negatively impacted by Covid-19 economic downturn.

[112] Warren and Wagner, (2020) [113] Afghanistan, Chad, Cote d'Ivoire, Guinea, Liberia, Mali, Mauritania, Niger, Nigeria, Pakistan, Senegal and Yemen. [114] Carter et al., (2020), page 18
[115] Ibid, page 19 [116] Save the Children et al., (2020)

Save the Children's emergency Covid-19 education plan

Save the Children's emergency Covid-19 education plan focusing on how to get the poorest and most marginalised children safely back to school[117] outlines five interventions:

1. Targeted cash transfers;

2. Catch-up classes;

3. WASH facilities in schools;

4. Back-to-school campaigns; and

5. Teacher professional development.

It estimates the costs of delivering these five interventions across 59 International Development Association-eligible countries to support children's safe return to school and learning (i.e. support for those who were already in school before Covid) to be US$ 50 billion. UNICEF[118] also argues that both cash transfers and international financing similar to the Marshall Plan are needed to ensure that all children can recover from the effects of Covid-19.

[117] Warren, Fiala and Watts, (2021) [118] UNICEF, (2020b)

Chapter 10

Conclusion

A number of reports outline recommendations for policymakers.

Joint United Nations and World Bank framework for school reopening

In 2020, the United Nations and the World Bank produced a joint framework[119] for the reopening of schools. This outlines actions prior to reopening, as part of the reopening process and with schools reopened, across four domains:

1. Safe operations;

2. Learning;

3. Including the most marginalised; and

4. Wellbeing and protection.

Later in the year it published a supplement[120] outlining emerging lessons from countries in relation to the four domains.

United Nations policy brief

A United Nations policy brief[121] suggests a focus on three priorities:

1. Catching up on learning loss;

2. Bringing back to school learners at risk of dropping out; and

3. Focusing on the social and emotional welfare of the student population, teachers and staff.

UNICEF policy brief

A UNICEF policy brief[122] looking at how countries (teachers) can prepare to mitigate learning loss as schools reopen outlines four actions:

1. Identify and reach out to vulnerable children who are most at risk of dropout;

2. Provide remedial support for mitigating learning losses to all children who may need it on their return to school, which will require an assessment of children's learning as schools reopen;

3. Leverage existing initiatives to support the return to school such as TaRL and use information from the Education Management Information System to monitor progress and identify any additional interventions needed; and

4. Continue to monitor the effectiveness of initiatives and share good practice and lessons learnt.

[119] UNICEF, UNESCO, World Bank, World Food Programme and UNHCR, (2020a) [120] UNICEF, UNESCO, World Bank, World Food Programme and UNHCR, (2020b) [121] UN, (2020)
[122] Nugroho et al., (2020)

UNESCO guidance on recovering from lost learning

A recent policy brief by UNESCO, (2021), which took stock of various national approaches employed from the current crisis, offers decision-makers a set of five critical priorities to be considered when exploring options for implementing recovery programmes:

1. Assess learning needs;

2. Adjust pedagogy;

3. Prioritise, train and support teachers;

4. Emphasise social-emotional learning (SEL); and

5. Ensure inclusion and gender equality.

These elements should be considered in relation to each other, as each is a key ingredient for ensuring the effectiveness of strategies for learning recovery. The policy brief is supplemented by a UNESCO, (2020) guidance framework which offers an indicative roadmap for effective implementation of catch-up programmes: assess learning needs, design the intervention, implement programmes, and monitor and adjust.

Mastercard Foundation

The Mastercard Foundation[123] posits that "Covid-19 provides an opportune moment to rethink secondary education systems" and outlines several possibilities for greater innovation including:

- More flexible approaches to the delivery of education at scale including accelerated learning programmes, self-paced modular learning and learning modalities enabled through education technology;
- More intentional integration of technology into education systems including digitising course materials and remote tutoring;
- Recognising the central role played by teachers in learning and psychosocial support requiring adequate support for teachers in professional development and access to digital devices and connectivity; and
- The important role that public-private partnerships (e.g. involving governments, technology companies, telecommunications networks operators and publishers) can play in the delivery of education.

The Mastercard Foundation posits that Covid-19 provides an opportune moment to rethink secondary education systems.

[123] Mastercard Foundation, (2020)

UNESCO's Futures of Education initiative

UNESCO and Futures of Education[124] propose nine high-level ideas about how education needs to change as a result of Covid-19 which include amongst other things:

- Ending current levels of inequality;
- Valuing the teaching profession and teacher collaboration with families and communities;
- Ensuring open source technologies are freely available to teachers and students; and
- Ensuring scientific literacy within the curriculum.

What next?

This review aligns well with its sister piece – the Rapid Evidence Assessment (published separately). Some interesting observations are evident and help to shape the next phase of the Education Development Trust and UNESCO collaborative research venture. These include:

1. This review suggests that there is consensus about the types of interventions that may support learning recovery once schools reopen.
These types of interventions include catch-up, remedial, and accelerated education programmes and condensed curriculum. The evidence available now suggests these types of actions show promise but more evidence is needed to help us understand how and under what conditions they work most effectively. As we move forward and start to get a sense of what governments are planning in their settings, there will be an urgent need to understand how ready education systems and schools, in particular teachers, are to implement these strategies in practice.

2. Measuring learning loss (or gain, which is far less common), is complex.
Projections and early data are cause for worry. Moving forward it will be important to find ways to help education systems deal with the need to understand what this means at an individual pupil level and then to respond appropriately. A focus on *instructional loss* may be another important dimension to consider. This refers to the instructional time and opportunities learners have missed as a result of school closure and interaction (or absence of) with remote provision.

3. There are some interesting reflections on other ways to support learning as school systems reopen.
For example, the idea that schools are not the only place where learning can be effectively supported is gaining traction and evidence. Understanding better how learning can be complemented and supported at home and in communities is vital – not as standalone programmes distinct from school but as part of the formal offer of education in partnership with the school and the teacher.

As we move forward and start to get a sense of what governments are planning in their settings, there will be an urgent need to understand how ready education systems and schools, in particular teachers, are to implement these strategies in practice.

[124] UNESCO and Futures of Education, (2020)

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Education Development Trust **T** +44 (0) 118 902 1000 **E** enquiries@educationdevelopmenttrust.com **W** www.educationdevelopmenttrust.com