OCTOBER 2020

WHAT HAVE WE LEARNT?

Overview of findings from a survey of ministries of education on national responses to COVID-19

UNESCO
United Nations Educational, Scientific and Cultural Organization
UNESCO Institute for Statistics
unicef for every child
unicef Office of Research – Innocenti
THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

WHAT HAVE WE LEARNT?

Overview of findings from a survey of ministries of education on national responses to COVID-19

OCTOBER 2020

UNESCO
United Nations Educational, Scientific and Cultural Organization
UNESCO INSTITUTE FOR STATISTICS
unicef for every child
unicef Office of Research – Innocenti
THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Published in 2020 by:
the United Nations Educational, Scientific and Cultural Organization,
7, place de Fontenoy, 75352 Paris 07 SP, France,

United Nations Children's Fund,
3 United Nations Plaza, New York, NY 10017, USA,

UNICEF Office of Research – Innocenti,
Via degli Alfani, 58, 50121 Florence, Italy,

and the International Bank for Reconstruction and Development / The World Bank
1818 H Street NW, Washington, DC 20433, USA

© UNESCO, UNICEF and The World Bank, 2020

This publication is available in Open Access under the Attribution-ShareAlike 3.0 IGO (CC-BY-SA 3.0 IGO) license (http://creativecommons.org/licenses/by-sa/3.0/igo/). By using the content of this publication, the users accept to be bound by the terms of use of the UNESCO Open Access Repository (http://www.unesco.org/open-access/terms-use-ccbysa-en). The present license applies exclusively to the text content of the publication. For use of any other material (i.e. images, illustrations, charts) not clearly identified as belonging to UNESCO or as being in the public domain, prior permission shall be requested from UNESCO at publication.copyright@unesco.org.

UNICEF Photographs—UNICEF photographs are copyrighted and are not to be reproduced in any medium without obtaining prior written permission from UNICEF. Permissions may be granted for one-time use in a context that accurately represents the real situation and identity of all people depicted. UNICEF photographs are not to be used in any commercial context; content may not be digitally altered to change meaning or context; assets may not be archived by any non-UNICEF entity. Requests for permission to reproduce UNICEF photographs should be addressed to nyhqdoc.permit@unicef.org.

Attribution—Please cite the report as follows: UNESCO, UNICEF and the World Bank (2020). *What have we learnt? Overview of findings from a survey of ministries of education on national responses to COVID-19.* Paris, New York, Washington D.C.: UNESCO, UNICEF, World Bank. Please cite the data as follows: UNESCO, UNICEF and the World Bank (2020). Survey on National Education Responses to COVID-19 School Closures, round 2. Paris, New York, Washington D.C.: UNESCO, UNICEF, World Bank.

Translations—If you create a translation of this work, please add the following disclaimer along with the attribution: This translation was not created by UNESCO, UNICEF or The World Bank and should not be considered an official UNESCO, UNICEF or World Bank translation. UNESCO, UNICEF and the World Bank shall not be liable for any content or error in this translation.

Adaptations—If you create an adaptation of this work, please add the following disclaimer along with the attribution: This is an adaptation of an original work by UNESCO, UNICEF and The World Bank. Views and opinions expressed in the adaptation are the sole responsibility of the author or authors of the adaptation and are not endorsed by UNESCO, UNICEF and The World Bank.

The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of UNESCO, UNICEF and the World Bank concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The ideas and opinions expressed in this publication are those of the authors; they are not necessarily those of UNESCO, UNICEF and the World Bank and do not commit the organizations.

Cover photos *(top to bottom, left to right)*: © UNICEF/UNI330879/Dejo; © UNICEF/UNI336263/Ma; © UNICEF/UNI313272/Matas; © UNICEF/UNI330862/Dejo; © UNICEF/UNI369509/Chuluunbaata; © UNICEF/UNI336259/Ma; © UNICEF/UNI355643/Gacad/AFP

Designed by Big Yellow Taxi, Inc.

ACKNOWLEDGEMENTS

First and foremost, the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF) and the World Bank would like to thank all the ministries of education that contributed to this data collection effort. These survey results enable the sharing of experiences and good practices during the world's largest global experiment in education. We would also like to thank the contributors to the UNICEF Education Thematic Fund for their support and the Global Partnership for Education (GPE) for the support provided through their accelerated funding response to the COVID-19 Pandemic.

This report was prepared by the following colleagues: UNESCO Headquarters (Sonia Guerriero, Cynthia Guttman, Sam Pairavi, Maya Prince, Sobhi Tawil, Thu Truong, Peter Wallet), UNESCO Institute for Statistics (Adolfo Gustavo Imhof, Yifan Li, Silvia Montoya), UNICEF Headquarters (Pragya Dewan, Sakshi Mishra, Suguru Mizunoya, Oscar Onam, Nicolas Reuge, Annika Rigole, Georgina Thompson, Ann Marie Wilcock, Haogen Yao, Jean Luc Yameogo), UNICEF Office of Research – Innocenti (Matt Brossard, Thomas Dreesen, Akito Kamei, Anindita Nugroho, Marco Valenza) and the World Bank (Melissa Ann Adelman, Samer Al-Samarrai, João Pedro Azevedo, Kaliope Azzi-Huck, Juan Baron, Diana Goldemberg, Amer Hasan, Maria Rebeca Barron Rodriguez, Kristyn Schrader-King, Tigran Shmis, Marianne Joy Anacleto Vital). Copyediting was done by Nancy Vega (UNICEF).

NOTES ON THE USE OF DATA IN THIS REPORT

This report presents findings from the Survey of National Education Responses to COVID-19, jointly conducted by UNESCO, UNICEF and the World Bank, and administered by the UNESCO Institute of Statistics. Two rounds of questionnaires have thus far been administered by the UNESCO Institute for Statistics (UIS).[1] This report focuses on responses to the survey's more recent second round.[2]

All numbers presented and discussed in this report refer to the share of countries that responded to each relevant question in the survey. The number of countries that provided valid responses to the question are noted in each figure. Where relevant, the distinction between countries that were excluded for selecting "Do not know" or had a missing response are provided in figure notes.

Unless otherwise noted, we reported only the indicators where respondents represent at least 50 per cent of the school-aged (4-to-17-year-old) student population. Detailed information on the country and student coverage of each figure, including by income group, is available in Annex 1.

In each country, the survey questionnaire was completed by Ministry of Education officials responsible for education planning at the central or decentralized levels. The survey instrument was designed to capture *de jure* policy responses and perceptions from government officials on their effectiveness, providing a systematic understanding of deployed policies, practices and intentions to date. When reading the survey findings, it is important to keep in mind that the questions on policy responses do not capture how well they are being implemented and their scope in terms of the proportion of children (or teachers) reached in the country, which can vary significantly across countries. It is also likely that, when answering the survey, the understanding of the scope of the education system (public versus public and private) varied depending on countries/respondents.

1 The survey data and questionnaire are available at: tcg.uis.unesco.org/survey-education-covid-school-closures/

2 The second round of the survey captured responses from 149 countries between July and October 2020. In some instances where common questions were asked across both rounds of the survey, the analysis also included responses to the first round of the survey which captured responses from 118 countries (90 countries responded to both rounds). These instances are noted in the relevant figure's notes.

© UNICEF/UNI336263/MA

EXECUTIVE SUMMARY

As part of the coordinated global education response to the COVID-19 pandemic, UNESCO, UNICEF and the World Bank have conducted a Survey on National Education Responses to COVID-19 School Closures. In this joint report, we analyse the results of the first two rounds of data collection administered by the UNESCO Institute for Statistics (UIS). They cover government responses to school closures from pre-primary to secondary education. The first round of the survey was completed by Ministry of Education officials of 118 countries between May and June 2020, and the second round from 149 countries between July and October 2020. The survey instrument was designed to capture *de jure* policy responses and perceptions from government officials on their effectiveness, providing a systematic understanding of deployed policies, practices, and intentions to date.

UNESCO, UNICEF and the World Bank have conducted a survey to 149 ministries of education on their responses to COVID-19.

MONITORING AND MITIGATING LEARNING LOSSES FROM SCHOOL CLOSURES

The duration of school closures varies greatly between countries. Beyond tracking the number of days of in-person teaching and learning lost, some countries are also making efforts to measure the extent of learning lost during school closures. As schools reopen, countries are also introducing supports to remediate this learning loss.

© UNICEF/UNI355643/GACAD/AFP

Key highlights on the extent of days lost to school closures and how countries are assessing and mitigating these losses include:

1. **Lost opportunities for learning:** Overall, 108 countries reported missing an average of 47 days of in-person instruction due to school closures by the time of the survey,[3] equivalent to approximately one quarter of a regular school year. Countries where the academic year was still ongoing at the time of the survey reported more days of instruction lost (54 days) on average compared to those where the academic year had finished at the time of the survey (40 days).

2. **Learning Assessments:** While most countries (86 per cent) reported that student learning is being monitored by teachers, there are large differences across income groups. Only 3 per cent of high-income countries reported that student learning progress is not tracked by teachers, compared to around a quarter of low- and lower-middle-income countries. As schools reopen, most countries reported assessing or planning to assess students through school-based assessments but not in a systemwide way. At the primary level specifically, the vast majority of countries did not perform or were not planning systemwide assessments, either nationally or sub-nationally, as schools reopen. This will impede their ability to measure learning losses comprehensively and against expected student learning trajectory.

3. **Reopening support to remediate learning loss:** Most countries which responded the survey (84 per cent) introduced additional support programmes to remediate learning loss as schools were reopening. Across all income groups,

3 Answers were received from July 15, 2020 to October 15, 2020, with August 20, 2020 as average date.

© UNICEF/UNI394582/DEJONGH

but particularly among low-income countries, this most frequently took the form of remedial programmes to help -at least a proportion of- students catch up. Meanwhile, one in four high-income countries were not introducing any additional support measures. While high-income countries were also more likely to consider remote learning a substitute to official school days (as discussed further in the report), school closures can lead to learning losses and widen the achievement gap even in high-income settings.

DEPLOYING EFFECTIVE DISTANCE LEARNING STRATEGIES

As schools closed around the world to limit the spread of COVID-19, governments moved quickly to offer remote learning options, including through online platforms, television, radio and paper-based take-home packages. Recognizing that these options are not equally available to all, countries also made efforts to boost access to these platforms and to support teachers and parents/caregivers.

Key highlights from these countries' reports on how they are deploying distance learning and related support include:

4. **Remote learning modes and effectiveness:** Almost every country that responded to the survey reported the inclusion of remote learning in its education response to COVID-19, using online platforms, TV/radio programmes and/or take-home packages. Online learning has been provided as a solution -for at least a proportion of students- in all high-income countries, but not as uniformly among countries in the other income groups. Almost three-quarters of countries reported that remote learning days count as official school days. However, this was the case among only one in five low-income country respondents.

5. **Policies to boost access to online learning:** Most countries that responded to the survey (89 per cent) have introduced at least one measure to increase access to the devices and connectivity needed for online learning. This most frequently took the form of making access available from mobile devices or offering internet access at subsidized/no cost. Most countries (91 per cent) have also taken measures to support populations at risk of being excluded from distance learning platforms, most commonly learners with disabilities. However, over 30 per cent of low-income countries were not introducing any measure to support access or inclusion.

6. **Policies to support teachers:** Three-quarters of responding countries reported that teachers were required to continue teaching during school closures, with significant differences by income group. Over 90 per cent of high- and upper-middle-income respondents, compared to 60 per cent of lower-middle-income and 39 per cent of low-income respondents, required their teachers to continue working. Globally, most countries encouraged teachers to interact with students and parents by using messaging apps. More than half of high-income countries have recruited or are recruiting additional teachers to support remote learning or reopening. Most countries (89 per cent) that responded to the survey offered support to teachers, although one in five low-income countries did not. This support most frequently took the form of instruction on how to deliver lessons through distance learning

7. **Policies to support parents and caregivers:** Around three-quarters of countries that responded to the survey have measures in place to support parents/caregivers, although more than a third of low-income countries had not introduced learning-related measures. The most frequently used measures are the provision of guidance, tips or materials for continued learning at home. More than a third of high- or middle-income countries were supporting parents/caregivers through regular telephone follow-up by schools, but this was reported by only 22 per cent of low-income countries.

REOPENING SCHOOLS SAFELY FOR ALL

The timing of and strategies for reopening schools varies between countries. Although almost all countries have prepared health and hygiene guidelines to support safe school reopening, the implementation of these protocols and the other aforementioned supports will require additional resources. Almost all participating countries required additional financial resources to cover COVID-19-related costs in the education sector. Countries relied on various sources to meet this need and foresee that upcoming education budgets will be impacted.

Key highlights on how countries plan to reopen schools safely and finance the necessary measures to address the impact of COVID-19-related school closures include:

8. **School reopening plans:** In September 2020, 73 per cent of countries had fully or partially reopened schools, and a further 5 per cent had reported a future reopening date. Others either missed previously set dates for reopening or did not report reopening dates. High-income countries were more likely to have reopened schools and more likely to have done so utilizing a hybrid approach that combines distance learning and in-person teaching. Meanwhile, low-income countries were more likely to have delayed school reopening and plan to return to full in-person teaching and learning.

9. **Health protocols during school reopening:** Across all income groups, almost all responding countries have produced or endorsed specific health and hygiene guidelines and measures for schools. The vast majority of these include the promotion of physical distancing, hand-washing practices and other measures to reduce exposure contact. However, less than one in five reported plans to test for COVID-19 at school. Overall, more than a quarter of countries reported not having enough resources to ensure the safety of all learners and school staff, with wide variations by income level. In low-income countries, this increased to 50 per cent, compared to just 5 per cent of high-income countries.

10. **Financing:** Almost all countries (95 per cent) reported that additional financial resources were required to ensure an adequate response to COVID-19 for education. In at least three-quarters of responding low- and lower-middle-income countries, this support was provided by external donors. In contrast, more than three-quarters of high-income countries used additional allocation for education from the government. Reallocations within the education budget occurred in around two-thirds of middle-income countries and half of high-income countries. While only 19 per cent of the 79 responding countries have either already experienced or anticipate decreases to their country's education budget for the current or next fiscal year, this was reported by more than a third of low- and lower-middle-income countries. More than a third of 72 responding countries indicated that they had increased government support to households in 2020-2021 or were expecting to do so.

GOING FORWARD

Despite varying durations of COVID-19-related school closures around the world, the survey of national education responses to these closures shows the efforts that countries have exerted to mitigate learning losses both during closure and after reopening. The survey results illustrate how certain government responses to COVID-19 can widen inequities between and within countries, with school closure and reopening experiences varying across income groups and with more or less capacity to be fully inclusive. This survey is planned to become a regular endeavor supported by UNESCO, UNICEF and the World Bank, and its next iterations will benefit countries by continuing to allow them to share experiences that will better inform local and national responses and prepare for school reopening.

Key areas that have been identified for further exploration include: monitoring student drop out and disengagement, the continued role of distance learning, plans for remediation and tracking of their effectiveness, new approaches to and the shifting role of learning assessments, localizing decisions with regards to reopening schools, effectiveness of health and safety measures, skills development and support to teachers, and psycho-social supports to wellbeing and better mental health.

Going forward, in addition to perception and *de jure* surveys such as this one, more in-depth qualitative research may be required in some areas to capture the impacts of policy responses and interventions, and to support subsequent educational planning and programming. In addition, robust evidence on household take-up of these programs, implementation fidelity of the new policies and their effectiveness for learning, using implementation science and impact evaluations, is critical.

The survey results illustrate how COVID-19 may widen inequities between and within countries.

TABLE OF CONTENTS

Acknowledgements ... 3
Notes on the use of data in this report ... 3

EXECUTIVE SUMMARY ... 4
Monitoring and mitigating learning losses from school closures ... 4
Deploying effective distance learning strategies ... 6
Reopening schools safely for all ... 7
Going forward ... 8

INTRODUCTION ... 11
The survey ... 12
Organization of the report ... 12

MITIGATING LEARNING LOSSES ... 13

1. LOST OPPORTUNITIES FOR LEARNING ... 14
School closures varied widely across the globe ... 14

2. LEARNING ASSESSMENT AND MONITORING ... 16
Learning monitoring by teachers ... 16
Assessing student learning as schools reopen ... 17

3. APPROACHES TO MITIGATING LEARNING LOSSES ... 19

DEPLOYING EFFECTIVE REMOTE LEARNING STRATEGIES ... 20

4. REMOTE LEARNING: MODES AND EFFECTIVENESS ... 21
Supply of remote learning during school closures ... 21
Perceived effectiveness of remote learning modalities ... 22
Remote learning as a supplement to schooling ... 23

5. POLICIES TO BOOST ACCESS TO ONLINE LEARNING ... 25
Actions to improve connectivity ... 25
Types and scope of online remote learning platforms ... 26
Focus on learners at risk of being excluded from access to online learning ... 27

6. POLICIES TO SUPPORT TEACHERS ... 28
Continued work at school premises ... 28
Supporting teachers in the transition to remote learning ... 29
Interactions between teachers, students and their parents or caregivers ... 29

7. PARENTAL SUPPORT ... 31
Support for parents and caregivers to improve the home learning environment ... 31
Support for economic welfare and the psychosocial wellbeing of families ... 32

REOPENING SCHOOLS SAFELY FOR ALL ... 33

8. PLANS FOR REOPENING SCHOOLS ... 34
Reopening status ... 34
Teaching and learning approach ... 35
Measures to manage school reopening ... 36

9. HEALTH PROTOCOLS IN SCHOOLS ... 37
Prevalence and content of health and hygiene protocols ... 37
Resources to implement health and hygiene protocols ... 38

10. EDUCATION FINANCING ... 39
Provision of additional funds to cover COVID-19 related costs ... 39
Reductions in government education budgets ... 39
Increased government support to households ... 41

CONCLUSION ... 42
Areas to be explored further ... 42

REFERENCES ... 44

ANNEX 1: COUNTRY AND POPULATION COVERAGE IN EACH FIGURE ... 46

ANNEX 2: FINANCING DATA ... 49

LIST OF FIGURES AND TABLES

FIGURE 1-1: School closures have varied by length, start date and moment in the academic year – evidence from selected countries 14

FIGURE 1-2: Average days of instruction missed, by income level 15

FIGURE 1-3 Share of instruction days missed, by income level 15

FIGURE 2-1 Learning monitoring by teachers, per cent of countries where student learning is not tracked, by income group 17

FIGURE 2-2 Assessment of student learning as schools reopen, by level of education and level of the assessment 17

FIGURE 3-1: Different approaches to limiting learning loss, by income group 19

FIGURE 4-1: Provision of remote learning modalities, by income group 21

FIGURE 4-2: Perceived effectiveness of remote learning, by modality and income group 23

FIGURE 4-3 Remote learning considered as official school days and set to continue when schools reopen, by income group 24

FIGURE 5-1: Actions taken to improve connectivity, by income group 26

FIGURE 5-2 Types of online platforms teachers / schools encouraged to use and subjects 26

FIGURE 5-3: Measures for students at risk of exclusion from remote learning, by income group 27

FIGURE 6-1: Work requirement and recruitment of teachers and other educational personnel, by income group 28

FIGURE 6-2: Support provided to teachers, by income group 29

FIGURE 6-3: Communication modalities between teachers, students and their parents/caregivers 30

FIGURE 7-1: Policies to support parents/caregivers with the home learning environment, by income group 31

FIGURE 7-2: Economic and wellbeing measures targeting families, by income group 32

FIGURE 8-1: School reopening status, by income group 34

FIGURE 8-2: Countries that have set reopening dates, by school level and income group 35

FIGURE 8-3: Teaching and learning approaches as schools reopen, by income group 35

FIGURE 8-4: Measures to manage school reopening, by income group 36

FIGURE 9-1: Measures for school health and hygiene guidelines 37

FIGURE 9-2: Countries with enough resources to ensure school safety, by income group 38

FIGURE 10-1: Additional financial resources received for education response to COVID-19, by source of funding and income group 39

FIGURE 10-2: Countries with budget declines in 2020-21, by component and income group 40

FIGURE 10-3: Countries with increased government financing in 2020-21, by income group group 41

TABLE 1-1. Country and population coverage in each figure 46

TABLE 2-1. Number of countries that indicated receiving additional funding, by source and income group 49

TABLE 2-2. Number of countries that indicated budget declines wage bill or school feeding in 2020-2021, by income group 49

TABLE 2-3. Number of countries that indicated increased budget in 2020-2021, by income group 49

© UNICEF/UNI330879/DEJO

INTRODUCTION

The COVID-19 pandemic has caused an unprecedented disruption of education systems globally, affecting the lives of more than 1.5 billion students and their families. Immediate policy responses were aimed at ensuring continued curriculum-based learning through a range of remote learning modalities including online, TV/radio, paper-based take-home materials or other approaches. Governments reacted to the challenges of this overnight transition to remote learning by trying to strengthen support to teachers and by adjusting their assessment and examination policies. Specific measures were also put in place to ensure the inclusion of populations at risk of being excluded from distance learning platforms, as well as to support student wellbeing.

The anticipated duration of school closures was unknown and often depended on the severity of the pandemic in the country and its sub-regions. Some 60 countries began to reopen schools, even if only for some grades, as early as a few weeks following initial country-wide school closures. In many of these countries, schools reopened for a short period before the scheduled yearly academic break. As outlined in the *Framework for reopening schools*[4] (June 2020), reopening strategies put the health of students,

4 *The Framework for reopening schools* (June 2020) was developed jointly by UNESCO, UNICEF, the World Bank, World Food Programme and UNHCR. The guidelines aim to inform the decision-making process regarding school reopening, support national preparations and guide the implementation process, as part of overall public health and education planning processes. https://www.unicef.org/documents/framework-reopening-schools

teachers and families first, with hygiene and safety measures determined based on the latest scientific evidence available.

There is much to learn from this initial experience of school reopening. At the end of September 2020, almost half of the global student population worldwide still faced lengthy school closures extending to over six consecutive months (UNESCO, 2020e). This remains a major concern, as without in-person classes, and the social space and services that schools offer, further learning loss, disengagement and dropout will likely increase.

THE SURVEY

As part of the coordinated global education response to the COVID-19 pandemic, the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF) and the World Bank began a monitoring Survey on National Education Responses to COVID-19 School Closures. Thus far, two rounds of questionnaires have been administered by the UNESCO Institute for Statistics (UIS). The first round of the survey was completed by Ministry of Education officials of 118 countries between May and June 2020, and the second round from 149 countries between July and October 2020.[5] The survey instrument was designed to capture *de jure* policy responses and perceptions from government officials on their effectiveness, providing a systematic understanding of deployed policies, practices, and intentions to date. The survey results will help to better inform local and national responses and to prepare for school reopening in other countries. The results will also help support the decisions and actions of partners in support to governments, including through the Global Education Coalition launched by UNESCO.[6]

The survey questionnaires were completed by Ministry of Education officials in charge of education planning at central or decentralized levels and covers national education responses to COVID-19 school closures from pre-primary through secondary education. As such, the questionnaires do not cover higher education or technical and vocational education and training.

ORGANIZATION OF THE REPORT

This report presents key findings from the second round of the UNESCO-UNICEF-World Bank survey, although in some cases data from the first round was also used. The first section addresses the potential learning losses implied by school closures, as well as policies to assess and remediate them. The second section addresses the various distance learning modalities deployed and the policies and strategies implemented to ensure their effectiveness, including policies to support teachers and parents and to boost access to and effectiveness of online learning. The third section addresses safe reopening strategies for all students and other system-level responses such as financing.

The COVID-19 pandemic has caused an unprecedented disruption of education systems globally, affecting the lives of more than 1.5 billion students and their families.

5 The second round data were received from 149 countries in the following regions: Central and Southern Asia (9), Eastern and South-eastern Asia (15), Europe and North America (32), Latin America and the Caribbean (31), Northern Africa and Western Asia (19), Sub-Saharan Africa (32) and Oceania (11). Data from both rounds is available at: tcg.uis.unesco.org/survey-education-covid-school-closures/

6 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 140 members from the UN family, civil society, academia and the private sector to ensure the continuity of learning. Coalition members rally around three flagships, namely connectivity, teachers and gender.

© UNICEF/UNI336259/MA

MITIGATING LEARNING LOSSES

After the World Health Organization declared COVID-19 a pandemic in March 2020, many countries moved to close down their schools. At the peak of school closures in early April, over 90 per cent of the world's learners were estimated to be affected (UNESCO, 2020e). Countries have since begun reopening schools. This section describes the resultant variation in the duration of school closures. Globally, countries reported that close to 50 days of in-person teaching and learning have been lost to school closures on average, although this varied by school calendar and income group.

These closures represent lost opportunities for learning. Beyond the number of days that schools were closed, it is also important to understand how much learning was lost. To this end, most respondent countries have assessed students or plan to assess students using school-based assessment as they return to school. Most were also introducing additional support programmes to remediate these learning losses as schools reopen, with remedial programmes being the most commonly used form of support.

1. LOST OPPORTUNITIES FOR LEARNING

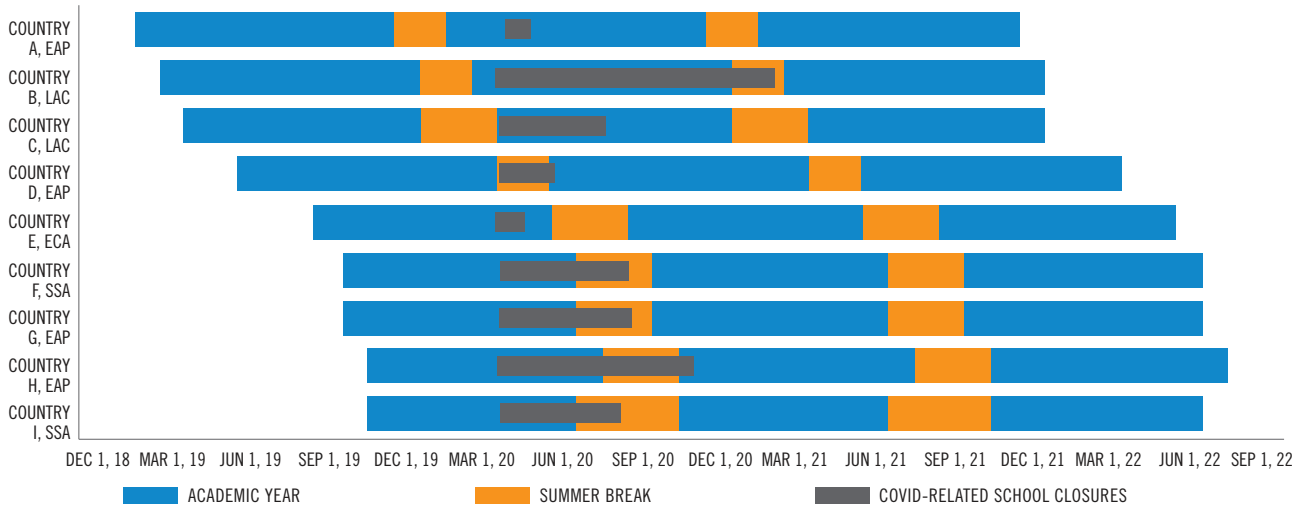
Across the globe school closures due to COVID-19 have served to deny students opportunities for learning. To date, a number of analyses have been developed on the extent of learning loss that students will face. Most have been based on simulated ranges of the duration of school closure and paint a stark picture of the extent of losses the world may face. One estimate suggests that global learning losses from four months of school closures could amount to $10 trillion in terms of lost earnings (Azevedo et al., 2020). Other studies have also estimated that students and countries stand to lose significant amounts over their lifetimes (Psacharopoulos et al., 2020; Hanushek & Woessman, 2020).

This survey represents one of the first global attempts to catalogue the timing and duration of school closures due to COVID-19, based on country reported values of the length of school closures and of their school year. The data reveal that the severity of the impact on students varied by when school closures began in terms of the school calendar, and how long they lasted. Similarly, the data also reveal whether respondents view remote learning as a valid alternative to in-school learning opportunities. Taken together, these two pieces of information not only help describe the severity of school closures but also explain some of the choices governments made when putting together a menu of policy responses to make up for lost school days.

SCHOOL CLOSURES VARIED WIDELY ACROSS THE GLOBE

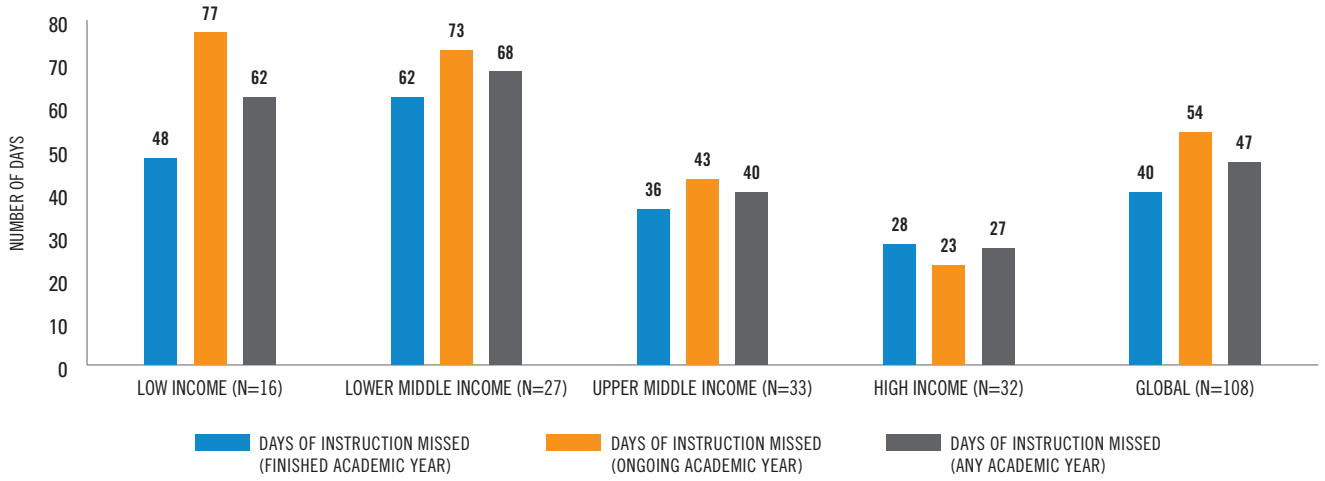
Figure 1-1 makes clear that school closures have impacted countries across the world in different ways. In some countries, school closures disrupted the end of a school year; in others, school closures delayed the start of the school year. In still others, school closures coincided with a previously scheduled break. The figure plots the timing of school closures for a selection of countries chosen to underscore the variety of situations. Even neighboring countries in the same region experienced vastly different durations and timing of school closure.

FIGURE 1-1: School closures have varied by length, start date and moment in the academic year – evidence from selected countries



Notes: *Authors' calculations using date of first closure from the World Bank's School Tracking Database and from the UNESCO global monitoring of school closures due to COVID-19. Data on length of school closures is from UNESCO-UNICEF-World Bank Joint Survey on Education during COVID-19. Data on start and end dates of academic years are from UIS. Selected countries anonymized within East Asia and Pacific (EAP), Europe and Central Asia (ECA), Latin America and Caribbean (LAC) and Sub-Saharan Africa (SSA).*

FIGURE 1-2: Average days of instruction missed, by income level

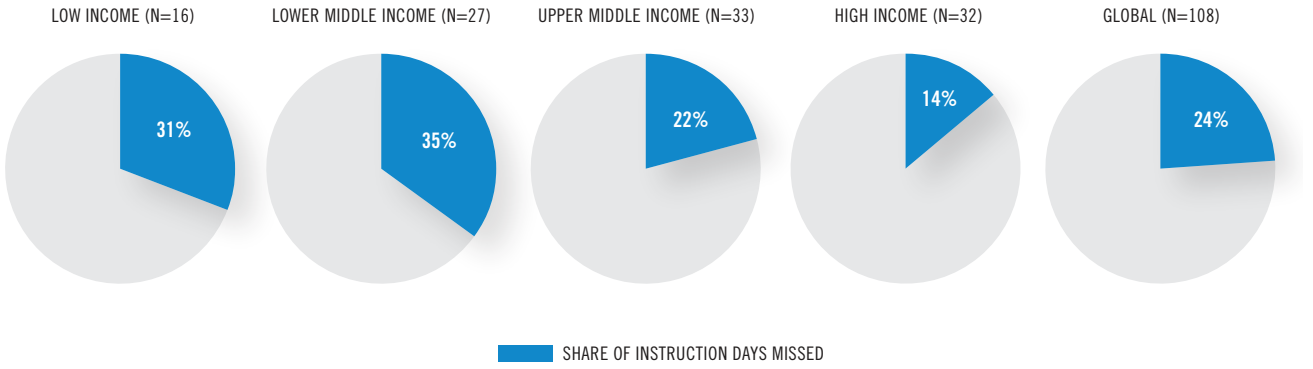


Notes: *Respondents answered the surveys during the period July – October. While there is a possibility that durations of school closure could be correlated to when the survey was filled out, there is no clear pattern in the data that would indicate a bias in either direction in the numbers reported here. Caution is advised in generalizing the results represented in the figure as the countries that responded to this question cover less than 50 per cent of the total 4-17 year old population. More information on the coverage of each income group can be found in Annex 1.*

These patterns differed for countries in the northern and southern hemispheres. Specifically, Figure 1-2 shows that, on average, across all country income levels, 40 days of school were lost if an academic year was already finished at the time of the survey, as was the case for countries predominantly in the northern hemisphere. In countries where there was an ongoing academic year at the time of the survey, 55 days were reported as lost, as was the case for countries predominantly in the southern hemisphere. On average, across all countries reporting, school closures lasted for one quarter of a regular school year (Figure 1-3).

The survey points to a diversity of experiences and responses at the national level. Countries experienced varying lengths of school closures, and while some considered remote learning to be a valid substitute for formal school days, others did not. This will be discussed further in section 4. Durations of school closure varied by whether the academic year had been completed, whether countries deemed remote learning to be effective, by country income group and by whether the country was located in the northern or southern hemisphere. The next sub-section describes how countries plan to assess learning as schools reopen.

FIGURE 1-3 Share of instruction days missed, by income level



Notes: *Respondents answered the surveys during the period July – October. While there is a possibility that durations of school closure could be correlated to when the survey was filled out, there is no clear pattern in the data that would indicate a bias in either direction in the numbers reported here. Caution is advised in generalizing the results represented in the figure as the countries that responded to this question cover less than 50 per cent of the total 4-17 year old population. More information on the coverage of each income group can be found in Annex 1.*

2. LEARNING ASSESSMENT AND MONITORING

Learning assessments and monitoring are crucial for measuring what children effectively learn. When well-designed, they help monitor the performance of the education system and inform policy makers and education managers on the reforms to implement and on the support to provide to schools. Learning assessments also serve as a feedback mechanism, allowing all stakeholders, including teachers, to understand what is being learned and how to adapt teaching and learning in the classroom (Liberman & Luna-Bazaldua, 2020).

Different types of learning assessments exist, with different purposes. **Formative and summative assessments** are implemented by teachers/schools to adapt their teaching strategies or as means to provide individual grading to students at the end of a certain period of instruction. **Examinations** are used to certify or select learners in a given grade or age for further schooling, training or work. **Large-scale system-level assessments** provide feedback on the overall health of the system for a given group of learners (based on age or grade) in a given year and in a limited number of domains and are likely the most relevant type for capturing learning loss due to school closures consistently.

Unsurprisingly, the COVID-19 pandemic and related school closures impacted learning assessments. For example, based on the data from the joint survey's first round, more than half of respondent countries decided to postpone or reschedule high-stakes examinations, ranging in time from by four weeks to more than 12 weeks. A few countries reported having cancelled their examinations altogether. Around a quarter were continuing to hold high-stakes exams as planned (a smaller proportion for primary schools), but with half of these countries reducing the curriculum content to be assessed (Nugroho et. al., 2020).

There are large differences in assessing and monitoring learning across income groups.

The second round of the joint survey asked further questions about: i) monitoring learning outcomes by teachers and related tracking tool (from "not tracked" to different types of tools for tracking);[7] ii) the types of existing assessments prior to COVID-19 (formative/summative; examinations; and large-scale system-level) for both primary and secondary education; and iii) whether students were assessed (or there were plans to assess students) following school reopening at school, sub-national and national levels (and by level of education).

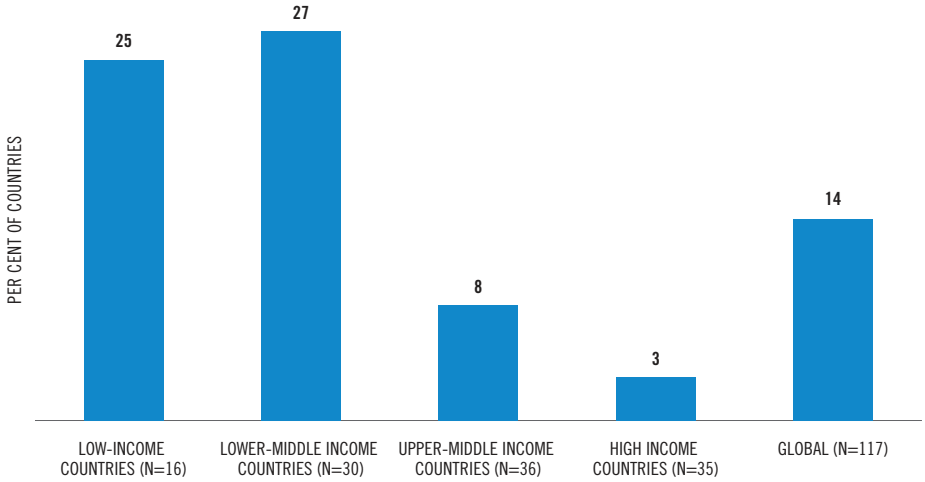
LEARNING MONITORING BY TEACHERS

Overall, 14 per cent of countries reported that student learning progress is not being tracked by teachers/schools. There are large differences in monitoring practices across income groups. Only 3 per cent of high-income countries reported that student learning progress is not tracked by teachers, compared to 25 per cent of low-income countries and 27 per cent of lower-middle-income countries (see Figure 2-1). Among countries where tracking systems were in place prior to COVID-19, just over half of countries reported that they were developed by schools.[8]

7 The types of tools for tracking student learning proposed in the questionnaire were: i) Through a learning management system developed by the school; ii) Through a learning management system provided by the private sector (e.g. Google, Blackboard, Edmondo, etc.); iii) Tracking student progress on Excel or other spreadsheets; iv) Tracking student progress on paper; and v) other.

8 And 29 per cent of countries -predominantly high-income countries and none of low-income countries- reported that the learning tracking system was provided by the private sector (e.g. Google, Blackboard, Edmondo, etc.)

FIGURE 2-1 Learning monitoring by teachers, per cent of countries where student learning is not tracked, by income group

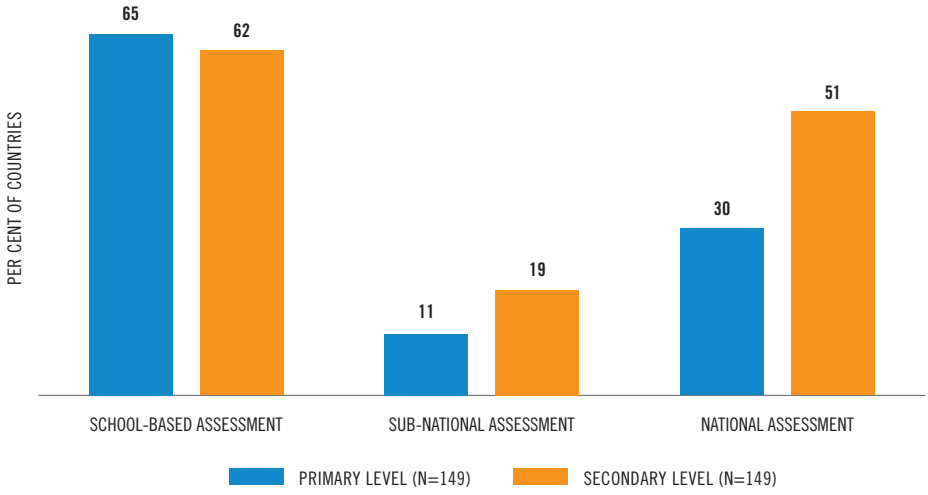


ASSESSING STUDENT LEARNING AS SCHOOLS REOPEN

As schools reopen, most countries reported assessing or planning to assess student learning outcomes through school-based assessment (see Figure 2-2).[9] Although these assessments are less suitable for providing a robust and nation-wide picture of learning losses due to COVID-19, they are valuable in helping teachers understand where their students are so that they can support them accordingly.

Specifically at the primary level, the share of respondent countries assessing or planning to assess primary students through sub-national or national assessments is very low, with only 10 to 30 per cent of countries planning to assess primary students. This indicates that the vast majority of countries are not planning system-wide assessments following school re-openings, and therefore may not be able to accurately measure and compare learning losses against expected student learning trajectory.

FIGURE 2-2 Assessment of student learning as schools reopen, by level of education and level of the assessment



Note: *The figures are calculated based on all respondents due to the nature of the question, which asked respondents to 'select all that apply' among assessments for each level of education.*

9 It is noteworthy that answers provided did not include information about the quality of the reported assessments, e.g. in reference to the use of standardized instruments with psychometrically valid test items.

© UNICEF/UNI330852/DEJO

Now that schools are reopening, learning assessments and monitoring are more important than ever. Large differences that already existed in day-to-day learning monitoring and robust system-wide learning assessment systems across countries before COVID-19 have been exacerbated by the pandemic. It is crucial that countries and development partners strengthen their efforts toward developing well-designed learning assessment systems, including to better measuring the impact of school closure and provide evidence on remote learning.

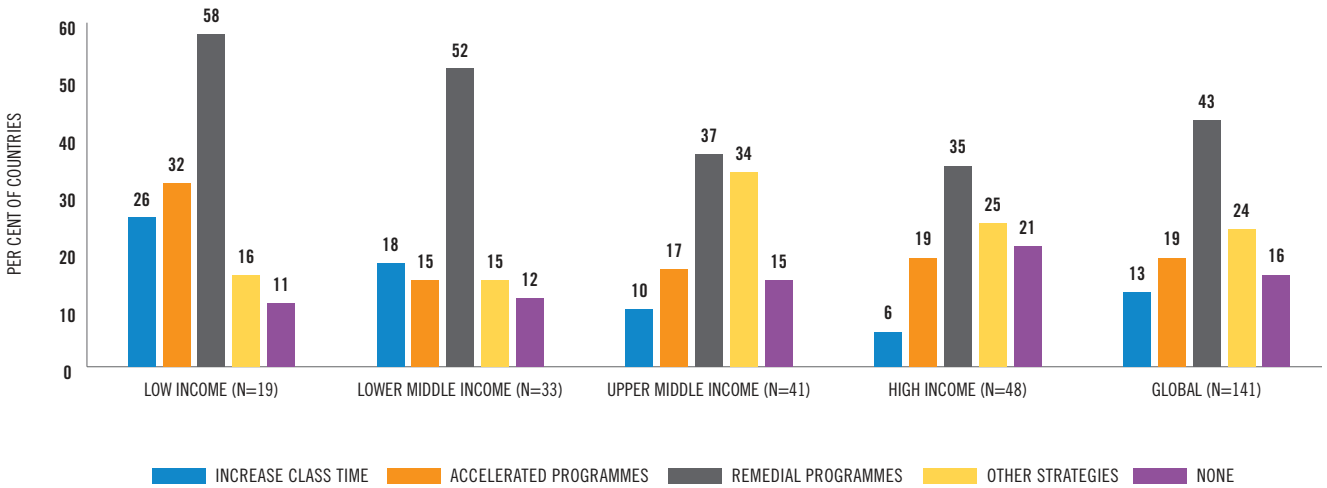
Also, as access to different channels of remote learning varies, so too do their uptake and effectiveness when implemented. Innovative methods to monitor and assess learning, such as telephone-based assessments, could be invested in. As education systems prepare for further school closures resulting from the ongoing COVID-19 crisis and possible future crises, understanding the accessibility and effectiveness of remote learning programmes will be critical to creating resilient systems (Alban Conto et al., 2020). Household-based learning assessment surveys, such as UWEZO or the MICS Foundational Learning Skills module, are also valuable complementary efforts to support, including for assessing the learning loss of children who dropped out of school due to the pandemic.

3. APPROACHES TO MITIGATING LEARNING LOSSES

Given the wide-ranging experiences of school systems it is not surprising that countries are choosing to combat lost opportunities for learning with a diverse array of policy responses. Over one-third of countries are introducing remedial programs to help children catch up. This is the most common option across income groups, with the share of low-income countries pursuing this option almost double that of high-income countries. Accelerated programs are being pursued by one in five countries across the globe. Among high- and upper-middle-income countries, increasing class time was the least used approach.

Countries are offering a range of in-school supports to help remediate learning losses during school closures. This has most frequently taken the form of remedial programmes. Examples include computer-assisted remediation interventions in Ecuador (Angel-Urdinola, 2020) and remedial tutoring in Niger (3EA, 2018). About one in ten countries are not providing additional support to students beyond school reopening; among high-income countries this rate is close to one in four. This pattern is consistent with the smaller share of instruction days missed (Figure 1-2) and the greater likelihood of recognizing remote learning as official school days among high-income countries (Figure 4-3). It is notable, however, that recent studies have found that school closures from COVID-19 can lead to learning loss and widen the achievement gap even in high-income countries (e.g. Dorn et al., 2020; Maldonado & De Witt, 2020).

FIGURE 3-1: Different approaches to limiting learning loss, by income group



Notes: Remedial programmes *generally target students who are struggling with one or more learning domains and are therefore generally designed to help give students the individual attention they need to build skills and confidence.* ***Accelerated programmes*** *are flexible, age-appropriate programmes, run in an accelerated timeframe, which aim to provide access to education. They generally target disadvantaged, over-age, out-of-school children and youth – particularly those who missed out on schooling or had their education interrupted due to poverty, marginalization, conflict and/or crisis.* ***Other strategies*** *include summer school, revisions to the curriculum and deferring decision making to the local school level.*

© UNICEF/UNI304636/MA

DEPLOYING EFFECTIVE REMOTE LEARNING STRATEGIES

As schools closed around the world, countries moved quickly to offer remote learning to continue children's education through various delivery modalities including online platforms, broadcast media (TV/radio) and paper-based take-home packages. This section describes the remote learning responses that governments provided to address education during school closures, and how these practices are being taken forward as schools reopen. It then explores measures and policies implemented thus far to boost access to online remote learning, as access remains a critical barrier for many children due to the digital divide. Finally, this section explores the support provided to teachers, parents and caregivers, who are instrumental for children's learning and had to rapidly adapt to remote learning as the space for children's learning moved out of the classroom.

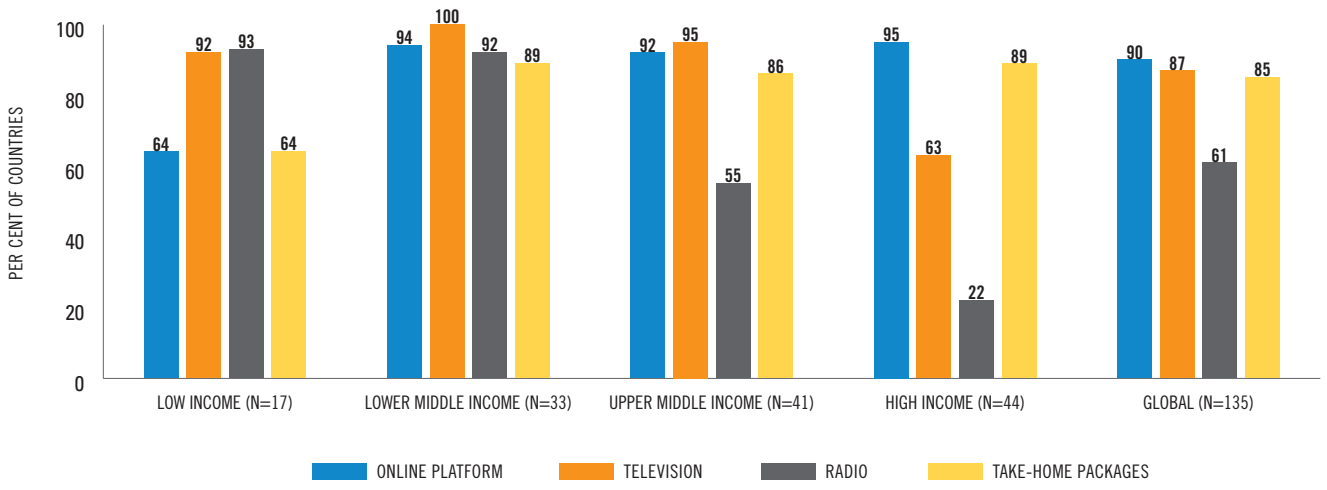
4. REMOTE LEARNING: MODES AND EFFECTIVENESS

Even short interruptions in children's schooling can have long lasting negative impacts on children's learning (Alban Conto et al., 2020). While government responses to provide remote learning through various modalities were swift, it is essential to understand who had access to remote learning interventions, how they were used and the extent of their effectiveness. Throughout this unprecedented period of school closures some key guiding principles have emerged (World Bank, 2020c; Dreesen et al., 2020) on the use of multiple delivery channels for remote learning to mitigate the digital divide, the curation of existing accessible (open) content when available, and the provision of tailored support to the teachers, parents and caregivers delivering remote learning.

SUPPLY OF REMOTE LEARNING DURING SCHOOL CLOSURES

Overall, online and TV were the most used modalities, being offered in 90 per cent and 87 per cent of countries respectively, followed by paper-based take-home materials (85 per cent) and radio-based remote learning (61 per cent). Stark differences among income groups reflect the great inequities in access to the technologies that are required for remote learning. Though these differences preceded COVID-19, the pandemic has further exacerbated this digital divide, disproportionately impacting poorer communities within and across countries.

FIGURE 4-1: Provision of remote learning modalities, by income group



Notes: *Countries were not asked directly about remote learning modalities. Responses to the question on the effectiveness of remote learning (which included: very effective, fairly effective, not effective, we don't have such systems) were used to develop a proxy indicator.*

UNESCO and the International Telecommunication Union (ITU, 2020) estimate that 40 per cent of students whose schools were closed as of May 2020 do not have access to the internet (Giannini, 2020; UNICEF, 2020). In addition to these large inequities in internet access, TV and radio access also varies considerably across and within countries. In 40 of the 88 countries for which there is recent household survey data, TV ownership rates among urban households were more than double that of rural households, with the largest disparities appearing in sub-Saharan Africa (Dreesen et al., 2020). High-income

countries report using online platforms (95 per cent) as the main approach to ensure remote learning, followed by take-home material (89 per cent), television (63 per cent) and radio (22 per cent). Meanwhile, low-income countries relied more heavily on broadcast media, including radio (93 per cent) and television (92 per cent), to provide education content remotely during school closures, while the use of online platforms is lower, at 64 per cent, likely due to low internet penetration in these environments. In the earlier section, the survey showed less effort by high-income countries to remediate learning loss compared to countries from other income groups. The information here may mean that the perceived quality of remote learning tools (including online and TV) is better in high-income countries than in low- and middle-income countries.

It is important to keep in mind that in this section we report information regarding what programs governments seem to be supporting. A critical component which is not easily observable is the take-up of such programs by students and households. This additional element is critical but is beyond the scope of this survey, as it requires questions to be asked at the household level. The previous round of the survey showed that the monitoring of remote learning, and countries' assessment of its reach to students, was at 69 per cent globally (UNICEF, 2020). Therefore, the numbers related to remote learning availability should be taken with caution.

PERCEIVED EFFECTIVENESS OF REMOTE LEARNING MODALITIES

While the full impact of school closures and relative effectiveness of remote learning may not be known for some time, this survey shows the perceived effectiveness of remote learning varied by modality and income group (Figure 4-1). Globally, online learning platforms were rated as either very (36 per cent) or fairly (58 per cent) effective, particularly among high- and upper-middle-income countries whereby, none of high-income and only 6 per cent of upper-middle-income countries rated online learning as ineffective.

Television was widely used across low- and middle-income countries, but these groups reported varying degrees of effectiveness. Among upper-middle-income countries, 37 per cent reported television as very effective, compared to 16 per cent among lower-middle-income countries and 27 per cent among low-income countries.

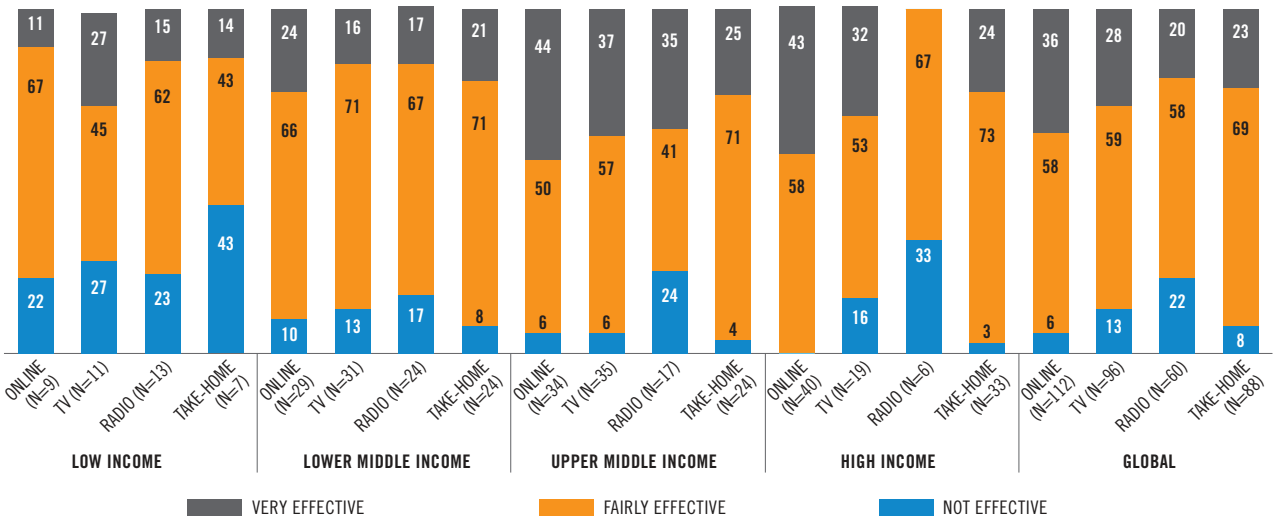
© UNICEF/UNI330862/DEJO

Radio was rated as ineffective by more than one in five countries globally, though this could be correlated to the prevalence of its use across income groups. High-income countries were least likely to use radio, and a third of those who did considered it ineffective. However, among low- and lower-middle-income countries, radio was widely used and rated as very effective by about 16 per cent and fairly effective by 65 per cent of countries.

Globally, take-home packages were used by the majority of high- and middle-income countries, and most (>70 per cent) rated them as fairly effective. Meanwhile, although these materials were almost equally as commonly used as online platforms among low-income countries, they were rated more negatively, with 43 per cent of the low-income countries that used them considering them ineffective.

Among income groups, low-income countries were more likely than others to consider remote learning not effective across all modalities, except for radio. This likely reflects the larger issues of availability of prerequisite infrastructure and households' lack of access to technologies that are more acute in lower income settings.

FIGURE 4-2: Perceived effectiveness of remote learning, by modality and income group



REMOTE LEARNING AS A SUPPLEMENT TO SCHOOLING

Answers received indicate that remote learning methods are commonly considered valid forms of education delivery and thus can be counted as official school days. This was the case among 73 per cent of respondents, who agreed that remote learning served as official learning. There are, however, striking differences by income group. Among low-income countries, only 20 per cent considered remote learning sufficient enough to account for official school, while 70 per cent of lower-middle-income, 82 per cent of upper-middle-income and 86 per cent of high-income countries perceived it to be a valid learning alternative to official school days.

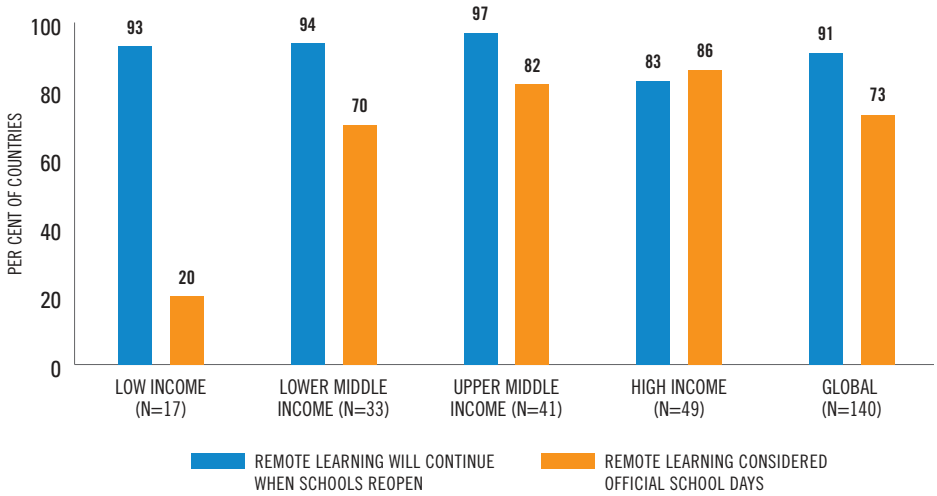
Significant resources have gone into remote learning in recent months, as evidenced by the number of countries who reported using it once schools closed. Not surprisingly, these efforts have spawned a rethinking of education delivery beyond the crisis phase. Among countries that have reopened and those planning to reopen schools, many are now using hybrid models that blend in-person and remote learning. More than 90 per

© UNICEF/UN035785/LEMOYNE

cent of countries across all income groups reported that remote learning (be it through online platforms, television, radio or take-home packages) will continue as schools reopen. This approach seems to build resiliency into education systems, allowing them to adapt to fluid environments such as localized and widespread school closures due to COVID-19 and beyond.

As countries continue the use of remote learning, mainstreaming it into hybrid education systems will need careful review. The decision to consider remote learning as official school days must take into account inequities in access to technology and ensure that it does not further widen the digital divide around the world. Some governments reported that they are already including all students in their remote learning strategies and taking measures such as providing specific support to those with disabilities (56 per cent), designing learning materials in minority languages (21 per cent) and making a special effort to ensure that online learning becomes more accessible to migrant and displaced children (16 per cent).

FIGURE 4-3 Remote learning considered as official school days and set to continue when schools reopen, by income group



5. POLICIES TO BOOST ACCESS TO ONLINE LEARNING

Access to technology, connectivity and electricity that enables online remote learning is not available to all, with children in conflict zones and rural areas and those from poorer households disproportionally more likely to lack the necessary tools and setup for online learning (UNESCO, 2020b; UNICEF, 2020). While 53 per cent of households globally are connected to the internet, the share of students with no access to the internet at home varies from less than 15 per cent in Western Europe and North America to as high as 80 per cent in sub-Saharan Africa. These students – most often from lower-income or rural households – are de-facto excluded from online remote learning during times of school closures (Giannini, 2020; International Telecommunication Union, 2020).

Additionally, skill gaps in using available online platforms and devices makes access to and use of online tools even more complex. Analyses of household-level data in eight Sub-Saharan countries, for example, identified that girls face disadvantages in acquiring ICT skills both at school and at home (Amaro et al, 2020). Therefore, boosting access to online remote learning has become a crucial part of addressing inequalities and reducing learning losses, and will continue to play a major role for reopening schools. At the time of the survey, **more than half of the countries reported the intention to use hybrid approaches, constituting a mix of in-person and remote learning, upon school reopening.**

ACTIONS TO IMPROVE CONNECTIVITY

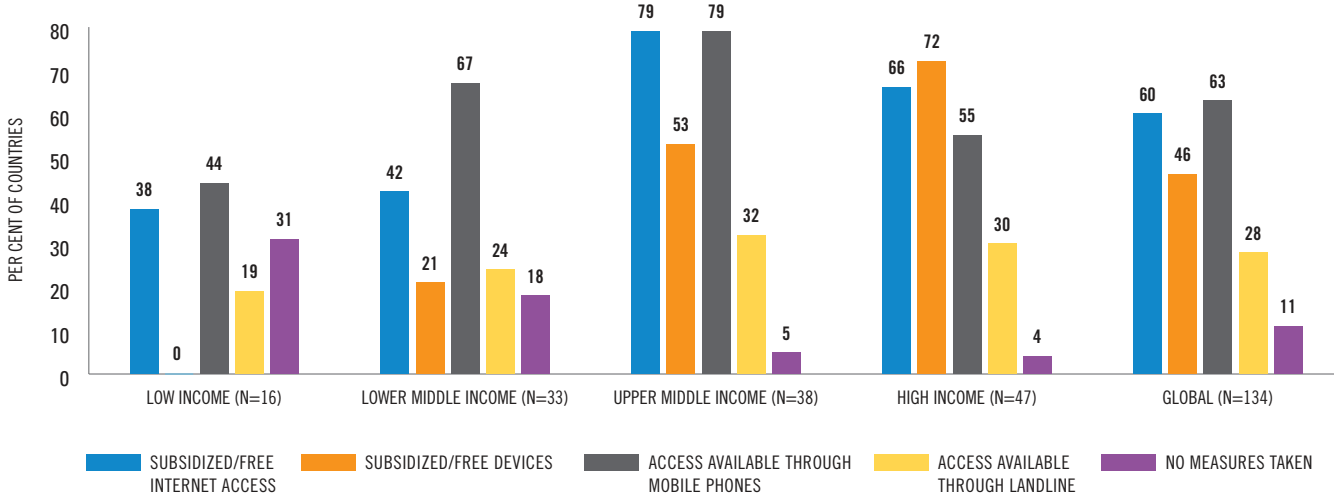
One important trend to facilitate connectivity to online remote learning infrastructure seems to be **the provision of internet access at subsidized or zero cost**. At least two-thirds of high- and upper-middle-income countries surveyed implemented this measure, though this was less common in low- and lower-middle-income countries (38 per cent and 42 per cent respectively). Some countries have made access to their national online digital platforms data free, while others have provided subsidized internet access in other forms, for instance by providing funds to students and teachers to reduce the financial burden of purchasing internet subscriptions.

Providing devices at lower cost to be used for educational purposes was another measure applied, although with large differences across income groups: 72 per cent of high-income countries, 53 per cent of upper-middle-income countries, 21 per cent of lower-middle-income countries and none of low-income countries who responded to the survey.

A further complement was the **access to online learning platforms through mobile phones**, reported by a majority of high- and middle-income countries. Even though phone-based access was the leading measure in low-income countries (44 per cent), about one-third did not report offering any specific support to boost access to connectivity. This is somewhat mitigated by the widespread use of television and radio, or the use of paper-based take-home packages, in low-income countries as the only short-term alternative solution in places without electricity and connectivity (see section 4. *Remote learning: modes and effectiveness*).

A less frequently implemented measure was the use of landlines to provide access to distance learning platforms, used by only 19 per cent of low-income countries and around one in four high- and middle-income countries.

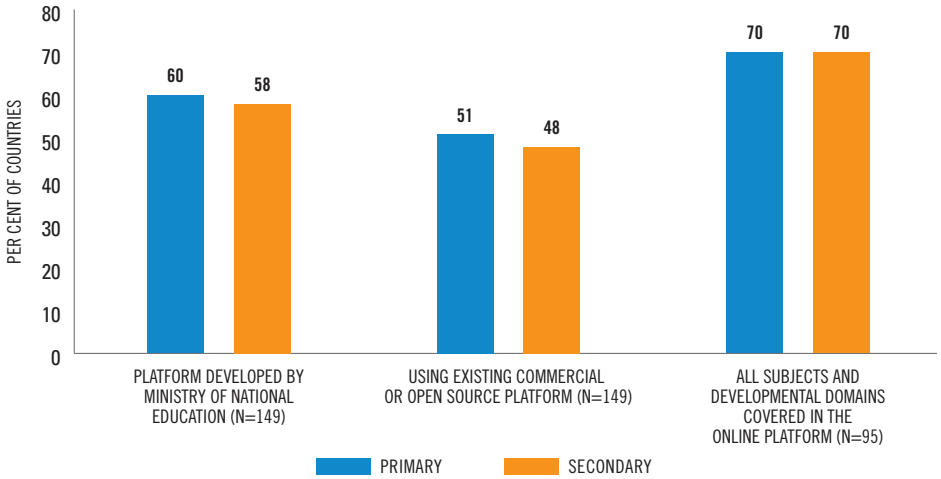
FIGURE 5-1: Actions taken to improve connectivity, by income group



TYPES AND SCOPE OF ONLINE REMOTE LEARNING PLATFORMS

In about 60 per cent of countries, the Ministry of Education created its own platform to display educational content for teachers and students in primary and secondary education. Commercial (e.g. Microsoft Teams, Google classroom) and open source platforms (e.g. Moodle, Canvas) were also used to complement those national education platforms for the delivery of synchronous classes. In some cases, individual schools were given the choice to select the platform(s) through which to deliver distance learning, depending on the context and the needs of the teachers and students. **About two-thirds of countries reported that all subject areas and developmental domains, whether in primary or secondary education, were covered through online remote learning.** Nevertheless, some countries reported that distance

FIGURE 5-2 Types of online platforms teachers / schools encouraged to use and subjects



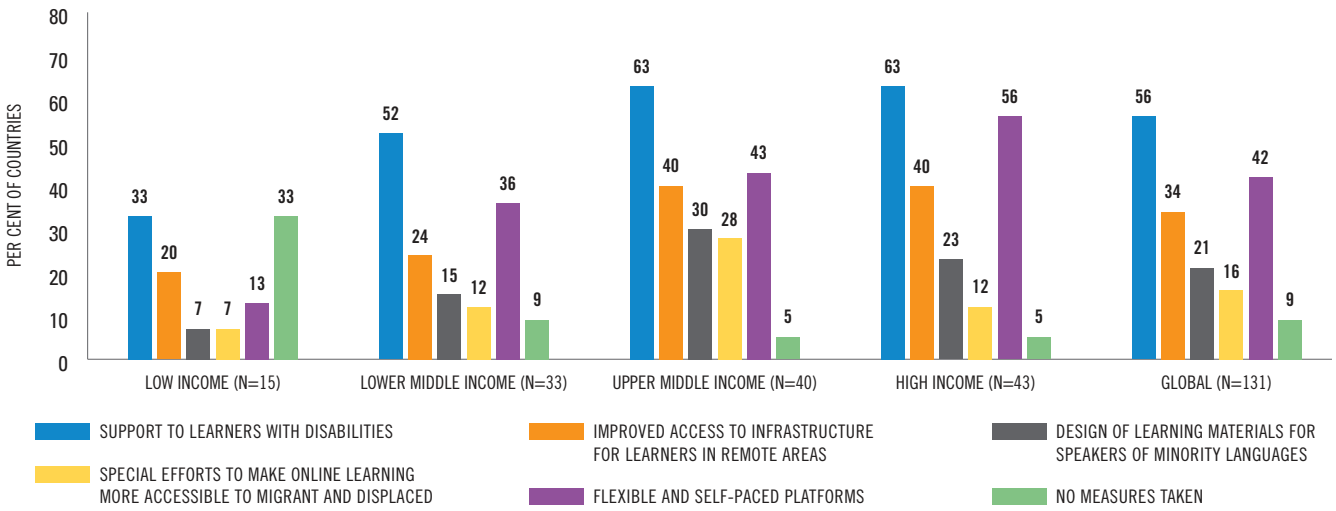
Note: *This graph combines information from question 17.1 (What type of online learning platforms are teachers/schools encouraged to use while schools are closed, by education level?) and question 17.1.1 (If the platform is created by the Ministry of Education or education authorities, are all subjects and developmental domains covered in the online learning platform?).*

learning for sports and in subjects such as art, where distance learning had been virtually non-existent before COVID-19, was challenging.

FOCUS ON LEARNERS AT RISK OF BEING EXCLUDED FROM ACCESS TO ONLINE LEARNING

In addition to the general measures described above to boost connectivity, countries implemented more specific actions aimed at improving inclusion to online learning. At least 1 in 3 countries reported **improving access to connectivity and infrastructure for learners.** Other common measures entailed flexible and self-paced platforms, which 56 per cent of high-income and nearly 40 per cent of middle-income countries (upper- and lower-middle-income combined) reported. These platforms could, for example, take the form of asynchronous learning platforms, allowing each learner greater flexibility and the freedom to advance at his or her own speed, thus integrating varying learning habits (UNESCO, 2016). Other measures included **using school facilities to support learners in need, as well as those at risk of dropout and disengagement**. For example, multiple countries provided local solutions to provide connectivity infrastructure for those the most in need, and many countries set up hotlines and chatbots to offer psychosocial support to both children and parents.

FIGURE 5-3: **Measures for students at risk of exclusion from remote learning, by income group**



Online remote learning will likely continue to be part of schooling as countries develop hybrid learning systems that use both in-person and remote learning which can be leveraged during times of crisis. To avoid the further exacerbation of learning losses and widening inequalities, several factors beyond connectivity and accessibility of distance learning platforms are important to consider, including additional efforts directed toward supporting learners who are at higher risk of dropout and disengagement, as well as strengthening digital skills among teachers, learners and their caregivers.

6. POLICIES TO SUPPORT TEACHERS

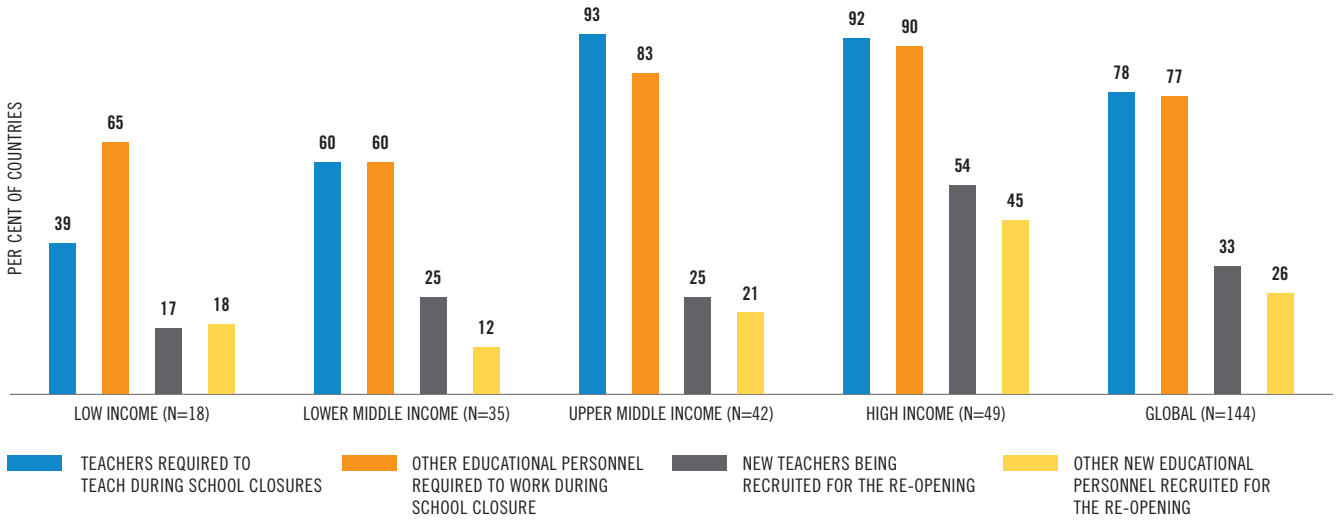
Global school closures affected around 63 million primary and secondary teachers. They have been, and remain, on the frontlines of the response to ensure that learning continues. Teachers have had to rapidly innovate their approaches to teaching in order to facilitate quality distance learning for students, with or without the use of digital technologies. They also played a key role in communicating measures that prevent the spread of the virus, ensuring that children are safe and supported (International Task Force on Teachers for Education 2030, 2020).

CONTINUED WORK AT SCHOOL PREMISES

Teachers in at least three quarters of the countries surveyed were required to teach during school closures, of which the majority reported no changes to teacher salaries or benefits. Yet the share of countries where teachers were required to teach varied across income groups – over 90 per cent of high- and upper-middle-income countries, 60 per cent of lower-middle-income countries and 39 per cent of low-income countries. About half of the high-income countries reported that teachers were able to teach and work from the school premises, compared to 27 per cent of middle-income countries (upper-middle and lower-middle-income combined). Teaching from the school premises was more frequent for teachers of upper secondary, and especially for those helping prepare their students for national examinations. In other cases, schools remained open throughout to teach the children of front-line workers and priority groups. **In addition to the pre-existing staff, 1 in 3 countries recruited additional teachers to support remote learning during closure of schools and their reopening, mostly high- and upper-middle-income countries though.**

Similarly, 77 per cent of countries also reported that other educational personnel continued to work during the school closures. These included IT technicians to ensure the proper functioning of online distance learning and the provision of proper devices for students and teachers. In some cases, psychologists and pedagogical experts were called upon to support teachers and students, and to reach out to vulnerable children of parents working in vital sectors and to those living in precarity at home. In addition, about **1 in 4 countries reported recruitment of additional staff such as cleaning and administrative personnel during the reopening of schools.**

FIGURE 6-1: **Work requirement and recruitment of teachers and other educational personnel, by income group**



SUPPORTING TEACHERS IN THE TRANSITION TO REMOTE LEARNING

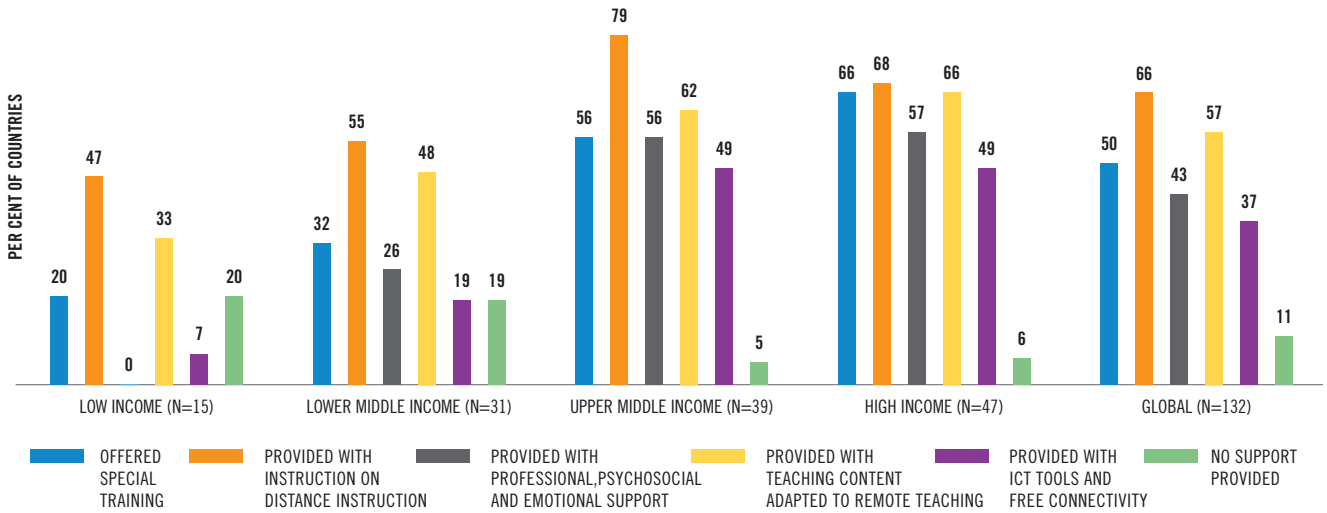
While support to teachers varied significantly across income groups, **the majority of countries (66 per cent) reported their teachers receiving instructions on how to operate and deliver their lessons through remote learning**. For lower-income countries, this was by far the most commonly reported measure to support teachers.

About two-thirds of high-income countries, in comparison to almost half of middle-income and just 20 per cent of low-income countries, offered special training, which generally consisted of strengthening their ICT skills and innovating their pedagogical approaches to delivering learning contents. In countries that already had online platforms established, teachers received trainings on these platforms, which were repurposed for distance learning during school closures.

Further, over 60 per cent of high- and upper-middle-income countries report having provided teachers with content adapted to remote teaching, compared to 48 per cent in lower-middle-income countries and 33 per cent in low-income countries. **1 in 3 countries reported providing their teachers with ICT tools and free internet connectivity to facilitate their work during the school closures.**

Psychosocial and emotional support was another measure provided to teachers, complementing the more technical support given to them. It was given in more than half of high- and upper-middle-income countries, and in 26 per cent of lower-middle-income countries. In some cases, social media groups facilitated peer support and the exchange of best practices between teachers.[10]

FIGURE 6-2: **Support provided to teachers, by income group**



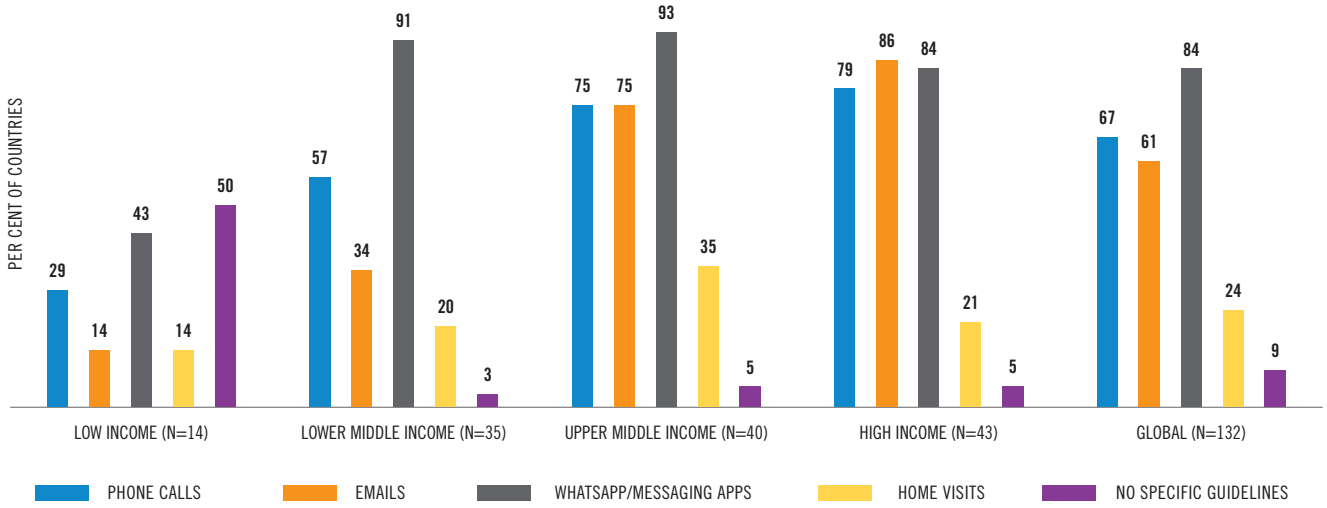
INTERACTIONS BETWEEN TEACHERS, STUDENTS AND THEIR PARENTS OR CAREGIVERS

Regular interaction between teachers, students and their parents was encouraged as part of the COVID-19 response. Whereas in high-income countries, emails, phone calls and messaging apps were fairly equally used to interact (about 80 per cent), the preferred modalities in middle-income countries were **messaging apps** (92 per cent)

10 And in some countries a special help line was set to support teachers with operating distance learning platforms

followed by **phone calls** (66 per cent). Some countries developed dedicated applications to communicate with all students, including those with special needs. Similarly, others put emphasis on the role of pedagogical professionals to contact and stay in touch with special needs learners. Low-income countries also reported the use of messaging apps (43 per cent) and phone calls (29 per cent) to sustain contact between teachers, students and parents, while over half did not implement any specific strategy to encourage teacher-student interactions, which is a much higher proportion than countries in other income groups. Given the nature of the pandemic, **home visits** were less common across all income groups.

FIGURE 6-3: Communication modalities between teachers, students and their parents/caregivers



The challenges in providing continued quality education through remote learning highlighted the pivotal role of teachers. Accordingly, the needs of teachers should be considered for any policy response targeting distance learning. This does not only entail technical and psychosocial support but also the facilitation of direct interactions between the key stakeholder groups, teachers, students and parents. Lessons learnt, tested platforms and established trainings can be exchanged between countries to implement resilient solutions.

© UNICEF/UNI358244/EMORUT

7. PARENTAL SUPPORT

A quality learning environment at home has been widely documented as critical for children's acquisition of foundational skills (e.g., Dowd et al., 2017). Recent evidence shows the importance of parental engagement in children's learning, and the striking disparities in home learning environments that persist within and across countries, hitting poorer learners the hardest (Brossard et al., 2020; UNICEF, 2020). With COVID-19 school closures, the importance of learning at home has been further amplified, increasing the role of parents and caregivers to support children's learning. Besides learning, vulnerable households have also had to take on added responsibilities for children's well-being, including for childcare services such as meals that were previously offered at school (Gromada, 2020). This section analyses government's efforts to facilitate continued learning at home and mitigation measures targeting parents and caregivers in the wake of the lockdown.

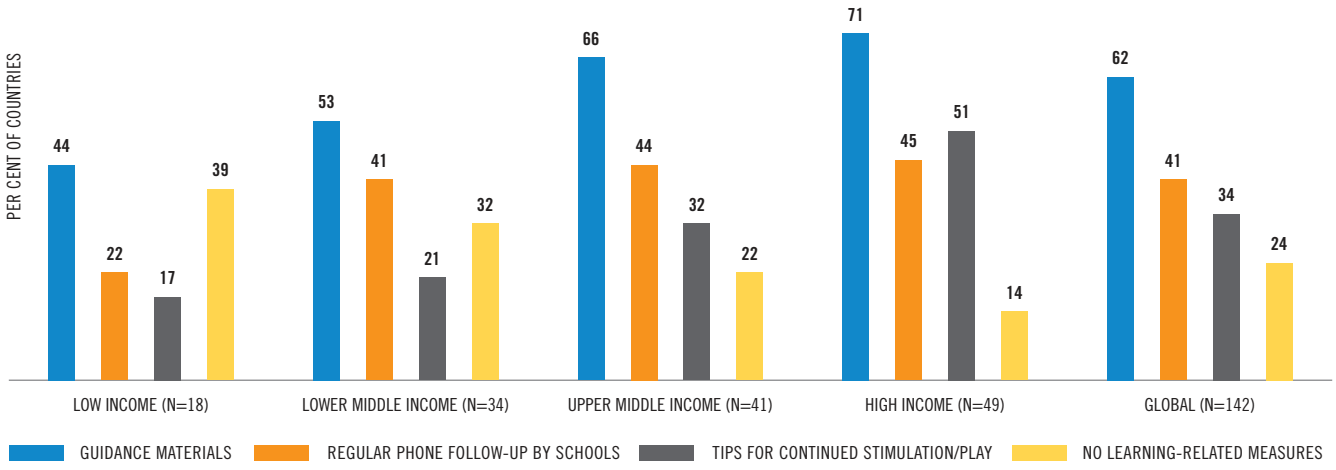
SUPPORT FOR PARENTS AND CAREGIVERS TO IMPROVE THE HOME LEARNING ENVIRONMENT

Overall, 62 per cent of countries reported providing materials to guide parents in home-based learning. This was a common form of support across income levels, with 71 per cent of high-income, 66 per cent of upper-middle-income, 53 per cent of lower-middle-income and 44 per cent of low-income countries providing these materials to at least a proportion of parents.

Parental guidelines to support learning at home were reinforced through regular phone follow-up conducted by schools in 45 per cent of high-income, 44 per cent of upper-middle-income and 41 per cent of lower-middle-income countries, but just in 22 per cent of low-income countries.

Younger children require additional support from parents as they participate in learning from home – a luxury that is not attainable for lower-income households and environments where parents and caregivers continue to work outside the home. **Tips for stimulation and play for young children was another commonly used support measure for -at least a proportion of- parents and caregivers, with around 34 per cent of countries reporting providing that support overall**, although only 17 per cent of low-income countries reported providing that support. Overall, 39 per cent of low-income countries report they have not introduced any measures for promoting the home learning environment.

FIGURE 7-1: **Policies to support parents/caregivers with the home learning environment, by income group**

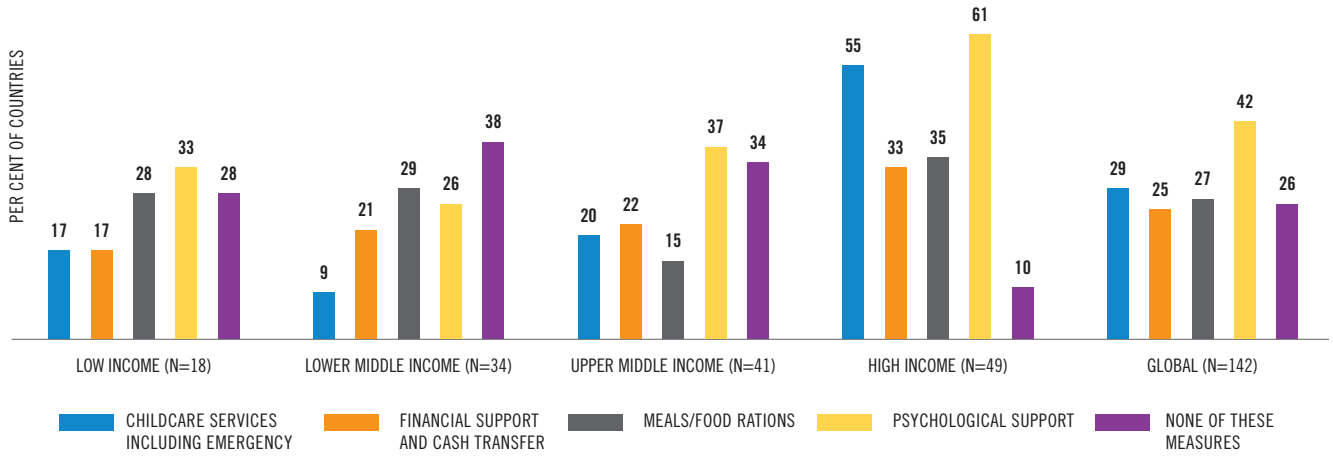


SUPPORT FOR ECONOMIC WELFARE AND THE PSYCHOSOCIAL WELLBEING OF FAMILIES

Schools are not only a place for learning. They also provide critical services for children, such as childcare and nutrition through school meals. The absence of these services can put an additional financial burden on households, especially the most vulnerable who rely on these services. Overall, 27 per cent of responding countries reported providing meals and rations to families during school closures, while 25 per cent reported providing financial support to households. These types of support could be critical as parents and caregivers take on additional responsibilities as children learn from home and also possibly face economic hardship through the loss of livelihoods due to the lockdown.

Provision of psychosocial support and childcare were key areas of support provided by governments during lockdowns, though provision of these vary by income level. While 61 per cent of high-income countries offer psychological counselling for -at least a proportion of- parents and children, only 26 per cent of lower-middle-income countries reported providing this support. Similarly, childcare is offered in 55 per cent of high-income countries, while this support was reported in just 17 per cent of low-income countries. Between 28 per cent and 38 per cent of middle- and low-income countries do not implement any of these mitigation measures, suggesting that these countries may need additional support for providing these key services.

FIGURE 7-2: **Economic and wellbeing measures targeting families, by income group**



Support to parents and caregivers targeted at the most marginalized are crucial for providing families with the necessary tools to support their children's continued learning and wellbeing. Similarly, measures such as childcare, financial transfer and in-kind support are potential investment to consider.

© UNICEF/UNI329510/

REOPENING SCHOOLS SAFELY FOR ALL

As of September 2020, most countries had fully or partially reopened their schools. School reopening plans, however, vary greatly by income group. High-income countries were more likely than countries in other income groups to have reopened as planned and were more likely to prioritize the reopening of pre-primary levels. The approach to returning to school also varied, with wealthier countries more likely to use a combination of remote and in-person (hybrid) learning.

Virtually all responding countries reported that their governments produced or endorsed specific health and hygiene guidelines and measures for schools. These included physical distancing, handwashing, cleaning and disinfection and the isolation of infected staff or students, but rarely included COVID-19 testing at the school level. While most high- and upper-middle-income countries reported that they had enough resources to reopen schools safely, most low- and lower-middle-income countries reported that they did not.

Almost all countries required additional financial resources to ensure an adequate response to COVID-19 for education. When the needs were -at least partially- met, this was commonly funded by additional domestic financing, combined with support from external donors in low- and lower-middle-income countries. More than a third of responding countries indicated that they expected to see increases to the education budget in the form of support to households. Meanwhile, one in five reported cuts to the education budget, more commonly among low- and lower-income countries.

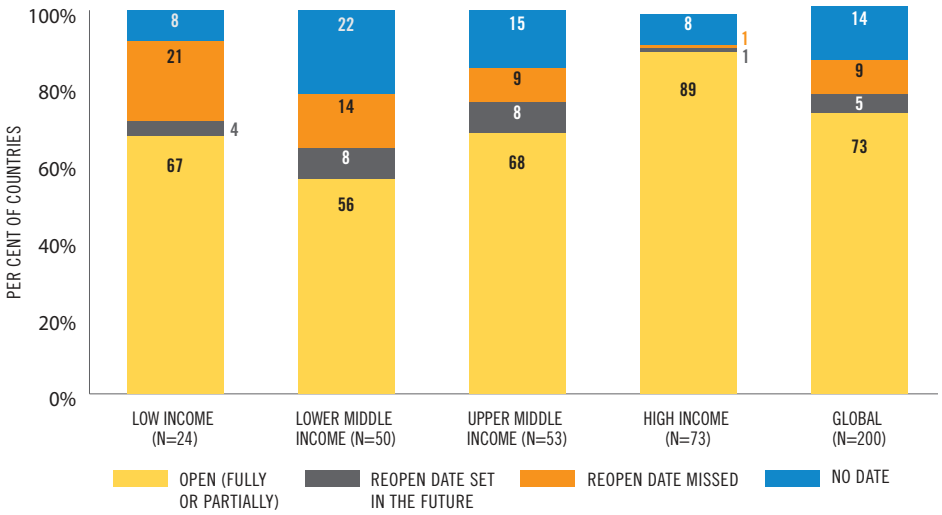
8. PLANS FOR REOPENING SCHOOLS

Based on emerging evidence from the current crisis (e.g., Azevedo et al., 2020; Dorn et al., 2020; Maldonado & De Witte, 2020) as well as experiences from past crises, extended and widespread school closures can impact children's learning and economic wellbeing over their lifetime. Recognizing that many children were not being reached by learning continuity efforts during school closures, a recent United Nations Secretary-General policy brief also called for the reopening of schools once local transmission of COVID-19 is under control (United Nations, 2020).

REOPENING STATUS

Based on ongoing monitoring by UNESCO and the World Bank, as of September 2020, most countries had fully or partially reopened their schools. There was considerable variation by income group, however (Figure 8-1). High-income countries were much more likely to have reopened schools, while countries in the other income groups were more likely than other groups to have missed previously set reopening dates.[11] Low- and lower-middle-income countries were also over-represented in the group of 25 countries who reported a later reopening date in the second round of the joint survey than they did in the first round, suggesting that they were more likely to have had to delay their reopening. In addition to increases in infection numbers, this may be at least partially attributed to the availability of resources to ensure safe school reopening, as will be discussed further in the next sub-section.

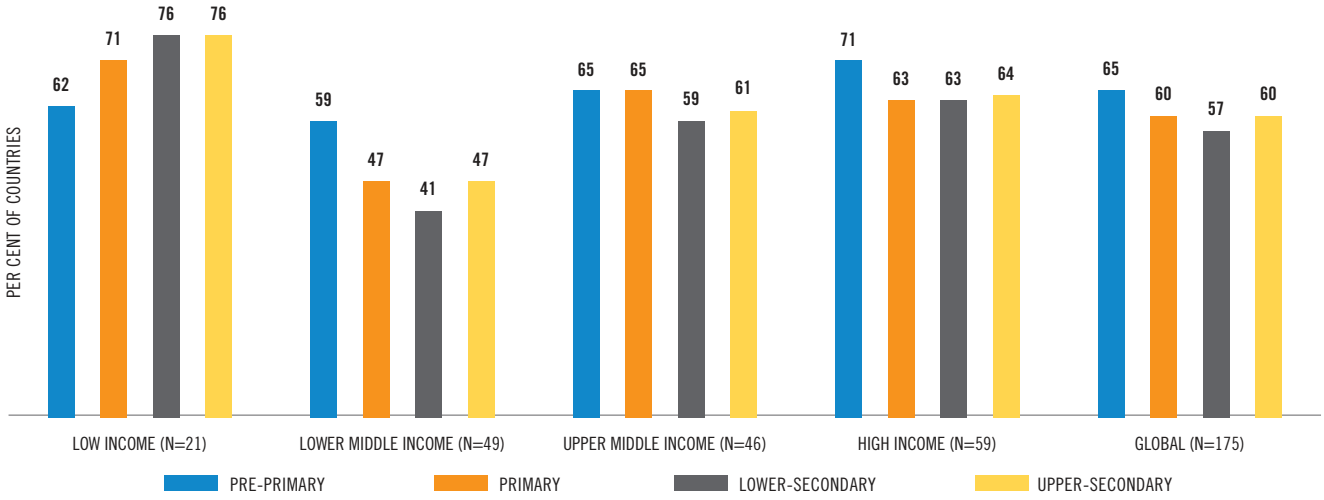
FIGURE 8-1: School reopening status, by income group



Notes: *Figure 8-1 combines data from UNESCO global monitoring of school closures caused by COVID-19, as of 15 September 2020, and country responses from both rounds of the joint survey. Information on whether countries' schools are open (fully or partially) were from UNESCO global monitoring. Where schools were on academic break or closed due to COVID-19, the reopening date reported from the joint survey were used. Where a country responded to the joint survey but did not report a planned reopening date they included in the "No date" category. Ten countries that had not reopened and did not respond to the joint survey were considered missing.*

11 A country is considered to have missed their reopening date if the country's schools were reported to be closed in the UNESCO monitoring dataset as of 15 September and the latest date (across all levels) that the country entered for reopening in the joint survey was before that date.

FIGURE 8-2: **Countries that have set reopening dates, by school level and income group**



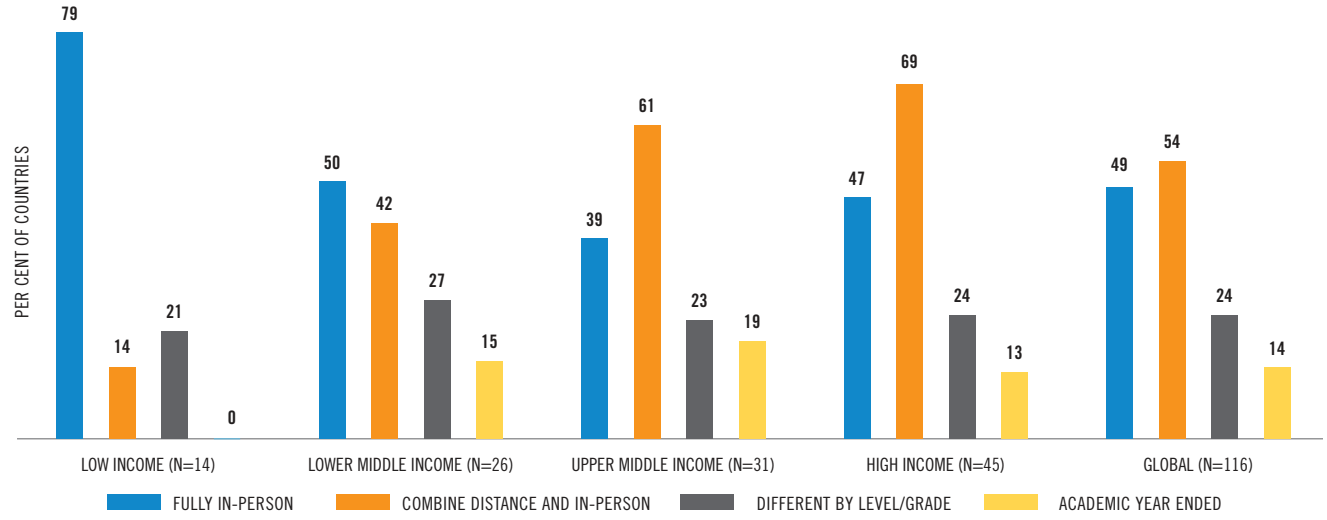
Notes: *Figure 8-2 combines data from both rounds of the joint survey, adding responses of countries that only responded to the first round. Respondents were asked for the actual or planned school reopening date at each level of education. Countries that did not provide a date was considered to not have set a reopening date. Two countries were excluded as they noted in free text that schools were never closed due to COVID-19.*

While **over 70 per cent of countries were able to report a date for the reopening of at least one schooling level** by the time they were surveyed, this figure also varied by school level and income group (Figure 8-2). More high-income countries had set dates for reopening pre-primary schools than for higher levels of schooling. However, low-income countries were more likely to prioritize the reopening of secondary schools.

TEACHING AND LEARNING APPROACH

More than half of countries globally were combining distance and in-person teaching and learning as they reopen schools. This approach, however, varies greatly by income group (Figure 8-3). In most low-income countries, schools were reopening with fully in-person teaching and learning. Meanwhile, high- and upper-middle-income countries were more likely to use a combination of remote and in-person learning. The challenge of reaching children with remote learning in lower-income countries (Dreesen et al., 2020) can likely explain much of this difference.

FIGURE 8-3: **Teaching and learning approaches as schools reopen, by income group**



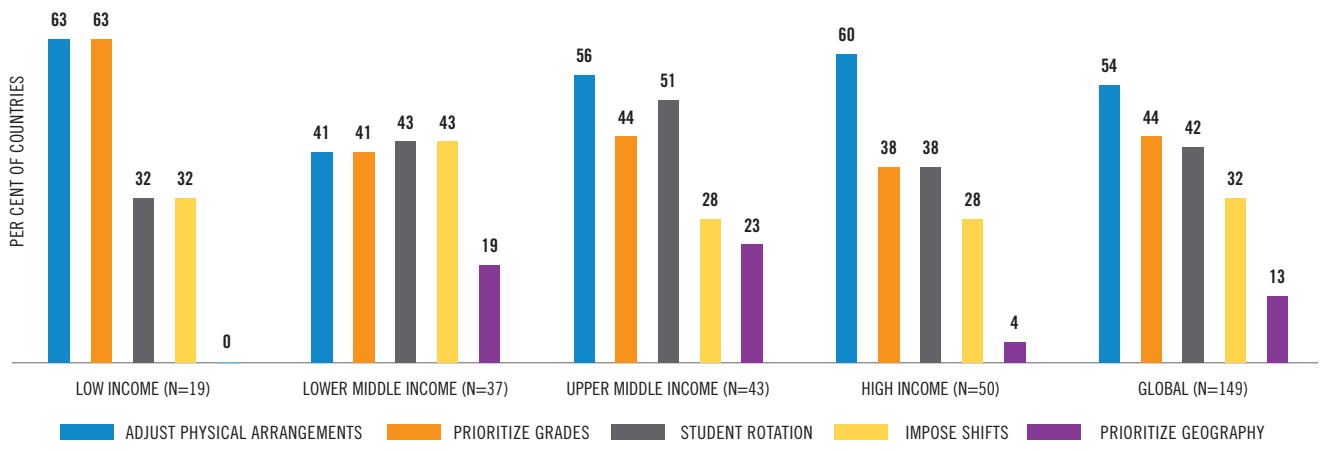
Note: *Caution is advised in generalizing the results represented in the figure as the countries that responded to this question cover less than 50 per cent of the total 4-17 year old population. More information on the coverage of each income group can be found in Annex 1.*

MEASURES TO MANAGE SCHOOL REOPENING

Country reopening plans included widespread use of several measures. Most countries were adjusting school and/or classroom physical arrangements. Most low-income countries were prioritizing specific grades, mostly upper-secondary levels. Meanwhile, middle-income countries were more likely to prioritize certain geographical areas, mostly based on the spread of COVID-19 infection. Around four out of ten countries were implementing student rotation to reduce class sizes, with slightly higher rates among middle-income countries.

While most countries have reopened schools or set dates to do so, experiences with school reopening vary across countries. Low- and middle-income countries were more likely to face delays in school reopening. The return to school also looks different for children in different countries. Wealthier countries are more likely to reopen schools with a hybrid approach, and lower income countries more likely to return to fully in-person teaching and learning.

FIGURE 8-4: **Measures to manage school reopening, by income group**



9. HEALTH PROTOCOLS IN SCHOOLS

The development and implementation of clear health and hygiene protocols are critical in ensuring the safe reopening of schools. Such protocols may include measures to reduce person-to-person transmission of the virus, to reduce exposure contact of the virus, or to isolate staff and students who are infected or exposed to the virus. Effective implementation of the protocols may require allocating additional resources to schools, upgrading existing infrastructure, and training teachers and staff on safety measures.

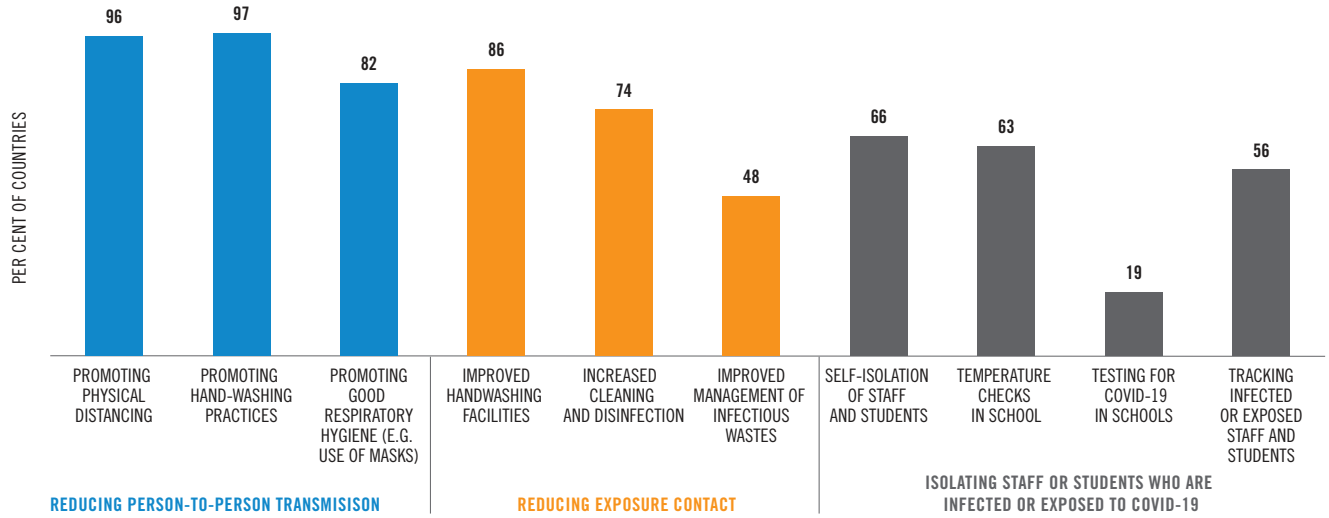
PREVALENCE AND CONTENT OF HEALTH AND HYGIENE PROTOCOLS

In nearly all the surveyed countries, governments produced or endorsed specific health and hygiene guidelines and measures for schools, with almost no variation by income group**.** Only one country responded that no such guidelines had been produced or endorsed, and sixteen other countries responded that this information was not known.

Among the 132 countries with health and hygiene guidelines, countries reported that their guidance includes one or more measures to reduce person-to-person transmission of the virus (98 per cent), reduce exposure contact of the virus (93 per cent) or isolate staff and students who are infected or exposed to the virus (91 per cent). The inclusion of ten specific safety measures from these categories is depicted in Figure 9-1. Over 90 per cent of countries include at least five of the listed measures in their health guidelines, and almost 60 per cent include seven or more of the measures. On average, low-income countries include six measures, one fewer than the average for other income groups.

Notably, almost all countries include the promotion of physical distancing or handwashing in their health and hygiene guidelines and more than 8 out of 10 are promoting good respiratory hygiene and improving handwashing facilities. Temperature checks, self-isolation of staff and students, and tracking of infected or exposed staff and students are included in over half of countries reporting, though only 19 per cent of countries plan to test for COVID-19 at the school level. In addition to these items, common **precautionary measures taken to protect learners on the journey to and from school** included regulating public transportation, staggering entry and exit times for students and specifying school dropoff areas.

FIGURE 9-1: **Measures for school health and hygiene guidelines**



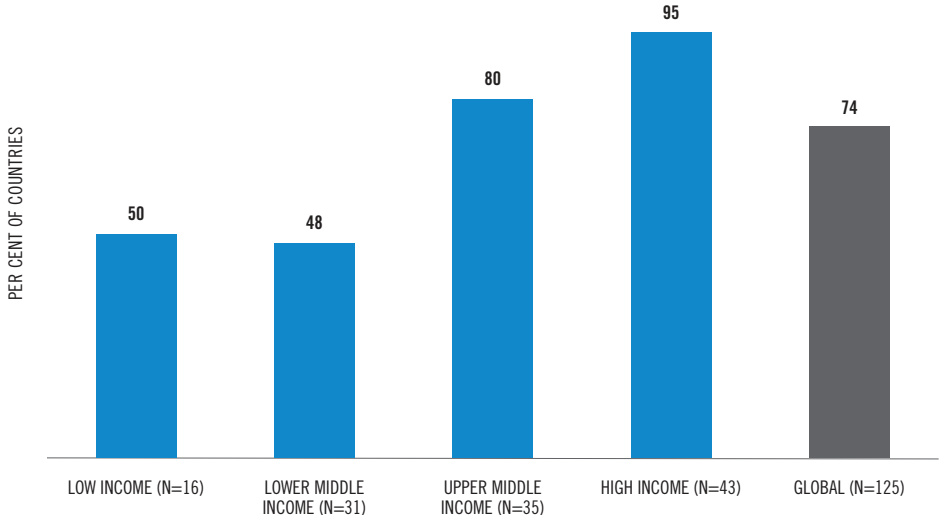
Note: *N=132; 16 countries responding "Don't know" to whether they had health guidelines and 1 country responding "No" are not included.*

Insights **on how countries are supporting or monitoring the application of the guidelines** often included the involvement of health authorities. Support includes the provision of training for school staff and leaders and of visual awareness materials and infection prevention control items to schools. Monitoring practices include regular or sporadic visits from health and/or education officials.

RESOURCES TO IMPLEMENT HEALTH AND HYGIENE PROTOCOLS

Overall, 74 per cent of countries reported that they have enough resources, commodities such as soap and masks, and infrastructure such as clean water and handwashing facilities to ensure the safety of learners and all school staff. Still, there are wide variations by income level. **Only around half of low-income and lower-middle-income countries reported having enough resources, in comparison to 80 per cent of upper-middle-income countries and 95 per cent of high-income countries.**

FIGURE 9-2: **Countries with enough resources to ensure school safety, by income group**



Notes: *15 countries which responded "don't know" and 9 countries which did not respond are excluded from the analysis. Caution is advised in generalizing the results represented in the figure as the countries that responded to this question cover less than 50 per cent of the total 4-17 year old population. More information on the coverage of each income group can be found in Annex 1.*

Countries' sources of funding for the needed resources, commodities, and/or infrastructure were primarily their own government allocations or a combination of such allocations and external donor funding. Of the 93 countries providing this information, 97 per cent (or all but three) governments are allocating funding to support implementation of the health and hygiene guidelines. External donors, meanwhile, are contributing funding for health and hygiene to 1 out of every 2 countries, largely targeting lower-income countries. For example, 89 per cent of low-income and 80 per cent of lower-middle-income countries are receiving external funding for this area, in comparison to half of upper-middle-income countries and 21 per cent of high-income countries.

Country practice reflects the critical importance of addressing school safety for the reopening of schools. Almost all countries have health and hygiene guidelines and protocols in place, and these guidelines on average include seven out of ten key measures to reduce person-to-person transmission, reduce exposure contact, and track or isolate students or staff who may be exposed or infected. Furthermore, almost three out of four countries have the resources needed to implement their guidelines. Yet significant gaps remain, particularly in low- and lower-middle-income countries, where only half of countries have the required resources needed to ensure the safety of learners and all school staff.

10. EDUCATION FINANCING

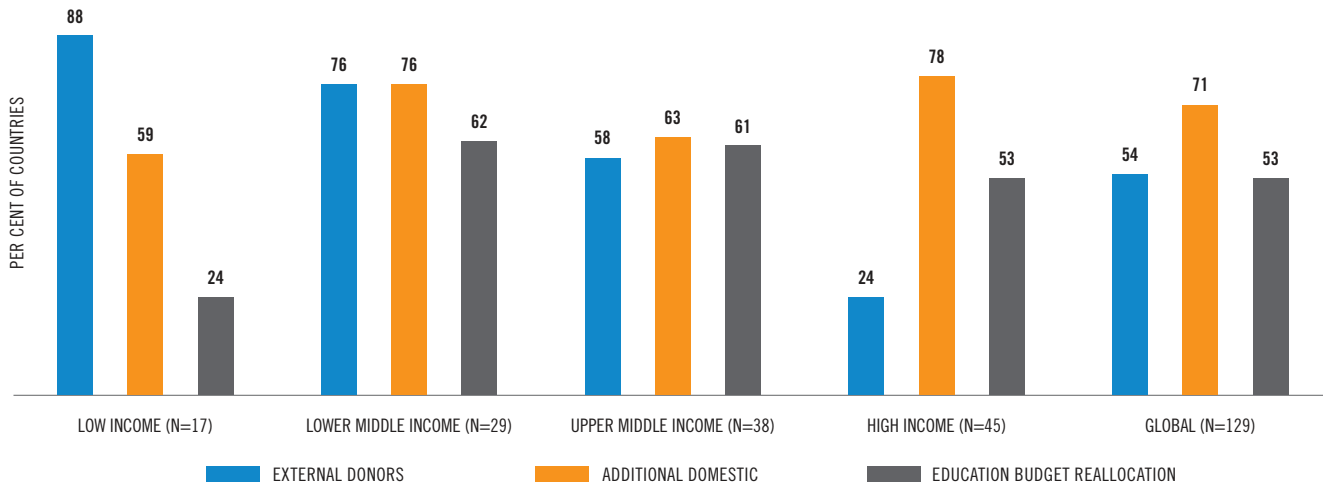
The ongoing pandemic has posed challenges to education financing globally. For low- and lower-middle-income countries, the annual funding gap to reach SDG4 has increased from US$148 billion pre-COVID to up to almost US$200 billion (UNESCO, 2020a). This section presents findings on the financing section of the joint survey.

PROVISION OF ADDITIONAL FUNDS TO COVER COVID-19 RELATED COSTS

In almost all countries (95 per cent) additional funds have been provided to cover COVID-19-related costs in the education sector.[12] In most of low- and lower-middle-income countries reporting, development assistance was the most common source for this additional funding. Supplementary funding from outside the existing education budget was also a common source. Seventy-one per cent of all reporting countries received additional government funds to support their response to the pandemic. Reallocations from within existing education budgets was less common in most countries, particularly for low-income countries.

While most countries received additional funds for the education response, more than a quarter of countries globally reported not having adequate resources for safe school operations. This challenge was particularly prevalent among low- and lower-middle-income countries.

FIGURE 10-1: Additional financial resources received for education response to COVID-19, by source of funding and income group



Notes: *The proportions presented here are the respective shares in each income group that indicated receiving the particular source. Out of the 129 countries, two responded as not knowing which additional funding has been received. It is likely that "external donors" was understood as "sponsors" by respondents from upper-middle- and high-income countries.*

REDUCTIONS IN GOVERNMENT EDUCATION BUDGETS

While only 19 per cent of countries reported cuts in their education budgets, it was more commonplace in low- and lower-middle-income countries. (reported by 42 per cent of the 26 respondents from these groups). Respondents were asked to indicate whether there had been cuts in the overall education sector wage bill in 2020 and whether there would be cuts in 2021. A majority of countries (64 per cent) with wage bill reductions have also

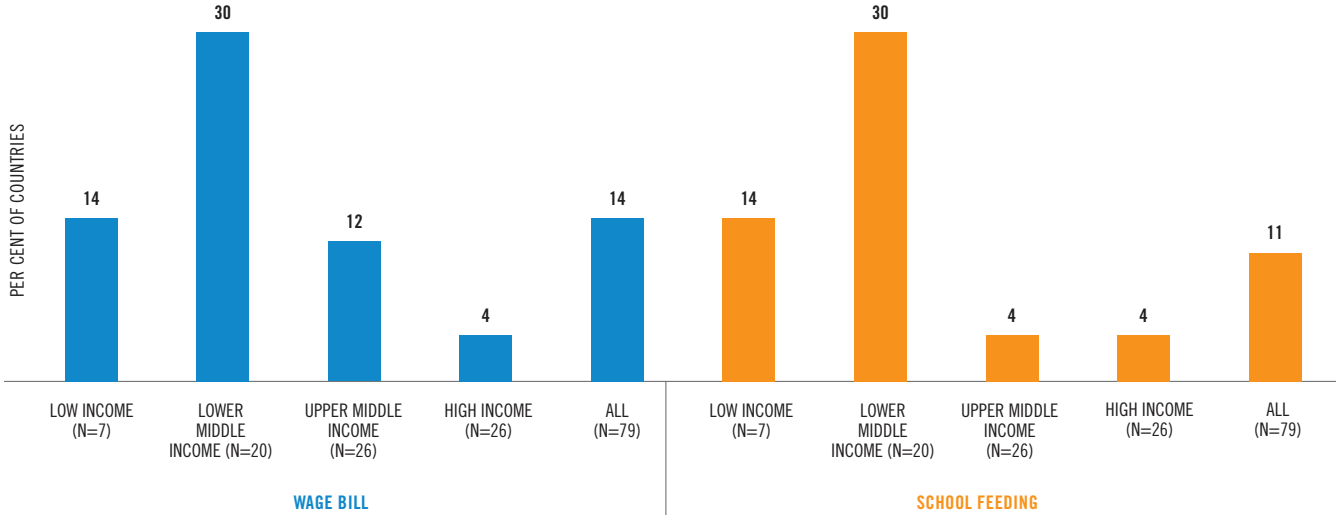
12 Out of the total sample of 149 countries, 91 per cent have valid responses. Invalid responses are those that have responded "Do not know" (6 per cent) and no response or blanks (3 per cent).

© UNICEF/UNI369509/CHULUUNBAATA

stopped teacher hiring (refer to section 6 on teacher policies). While response rates were low, about a quarter of all low- and lower-middle-income countries expected that the wage bill could be cut over this period.[13] **More countries expected cuts in 2020 than in 2021**. Three countries, meanwhile, indicated that their operations budget, covering expenses such as utilities and staff travel, was affected instead of the wage bill and school feeding.

Out of 79 countries that provided a response on budget declines, 11 per cent indicated that school feeding budgets are also likely to be cut either this fiscal year or the next. The economic impact of such cuts could be dire for poor households where the value of a school meal can be equivalent to about 10 per cent of a household's monthly income (WFP, 2020).

FIGURE 10-2: Countries with budget declines in 2020-21, by component and income group



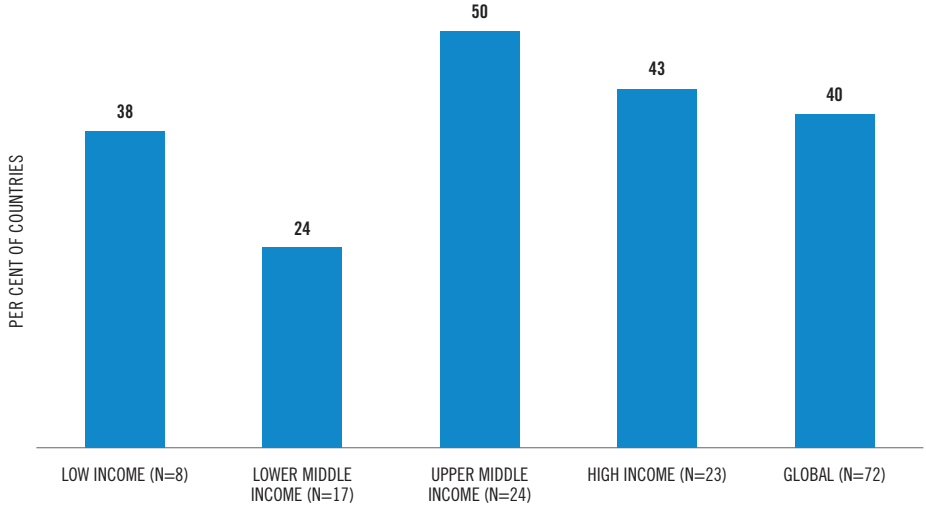
Notes: *This figure presents the share of countries that indicated a reduced government budget in 2020 or 2021 either on wage bills (either without teachers or including teachers) or school feeding in relation to (n) the number of countries that have provided a valid response on questions relating to fiscal budget declines. Caution is advised in generalizing the results represented in the figure as the countries that responded to this question cover less than 50 per cent of the total 4-17 year old population. More information on the coverage of each income group can be found in Annex 1.*

13 However, it should be noted that more than 50 per cent of low-income countries didn't provide an answer to this question. 63 per cent of low-income countries and 46 per cent of lower-middle-income countries did not provide a response when asked whether their respective budgets on wage bills are reduced or not in 2020-2021.

INCREASED GOVERNMENT SUPPORT TO HOUSEHOLDS

Forty per cent of countries indicated that they had increased, or were expecting to increase, government support to households in 2020-2021. Respondents were asked whether there were increases in the budgets assigned for conditional cash transfers and education scholarship programs. With the exception of lower-middle-income countries, the proportion of governments that had increased, or were expecting to increase, support to households through these mechanisms was relatively similar across income groups (about 40 per cent).[14] In lower-middle-income countries only four of the 17 countries responding stated that they had increased this type of support to households. A few high-income countries mentioned increasing funding to schools and municipalities for reopening costs to increase support to students facing learning and developmental delays. A recent World Bank survey on COVID-19 social protection responses shows that the average level of social assistance varies greatly. In low-income countries additional social protection measures represent about $4 per capita compared to $28 per capita in lower-middle-income countries (Gentilini et al., 2020).

FIGURE 10-3: Countries with increased government financing in 2020-21, by income group group



Notes: *This figure presents the share of countries that have indicated increased government budget in 2020 or 2021 either on conditional cash transfers or scholarships in relation to (n) the number of countries that have provided a valid response on questions relating to fiscal budget increase. Caution is advised in generalizing the results represented in the figure as the countries that responded to this question cover less than 50 per cent of the total 4-17 year old population. More information on the coverage of each income group can be found in Annex 1.*

Hundreds of millions of students still face extended school closures. This uncertainty poses serious problems given the persistent inequalities associated with distance learning, which particularly affect vulnerable populations.

Governments around the world are making the effort to protect their education budgets despite the shock to the economy caused by the pandemic. Governments and households in low- and lower-middle-income countries are taking a harder hit, and external development assistance will be critical to increase support to households in those countries.

As schools reopen, countries will face competing demands for resources for safe school operations, blended learning options for future closures, and the need to ensure return of the most vulnerable children to school. This is reflected in some responses where countries mention adjusting their funding need in response to the pandemic, such as increased investment in digital learning and data analysis. It will be helpful to monitor these policy shifts in the following rounds of the survey.

14 It should be noted that less 50 per cent of the total number of countries who responded to the survey and 52 per cent of countries did not provide any response and/or answered "Do not know" to questions relating to increases in conditional cash transfers and/or scholarships in their education budgets.

© UNICEF/UNI372362/POUGET

CONCLUSION

The report highlights key findings from the second round of a survey on national education responses to COVID-19 school closures, conducted jointly by UNESCO, UNICEF and the World Bank. Despite varying durations of school closures around the world, it shows the efforts made by countries to mitigate learning losses, increased inequality and widening achievement gaps – both during the closures and after reopening.

The survey results illustrate how educational responses to COVID-19 can widen inequities between countries, with experiences varying across income groups. For example, low- and middle-income countries are more likely to experience longer school closures than high-income countries. Most low-income countries did not find remote learning to be sufficiently effective to substitute for official school days. This likely contributed to most low-income countries planning for a return to in-person teaching and learning when schools reopen, compared to the more prevalent use of combining remote and in-person learning among higher income countries. However, most low- and lower-middle-income countries also reported that they do not have enough resources to reopen schools safely. In fact, the reduction in education funding reported by one in five countries is of concern, particularly at this time when investment in learning has never been so critical.

Hundreds of millions of students still face extended school closures. This uncertainty poses serious problems given the persistent inequalities associated with distance learning, which particularly affect vulnerable populations. The risk of dropout increases, children experience decreased quality of learning, and negative social and economic impacts are high. It is therefore crucial that education authorities make a concerted effort to determine how best to ensure a safe return to school for all students, while protecting the health and safety of students and education staff.

The coronavirus pandemic is transforming the traditional schooling model. In particular, the growing integration of digital technologies raises further questions about the future of learning, teaching, curriculum, and assessment. This calls for continuous monitoring of how education systems are transforming and responding to the scale and severity of the current learning crisis.

AREAS TO BE EXPLORED FURTHER

Future iterations of the survey will allow countries to continue to benefit from the sharing of experiences, to better inform local and national responses, to prepare for school reopening, and to understand how some of these indicators will evolve over time. It will also continue to support the decisions and actions by partners to support governments in recovering from this educational crisis. In

addition to the survey, more in-depth qualitative research may be required in some areas to capture the impacts of the policy responses and interventions, and to support subsequent educational planning and programming. It is also critical to complement a perception and *de jure* instrument such as this with objective measures of the action on the ground, including how students and households have taken up these programs and the level of implementation fidelity of the interventions described herein. As well, a robust impact evaluation agenda can measure how effective the interventions have been. The following have been identified as key areas to explore in the short- and medium-term.

- **Monitoring student dropout and disengagement.** Beyond recurrent administrative surveys, there is an urgent need to monitor student disengagement and dropout in order to avoid a rapid increase in the number of out-of-school children and youth.
- **The continued role of remote learning.** Distance learning is likely to continue to play an important role even after schools reopen. Understanding how it is being used and measuring its effectiveness are therefore critical. There is a need to better understand the implications of digital learning on the breadth of curricula. Continuing to monitor national policies to improve access to digital learning, with particular attention to increased privatization in education, is also crucial.
- **Plans for remediation and tracking of their effectiveness**. While several countries have reported the implementation of remedial and acceleration programmes as additional supports to mitigate learning losses, the extent of their effectiveness needs further exploration and evaluation.
- **New approaches to learning assessment and its shifting role**. The pandemic has changed the assessment landscape, including that of national examinations. Well-designed, large-scale learning assessments in particular provide a unique opportunity to further explore the relationship between home and school contexts and learning outcomes, before and during school closures as well as after reopening.
- **Localizing decisions on reopening schools**. Increasingly, countries are decentralizing decision-making on school reopening to local governments. This has immediate implications on education planning and monitoring.
- **Effectiveness of implemented health and safety measures.** Measures to ensure the health and safety of learners, teachers and other educational staff has varied from context to context. Additional research on the effectiveness of such measures would ensure more efficient use of resources and risk reduction for future pandemics.
- **Skills development and support to teachers.** The challenges in providing continued quality education through remote learning highlighted the pivotal role teachers play. Accordingly, monitoring policy responses to support teachers is critical to the overall response and recovery from this educational crisis.
- **Psychosocial supports to wellbeing and better mental health**. The effects of extended school closures on students and teachers, combined with lockdowns and economic instability, have been substantial. The provision of additional services and support to students, teachers and parents worth being considered.

REFERENCES

3EA. (2018). IRC Healing Classrooms Remedial Tutoring Programming Improves Nigerien And Nigerian Children's Learning. Impact Report https://research.steinhardt.nyu.edu/scmsAdmin/media/users/mhm327/3EA-Niger_Impact_Brief_2.1.pdf

Alban Conto, C., Akseer, S., Dreesen, T., Kamei, A., Mizunoya, S., & Rigole, A. (2020). *COVID-19: Effects of School Closures on Foundational Skills and Promising Practices for Monitoring and Mitigating Learning Loss* (Innocenti Working Paper No. 2020-13). UNICEF Office of Research - Innocenti. https://www.unicef-irc.org/publications/1144-covid19-effects-of-school-closures-on-foundational-skills-and-promising-practices.html

Amaro, D., Pandolfelli, L., Sanchez-Tapia, I., & Brossard, M. (2020). COVID-19 and education: The digital gender divide among adolescents in sub-Saharan Africa. https://blogs.unicef.org/evidence-for-action/covid-19-and-education-the-digital-gender-divide-among-adolescents-in-sub-saharan-africa/

Angel-Urdinola, D. (2020). Use of adaptive computer assisted remediation programs to prevent student dropout in the context of COVID-19. *The World Bank's Education for Global Development Blog*. https://blogs.worldbank.org/education/use-adaptive-computer-assisted-remediation-programs-prevent-student-dropout-context-covid

Azevedo, J. P., Hasan, A., Goldemberg, D., Iqbal, S. A., & Geven, K. (2020). *Simulating the potential impacts of COVID-19 school closures on schooling and learning outcomes: A set of global estimates* (Policy Research Working Paper 9284). The World Bank. http://pubdocs.worldbank.org/en/798061592482682799/covid-and-education-June17-r6.pdf

Brossard, M., Cardoso, M., Kamei, A., Mishra, S., Mizunoya, S., & Reuge, N. (2020). *Parental engagement in children's learning: Insights for remote learning response during COVID-19* (Innocenti Research Briefs no. 2020-09). UNICEF Office of Research - Innocenti. https://www.unicef-irc.org/publications/pdf/IRB per cent202020-09 per cent20CL.pdf

Caspe, M. (2009). Low-income latino mothers' booksharing styles and children's emergent literacy development. *Early Childhood Research Quarterly, 24*(3), 306–324.

Dorn, E., Hancock, B., Sarakatsannis, J., & Viruleg, E. (2020). *COVID-19 and student learning in the United States: The hurt could last a lifetime* (McKinsey & Company Public Sector Practice). McKinsey & Company. https://www.mckinsey.com/~/media/McKinsey/Industries/Public per cent20and per cent20Social per cent20Sector/Our per cent20Insights/COVID-19 per cent20and per cent20student per cent20learning per cent20in per cent20the per cent20United per cent20States per cent20The per cent20hurt per cent20could per cent20last per cent20a per cent20lifetime/COVID-19-and-student-learning-in-the-United-States-FINAL.pdf

Dowd, A. J., Friedlander, E., Jonason, C., Leer, J., Sorensen, L. Z., Guajardo, J., D'Sa, N., Pava, C., & Pisani, L. (2017). Lifewide learning for early reading development. In A. Gove, A. Mora, & P. McCardle (Eds.), *Progress toward a literate world: Early reading interventions in low-income countries, New Directions for Child and Adolescent Development* (pp. 31–49). Jossey-Bass.

Dreesen, T., Akseer, S., Brossard, M., Dewan, P., Giraldo, J., Kamei, A., Mizunoya, S., & Ortiz, J. (2020). *Promising practices for equitable remote learning: Emerging lessons from COVID-19 education responses in 127 countries* (Innocenti Research Briefs no. 2020-10). UNICEF Office of Research - Innocenti. https://www.unicef-irc.org/publications/pdf/IRB per cent202020-10 per cent20CL.pdf

Fletcher, K. L., & Reese, E. (2005). Picture book reading with young children: A conceptual framework. *Developmental review, 25*(1), 64-103.

Gentilini, U., Almenfi, M., Dale, P., Palacios, R., Natarajan, H., Galicia Rabadan, G. A., Okamura, Y., Blomquist, J., Abels, M., Demarco, G., & Santos, I. (2020). *Social protection and jobs responses to Covid-19: a real-time review of country measures* (World Bank "Living paper", version 13). The World Bank. http://documents1.worldbank.org/curated/en/295321600473897712/pdf/Social-Protection-and-Jobs-Responses-to-COVID-19-A-Real-Time-Review-of-Country-Measures-September-18-2020.pdf

Giannini, S. (2020). Distance learning denied. *World Education Blog*. https://gemreportunesco.wordpress.com/2020/05/15/distance-learning-denied

Gromada, A., Richardson, D., & Rees, G. (2020). Childcare in a global crisis: the impact of COVID-19 on work and family life (Innocenti Research Briefs no. 2020-18). UNICEF Office of Research - Innocenti. https://www.unicef-irc.org/publications/pdf/IRB-2020-18-childcare-in-a-global-crisis-the-impact-of-covid-19-on-work-and-family-life.pdf

Hanushek, E. A., & Woessmann, L. (2020). *The economic impacts of learning losses* (OECD Education Working Papers, No. 225). Organization for Economic Co-operation and Development. https://www.oecd.org/education/The-economic-impacts-of-coronavirus-covid-19-learning-losses.pdf

International Task Force on Teachers for Education 2030 (2020). *Response to the COVID-19 outbreak: Call for action on teachers*. https://teachertaskforce.org/knowledge-hub/response-covid-19-outbreak-call-action-teachers-0

International Telecommunication Union (2020). Database on household connectivity.

Liberman, J., Levin, V., & Luna-Bazaldua, D. (2020). Are students still learning during COVID-19? Formative assessment can provide the answer. *The World Bank's Education for Global Development Blog*. https://blogs.worldbank.org/education/are-students-still-learning-during-covid-19-formative-assessment-can-provide-answer

Maldonado, J. E., & De Witte, K. (2020). *The effect of school closures on standardized student test outcomes* (KU Leuven Department of Economics Discussion Paper Series DPS 20.17). Katholieke Universiteit Leuven. https://feb.kuleuven.be/research/economics/ces/documents/DPS/2020/dps2017.pdf

Nugroho, D., Pasquini, C., Reuge, N. & Amaro, D. (2020). *COVID-19: How are Countries Preparing to Mitigate the Learning Loss as Schools Reopen? Trends and emerging good practices to support the most vulnerable children* (Innocenti Research Brief 2020-20). https://www.unicef-irc.org/publications/1119-covid-19-how-are-countries-preparing-to-mitigate-the-learning-loss-as-they-reopen.html

Psacharopoulos, G., Collis, V., Patrinos, H. A., & Vegas, E. (2020). *Lost wages: The COVID-19 cost of school closures* (Policy Research Working Paper 9246). The World Bank.

Senechal, M., & LeFevre, J. (2002). Parental involvement in the development of children's reading skill: A five-year longitudinal study. *Child development, 73*(2), 445-460.

Soland, J., Kuhfeld, M., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020). The impact of COVID-19 on student achievement and what it may mean for educators. *Brookings' Brown Center Chalkboard Blog*. https://www.brookings.edu/blog/brown-center-chalkboard/2020/05/27/the-impact-of-covid-19-on-student-achievement-and-what-it-may-mean-for-educators

The World Bank (2020a). *Response to COVID-19 in Europe and Central Asia: Policy and practice recommendations*. http://pubdocs.worldbank.org/en/862141592835804882/ECA-Education-Response-Note-v9-final.pdf

The World Bank (2020b). *EdTech knowledge pack on remote learning response to COVID-19*. http://pubdocs.worldbank.org/en/925611587160522864/KnoweldgePack-COVID19-RemoteLearning-LowResource-EdTech.pdf

The World Bank (2020c). *Guidance Note: Remote Learning & COVID-19*. http://documents1.worldbank.org/curated/en/531681585957264427/pdf/Guidance-Note-on-Remote-Learning-and-COVID-19.pdf

The World Bank (2020d). *Guidance Note on Education Systems' Response to COVID19*. http://documents1.worldbank.org/curated/en/450881585235950757/Guidance-Note-on-Education-Systems-Response-to-COVID19.pdf

The World Bank (2020e). *Lessons for Education during the COVID-19 crisis*. https://www.worldbank.org/en/topic/edutech/brief/lessons-for-education-during-covid-19-crisis

The World Bank (2020f). *World Bank Education and COVID-19*. https://www.worldbank.org/en/data/interactive/2020/03/24/world-bank-education-and-covid-19

UNESCO (2016). *Blended learning for quality higher education: Selected case studies on implementation from Asia-Pacific*. https://unesdoc.unesco.org/ark:/48223/pf0000246851

UNESCO (2020a). *Act now: Reduce the impact of COVID-19 on the cost of achieving SDG4* (Global Education Monitoring Report Policy Paper 42). https://unesdoc.unesco.org/ark:/48223/pf0000374163.

UNESCO (2020b). *Conflict-affected, displaced and vulnerable populations* (UNESCO COVID-19 Education Response, Issue note 8.1). https://reliefweb.int/sites/reliefweb.int/files/resources/373330eng.pdf

UNESCO (2020c). *COVID-19 education response: Preparing the reopening of schools: Resource paper* (UNESCO Education COVID-19 Response Series). https://unesdoc.unesco.org/ark:/48223/pf0000373401

UNESCO (2020d). *National Education Responses to COVID-19: Summary report of UNESCO's online survey*.

UNESCO (2020e). *School closures caused by Coronavirus (Covid-19)*. https://en.unesco.org/covid19/educationresponse

UNESCO, UNICEF, The World Bank, and WFP (2020a). *Framework for reopening schools*. https://www.unicef.org/media/68366/file/Framework-for-reopening-schools-2020.pdf

UNESCO, UNICEF, and The World Bank (2020b). *Survey on national education responses to COVID-19 school closures. First round of data collection.* UNESCO Institute for Statistics.

UNICEF (2020). *COVID-19: Are children able to continue learning during school closures?*. https://data.unicef.org/resources/remote-learning-reachability-factsheet

United Nations (2020). *Policy Brief: Education during COVID-19 and beyond*. https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid-19_and_education_august_2020.pdf

WFP (2020). *World Food Programme gears up to support children left without meals due to COVID-19 school closures*. https://www.wfp.org/news/world-food-programme-gears-support-children-left-without-meals-due-covid-19-school-closures

World Economic Forum (2020). *The COVID-19 pandemic has changed education forever. This is how.* https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/

ANNEX 1: COUNTRY AND POPULATION COVERAGE IN EACH FIGURE

The table below provide information on the survey questions used to produce the analyses presented in each Figure in this document. Additional notes on how the survey data were used can be found at the start of this report, and the survey questionnaire (with the specific questions asked) can be found along with the data at the following page: tcg.uis.unesco.org/survey-education-covid-school-closures. For each Figure, the number of country respondents that provided valid answers are included, as well as the coverage of these countries' school-aged population (4-to-17-year-olds) and student enrollment (in pre-primary, primary and secondary education) as a proportion of respectively the total population of school-aged children and the total enrollment in (pre-primary, primary and secondary) education. Where the population coverage falls below 50 per cent, this is noted under the relevant Figure in the text.

TABLE 1-1. **Country and population coverage in each figure**

FIGURE NUMBER	QUESTIONS	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID ANSWERS	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4-17)	ENROLLMENT COVERAGE (PER CENT OF ENROLMENT)
Figure 1-2	Q12	Low income	16	42	38
		Lower middle income	27	22	22
		Upper middle income	33	39	39
		High income	32	11	12
		Global	**108**	**29**	**28**
Figure 1-3	Q2, Q12	Low income	16	42	38
		Lower middle income	27	22	22
		Upper middle income	33	39	39
		High income	32	11	12
		Global	**108**	**29**	**28**
Figure 2-1	Q28	Low income	16	48	41
		Lower middle income	30	38	35
		Upper middle income	36	76	77
		High income	35	30	30
		Global	**117**	**50**	**50**
Figure 2-2	Q30	**Global**	**149**	**59**	**60**
Figure 3-1	Q11	Low income	19	51	46
		Lower middle income	33	42	38
		Upper middle income	41	84	85
		High income	48	48	49
		Global	**141**	**57**	**57**
Figure 4-1	Q13	Low income	17	46	40
		Lower middle income	33	43	40
		Upper middle income	41	82	83
		High income	44	41	42
		Global	**135**	**55**	**56**

FIGURE NUMBER	QUESTIONS	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID ANSWERS	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4-17)	ENROLLMENT COVERAGE (PER CENT OF ENROLMENT)
Figure 4-2	Q13	Low income	15	42	36
		Lower middle income	33	43	40
		Upper middle income	38	82	83
		High income	42	41	42
		Global	**128**	**55**	**55**
Figure 4-3	Q14, Q15	Low income	17	46	40
		Lower middle income	33	34	31
		Upper middle income	41	84	85
		High income	49	49	50
		Global	**140**	**53**	**54**
Figure 5-1	Q16	Low income	16	40	37
		Lower middle income	33	42	39
		Upper middle income	38	71	71
		High income	47	47	48
		Global	**134**	**51**	**52**
Figure 5-2	Q17	Low income	19	51	46
		Lower middle income	37	46	42
		Upper middle income	43	86	87
		High income	50	49	50
		Global	**149**	**59**	**60**
Figure 5-3	Q25	Low income	15	41	40
		Lower middle income	33	44	40
		Upper middle income	40	77	77
		High income	43	43	43
		Global	**131**	**54**	**54**
Figure 6-1	Q18, Q19, Q23, Q24	Low income	18	50	43
		Lower middle income	35	45	41
		Upper middle income	42	84	85
		High income	49	47	47
		Global	**144**	**58**	**58**
Figure 6-2	Q20	Low income	15	40	37
		Lower middle income	31	39	35
		Upper middle income	39	76	76
		High income	47	44	45
		Global	**132**	**51**	**52**
Figure 6-3	Q21	Low income	14	33	29
		Lower middle income	35	44	40
		Upper middle income	40	78	78
		High income	43	39	40
		Global	**132**	**53**	**53**
Figure 7-1	Q27	Low income	18	51	45
		Lower middle income	34	43	39
		Upper middle income	41	84	85
		High income	49	48	49
		Global	**142**	**57**	**58**

FIGURE NUMBER	QUESTIONS	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID ANSWERS	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4-17)	ENROLLMENT COVERAGE (PER CENT OF ENROLMENT)
Figure 7-2	Q27	Low income	18	51	45
		Lower middle income	34	43	39
		Upper middle income	41	84	85
		High income	49	48	49
		Global	**142**	**57**	**58**
Figure 8-1	Q1 and other sources	Low income	24	82	80
		Lower middle income	50	100	100
		Upper middle income	53	99	99
		High income	73	49	50
		Global	**200**	**92**	**91**
Figure 8-2	Q1 and other sources	Low income	21	82	80
		Lower middle income	49	100	100
		Upper middle income	46	99	99
		High income	59	50	51
		Global	**175**	**92**	**91**
Figure 8-3	Q4	Low income	14	33	31
		Lower middle income	26	27	26
		Upper middle income	31	76	78
		High income	45	47	48
		Global	**116**	**45**	**49**
Figure 8-4	Q3	Low income	19	51	46
		Lower middle income	37	46	42
		Upper middle income	43	86	87
		High income	50	49	50
		Global	**149**	**59**	**60**
Figure 9-1	Q6	**Global**	**132**	**52**	**54**
Figure 9-2	Q8	Low income	16	41	34
		Lower middle income	31	29	28
		Upper middle income	35	79	81
		High income	43	42	43
		Global	**125**	**47**	**50**
Figure 10-1	Q31.1	Low income	17	47	43
		Lower middle income	29	39	34
		Upper middle income	38	78	78
		High income	45	48	49
		Global	**129**	**53**	**53**
Figure 10-2	Q33	Low income	7	23	24
		Lower middle income	20	18	18
		Upper middle income	26	66	68
		High income	26	24	24
		Global	**79**	**34**	**38**
Figure 10-3	Q33	Low income	8	27	23
		Lower middle income	17	24	24
		Upper middle income	24	70	73
		High income	23	28	29
		Global	**72**	**39**	**42**

ANNEX 2: FINANCING DATA

TABLE 2-1. Number of countries that indicated receiving additional funding, by source and income group

INCOME GROUP	EXTERNAL	ADDITIONAL DOMESTIC	EDUCATION BUDGET REALLOCATION	COUNTRIES THAT RECEIVED ADDITIONAL FUNDING	TOTAL SAMPLE
Low income	15	10	4	17	19
Lower middle income	22	22	18	29	37
Upper middle income	22	24	23	38	43
High income	11	35	24	45	50
Total	**70**	**91**	**69**	**129**	**149**

Total sample (N= 149) is the total participating countries in the survey. "Countries that received additional funding" are those that answered "Yes" to the question: "Were additional financial resources required to ensure the response to COVID-19 for education?".

TABLE 2-2. Number of countries that indicated budget declines wage bill or school feeding in 2020-2021, by income group

INCOME GROUP	WAGE BILL	SCHOOL FEEDING	VALID RESPONSES	TOTAL SAMPLE
Low income	1	1	7	19
Lower middle income	6	6	20	37
Upper middle income	3	1	24	43
High income	1	1	25	50
All	**11**	**9**	**76**	**149**

Notes:

Total sample is the total participating countries in the survey.

Wage bill = counts the number of countries that have indicated a reduction in 2020 or 2021 in either a) wage bill (outside teachers) or b) wage bill including teachers (hiring freezes, early packages, lay-offs)

School feeding = counts the number of countries that have indicated a reduction in 2020 or 2021 in school feeding budget

Valid responses = countries that have at least one "Yes" or one "No" in questions relating to budget declines

TABLE 2-3. Number of countries that indicated increased budget in 2020-2021, by income group

INCOME GROUP	NO	YES	DON'T KNOW	MISSING VALUES	VALID RESPONSES	TOTAL SAMPLE
Low income	5	3	3	8	8	19
Lower middle income	13	4	9	11	17	37
Upper middle income	12	12	6	13	24	43
High income	13	10	6	21	23	50
Total	**43**	**29**	**24**	**53**	**72**	**149**

Notes:

Total sample is the total participating countries in the survey.

Yes = indicated an increase in the budget on either conditional cash transfers or scholarships for 2020-2021

No = indicated no increase in the budget on both conditional cash transfers and scholarships 2020-2021

Valid responses = sum of "Yes" and "No" responses

Don't Know = consistent response of "Do not know" in all options relating to budget increase, or responded at least one "Do not know" with the rest as missing responses

Missing values = consistent missing responses (blanks) in all options relating to budget increase

WHAT HAVE WE LEARNT?

Overview of findings from a survey of ministries of education on national responses to COVID-19

OCTOBER 2020

UNESCO
United Nations Educational, Scientific and Cultural Organization
UNESCO Institute for Statistics
unicef for every child
unicef Office of Research – Innocenti
THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP