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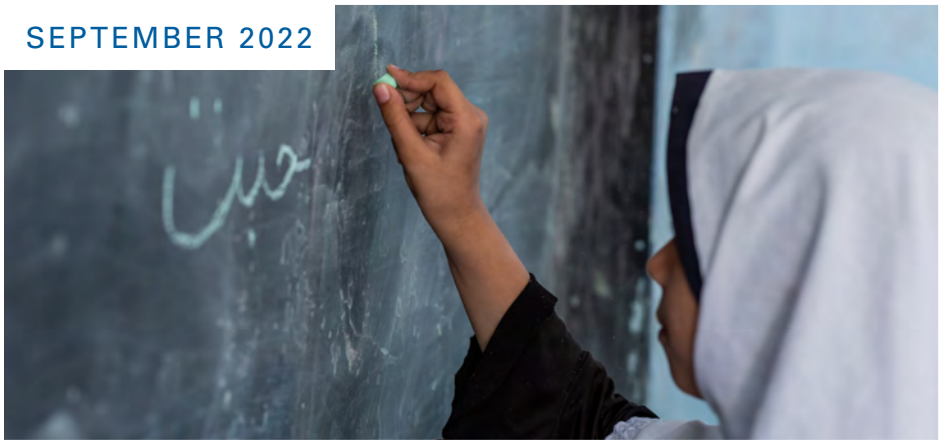

FROM LEARNING RECOVERY TO EDUCATION TRANSFORMATION

Insights and Reflections from the 4th Survey on National Education Responses to COVID-19 School Closures

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THE WORLD BANK IBRD • IDA | WORLD BANK GROUP
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EXECUTIVE SUMMARY

Over the past three years, the COVID-19 pandemic has brought unprecedented disruptions to education, deepening the pre-existing global learning crisis. As schools reopen – with nationwide school closures now lifted in all countries – children, adolescents and youth will need comprehensive, tailored support to meet their learning, health and psychosocial wellbeing needs. In response, the United Nations Children's Fund (UNICEF), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United States Agency for International Development (USAID), the Bill & Melinda Gates Foundation, the United Kingdom's Foreign, Commonwealth and Development Office (FCDO), and the World Bank have introduced a RAPID Framework for Learning Recovery and Acceleration, which outlines five short-term, key policy actions:

- **Reach** every child and keep them in school
- **Assess** learning levels regularly
- **Prioritize** teaching the fundamentals
- **Increase** the efficiency of instruction, including through catch-up learning
- **Develop** psychosocial health and wellbeing

To explore how countries have progressed in learning recovery and longer-term education transformation, the Organisation for Economic Co-operation and Development (OECD), UNESCO, UNESCO Institute for Statistics (UIS), UNICEF and the World Bank have conducted the fourth round of the Survey on National Education Responses to COVID-19 School Closures ('joint survey'), with responses from Ministries of Education in 93 countries. While the first three rounds of the survey were implemented in relatively rapid succession during the periods May–June 2020, July–October 2020 and February–June 2021, respectively, the fourth round was implemented more than one year after the last data collection during the period April–July 2022, when almost all schools had reopened and policymakers were beginning to reflect on responses going forward in the 'post-pandemic' normalization period. Findings from the joint survey are supplemented by data from the Global Education Recovery Tracker survey ('GERT survey'), administered with 166 World Bank and UNICEF country offices between May–July 2022. This report includes the main findings from the surveys, which are analyzed and presented along the lines of the five RAPID key policy actions. Furthermore, each of these analyses is complemented by a discourse of the policy implications and related measures required for longer-term education transformation to address the longstanding systemic bottlenecks, ensure future system sustainability and achieve national, regional and global goals, including Sustainable Development Goal 4 on education.

REACHING EVERY CHILD IS THE COMMON DENOMINATOR OF EDUCATION RECOVERY.

Ensuring that the world's children, particularly the most vulnerable, return to school is essential not only for education but also to address social challenges such as early marriage, early pregnancy, child nutrition, child labor and mental health. Countries showed their commitment to return children to school: at primary and secondary education levels, at least half of countries reported taking measures such as automatic re-enrolment and community mobilization campaigns to address disengagement from school, as well as cash transfers and subsidies to address economic hardship faced by families. To assuage parental concerns over health risks, a majority of countries implemented enhanced cleaning and disinfection and invested in improved infrastructure. A true and deep 'reach all' effort is imperative for education systems to shift from recovery to transformation. Governments can eliminate barriers to education for vulnerable and marginalized groups by targeting specific policy measures to identify and reach those who are still excluded and have been left behind. This includes ensuring the right to education for all is not only fully captured in national legal and regulatory frameworks, but also effectively enforced. Strengthening flexible models of education, including multiple modes of learning that vary in time and space, as well as teacher professional development for inclusive and personalized pedagogies, can also play an important role in retaining students. Building relationships with families by providing parents with information on benefits, costs and quality of education can also help improve school participation. Lastly, longer-term investments in resilience and preparedness for future crises, along with strengthened Education Management Information Systems to ensure real time and personalized monitoring, are also needed.

ASSESSMENT SYSTEMS MUST EVOLVE IN THEIR ROLE AND SCOPE TO IMPROVE BOTH LEARNING AND TEACHING.

Emerging data from countries around the world show that learning losses due to COVID-19-related disruptions are real and disproportionately distributed. As children return to school, understanding their current learning levels, needs and contexts allows teachers, school leaders, system managers and policymakers to make informed decisions about instructional approaches, assessment practices and other related policy measures for learning recovery and better outcomes. In the school year 2021/2022, at least 70 per cent of countries continued standardized testing programmes. However, fewer than half of countries conducted studies on the impact of school closures on learning outcomes, and only a quarter on its impact on non-cognitive skills. Looking forward to more systemic transformations and redesigning learning systems, shifting the focus of assessment from grading to monitoring and promoting learning growth, including that of social-emotional skills like agency, resilience and persistence, will be critical. New ways of assessment should not only capture student knowledge and skills, but also focus on helping students become more aware of how and what they learn. This includes promoting a regular and inclusive learning assessment culture by diversifying the types of assessment tools used, emphasizing the use of formative assessments to meet students' individual needs, and leveraging technologies such as digitalized and hybrid assessments.

PRIORITIZING FUNDAMENTAL KNOWLEDGE AND SKILLS IN THE CURRICULUM HELPS CHILDREN RECOVER MORE QUICKLY FROM LEARNING LOSS.

With the staggering loss of instructional time and its detrimental effects on students' learning levels, flexibility in curricula adherence is needed to set priorities in support of catching up on missed learning. In the school year 2021/2022, while nearly half of countries reported adjusting the curriculum for primary to upper secondary levels, only about one third reported the same for the pre-primary level. However, among countries implementing curricular adjustments, less than three quarters reported changes were based on the results of students' assessments – a crucial input for curriculum alignment. Prioritization efforts will continue to require flexibility and adaptivity to changing circumstances, putting learners at the center of the process. Moreover, teachers should increasingly be involved in co-designing and

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facilitating curricular adjustments. Curricular reform and transformation will entail reviewing learning objectives, content relevance and corresponding time allocations; producing the necessary educational materials; and using lessons learned during the pandemic as building blocks for the review, design and strengthening of evolving curriculum during crisis and non-crisis contexts.

INCREASING THE EFFICIENCY OF INSTRUCTION REQUIRES THE USE OF PROVEN INTERVENTIONS AND EXTENSIVE TEACHER SUPPORT.

To enable quick learning recovery, school systems must implement strategies that make instruction more effective, relevant and relational, and ensure teachers can support the recovery process in the classrooms. In the school year 2021/2022, about 80 per cent of countries implemented national programmes to provide additional support to students affected by the pandemic. However, a much smaller number of countries is implementing proven measures to catch up on missed learning, such as extending instructional time, providing tutoring programmes and using targeted instruction. To support teacher performance, more than 70 per cent of countries

implemented policy measures on structured pedagogy and teacher professional development on the effective use of technologies. Ensuring education transformation requires countries to adapt new policies and financing for strengthened licensing and accreditation schemes, as well as modernize pre-service teacher education curriculum to include supervised field teaching, induction and mentoring. Teachers will also need to have better opportunities for personalized continuous professional development on targeted instruction, tutoring, and digital and other 21st century skills. Effective and efficient compensatory systems, improved working conditions in schools, and teacher engagement through social dialogue in policy development can help enhance the profession and enable teachers to better serve their role in transforming education.

DEVELOPING PSYCHOSOCIAL HEALTH AND WELLBEING MEANS ENHANCING ACCESS TO ESSENTIAL SCHOOL-BASED SERVICES.

To help address the negative effects of the pandemic, it is critical that schools provide learners with comprehensive support, including services related to mental health and psychosocial support (MHPSS), water, health and sanitation (WASH), and nutrition. In the school year 2021/2022, less than two thirds of countries reported implementing psychosocial and mental health support to students (62 per cent) and teachers (58 per cent) at primary and secondary education levels. In addition, while 80 per cent of countries reported implementing strengthened WASH services, only 41 per cent reported the same for nutrition services. To transform education, school systems must monitor, address and prioritize learners' and educators' mental health and psychosocial wellbeing. A whole-of-society approach, involving collaboration across sectors including education, child protection, health and nutrition, will be needed to ensure children, adolescents and youth receive comprehensive services while education systems build better going forward. To guide the development of measures on MHPSS across more countries, especially in lower-income contexts where they are lacking, governments can use assessments to understand learners' and teachers' needs in order to strengthen preparedness for potential shocks as well as longer-term planning to promote their psychosocial health and wellbeing.

EDUCATION FINANCING IS CRITICAL TO SUPPORTING THE RAPID FRAMEWORK AND EDUCATION TRANSFORMATION.

To effectively implement the RAPID framework, it is essential that countries prioritize sustainable and equitable education financing. At the primary to upper secondary levels, 77 per cent of countries reported that they increased their budgetary allocations to the sector in 2021 relative to 2020. However, there are wide disparities by country income level: only 45 per cent of low- and lower-middle-income countries, compared to 91 per cent of high-income countries, increased their budgets for primary to upper secondary education. Transforming education should involve revamping how financial resources are raised and invested, prioritizing allocations of public spending to improve access to and quality in education, leveraging non-traditional sources of funding, and promoting innovations for increased efficiency in spending.

STRENGTHENED INTERNATIONAL COOPERATION IS NEEDED TO RECOVER LEARNING AND TRANSFORM EDUCATION.

The pandemic has shown how the international community can work together and mobilize resources to ensure continuity of learning. We need to rebuild systems so that we don't fall back to business as usual before COVID. As we near the Transforming Education Summit in September 2022, it is critical that countries, stakeholders and partners continue recovering education through the RAPID framework – as a first step towards wider education transformation. Looking to the future, bold new reforms and actions will be required to adapt to rapidly changing circumstances and create long-term sustainable transformations. These include introducing systemic changes to prevent the exclusion of vulnerable groups from education; reforming curricula and pedagogies for the inclusiveness and greening of education, improve effectiveness of instruction methods; and transforming the teaching profession by addressing teacher shortages and providing opportunities for continuous professional development. Governments and the international community must respond effectively with the necessary technical and financial resources to meet changing needs, so that all children can learn to their potential and the targets of the Sustainable Development Goals can be achieved.

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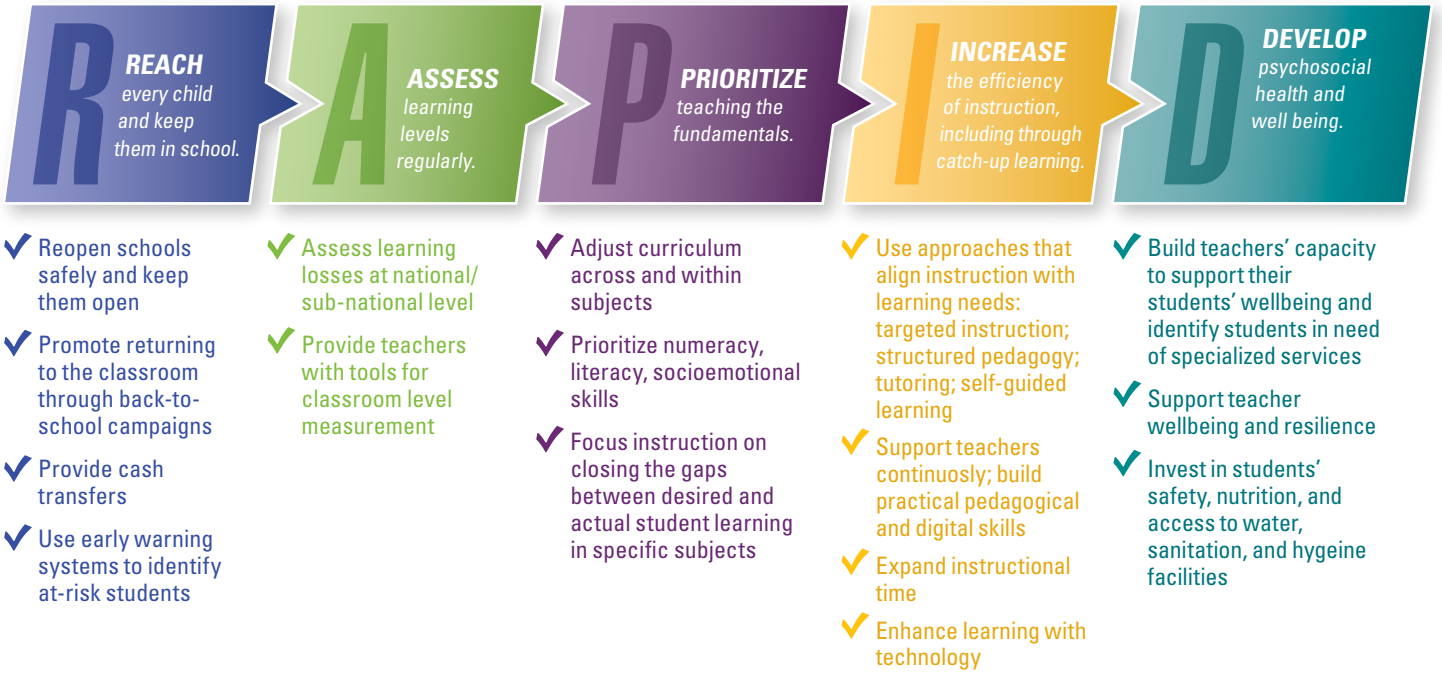
INTRODUCTION

Since its onset, the COVID-19 pandemic has brought unprecedented disruptions to education systems around the world. Between February 2020 and February 2022, schools were fully closed for an average of 20 weeks globally. In South Asia and in Latin America and the Caribbean, full school closures lasted for an average of 35 and 37 weeks, respectively. When schools are shut, even where remote teaching is provided, children miss out on opportunities that go beyond learning. They also face diminished access to critical services including feeding programmes, school-based healthcare support, peer interaction, protection from child marriage and sexual and gender-based violence, and more.

All countries have now lifted nationwide school closures – but evidence is increasingly revealing how the prolonged absence of in-person learning exacerbated the pre-existing global learning crisis. Prior to COVID-19, large numbers of children and youth were not attaining essential knowledge and skills worldwide: at about age 5, more than a quarter of children were developmentally off-track; at about age 10, half of children lacked foundational reading skills; and at about age 18, more than half of youth lacked secondary-level reading and mathematics, transferable, digital, job-specific and entrepreneurial skills (the Education Commission & UNICEF, 2022). The learning crisis may have worsened significantly as a result of COVID-related disruptions: in 2019, 52 per cent of children globally were unable to read and understand a simple text by age 10; simulations in 2022 suggest this share is likely to have now risen to as high as 64 per cent (World Bank et al., 2022). Increases are estimated to be especially large in South Asia and in Latin America and the Caribbean, where schools have been closed the longest.



Countries must act urgently and strategically to support and accelerate learning recovery. The situation, needs and contexts of geographies, as well as the individual needs of students, are diverse, as are the strategies to address learning losses; therefore, governments and stakeholders will need to take adapted, differential approaches.

To provide guidance on learning recovery strategies and measures that countries could consider implementing, the United Nations Children's Fund (UNICEF), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United States Agency for International Development (USAID), the Bill & Melinda Gates Foundation, the United Kingdom's Foreign, Commonwealth and Development Office (FCDO), and the World Bank have introduced the **RAPID Framework for Learning Recovery and Acceleration** (UNESCO et al., 2022). The framework encapsulates a menu of policy actions from which countries can select, combine and adapt to establish a contextually suitable learning recovery programme. The RAPID acronym also highlights the sense of urgency needed to address the challenges brought about by the global education disruption, with five key policy actions in the framework *(see above)*.

These policy options represent actions that countries are taking now, as well as policy tools that have been proven to significantly improve learning – even before the COVID-19 pandemic. To provide countries with practical guidance on implementing the RAPID framework, the partner organizations also produced a Guide for Learning Recovery and Acceleration. The Guide features policy options, examples, case studies, considerations for implementation, and additional resources that countries can use to design effective and contextually appropriate learning recovery programmes.

The learning recovery period must serve as a crucial first step towards education transformation. Given the magnitude of the challenge, for learning recovery to be effective and sustainable, it has to be transformational. The process cannot be an ad hoc programme or a series of fragmented policy interventions; it must be a multi-year and multi-phase endeavor aimed at addressing root causes and overcoming systemic barriers that have impeded effective teaching and learning over the past decades (UNESCO, 2021). Such a systemic approach is more important than ever, as countries will need to both recover missed learning opportunities caused by COVID-19 disruptions and address pre-existing learning gaps. The RAPID actions can be best sustained and supported by structural reforms and transformative decisions that will have been carefully designed, costed and agreed upon with all key stakeholders, including education personnel. Implementing such reforms should include critically reviewing what worked and did not work in past decisions and approaches, as well as deploying innovative and transformative actions built on lessons learned from the pandemic. This will help ensure that education systems do not return to the ineffective approaches of the pre-pandemic period.

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This report examines how countries have progressed in recovering and accelerating learning through the five key RAPID policy actions. We present findings primarily from the fourth round of the Survey on National Education Responses to COVID-19 School Closures (hereafter referred to as the 'joint survey') coordinated by the Organisation for Economic Co-operation and Development (OECD), UNESCO, UNESCO Institute for Statistics (UIS), UNICEF and the World Bank. The survey builds on earlier work by the partner organizations to monitor the impact of the pandemic in regular intervals and to develop principles for recovery policies. The fourth round of the survey was answered by Ministries of Education in 93 countries between April to July 2022. To provide further information on countries' progress, these findings are supplemented by data from the Global Education Recovery Tracker survey ('GERT survey') administered with 166 World Bank and UNICEF country offices between May to July 2022. The GERT survey began as a partnership between Johns Hopkins University, UNICEF and the World Bank in February 2021 and is now managed by the World Bank and UNICEF, with data captured periodically by World Bank and UNICEF staff and affiliates based on publicly available information.

Differences between the results of the joint survey and the GERT survey may be due to methodological design factors, including sample size and self-selection of respondent countries, time of the survey administration, framing of questions and response options available for respondents. It is also important to note that in both surveys, not all countries may have responded to all questions, so sample sizes for each question and sub-questions by level of education may vary. Data from the fourth round of the joint survey was compared with that of previous rounds of the same survey, with the third round implemented between February to June 2021 with a total of 143 country responses. Similarly, data from the GERT survey was compared with prior rounds going back to March 2020, as well as UNICEF's Pulse Survey of 122 UNICEF country and fundraising offices administered in March 2022.

This report is organized into seven sections. Sections 1 through 5 discuss countries' progress in each of the five key actions under the RAPID framework. Section 6 presents findings on education financing, including investments in digitalization. Finally, Section 7 provides an overall conclusion of the progress made to recover lost learning opportunities, and what further steps must be taken to ensure a RAPID learning recovery and acceleration.

REACH EVERY CHILD AND KEEP THEM IN SCHOOL

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All countries have now lifted COVID-19-related nationwide school closures – a first step to returning to normalcy and mitigating the ever-growing global learning crisis. The RAPID framework's focus on reaching every child and keeping them in school is deliberative. Ensuring that the world's children, particularly the most vulnerable, return to school is essential for education and human capital development and also addresses social challenges such as early marriage, early pregnancy, child nutrition, child labor and mental health – issues that have been exacerbated in some parts of the globe due to COVID-19.

Reaching all children requires a multi-sectoral collaborative undertaking, including investments that may be challenging to obtain in the current environment of increasingly limited resources. Governments must understand the gravity of the challenge, as re-opening schools does not necessarily equate to all students returning. For example, when schools reopened after the Ebola crisis in Liberia, around a quarter of respondents to a high-frequency cell phone survey with primary school-aged children reported that children had not returned to school. Older children saw a decline in attendance, with only 73 per cent of households reporting sending their older children back to school (World Bank, 2015).

COUNTRIES MUST COLLECT DATA ON STUDENT ABSENCE NOW TO PREVENT DROPOUTS IN THE FUTURE.

A critical first step towards ensuring that all children can be reached and re-enrolled in school is to collect and analyze information on attendance and absence. This recovery effort requires targeted (and likely out-of-cycle) comprehensive data collection to identify which children have returned to school and which groups of children have not, in order to create tailored return and recovery measures to meet their needs.

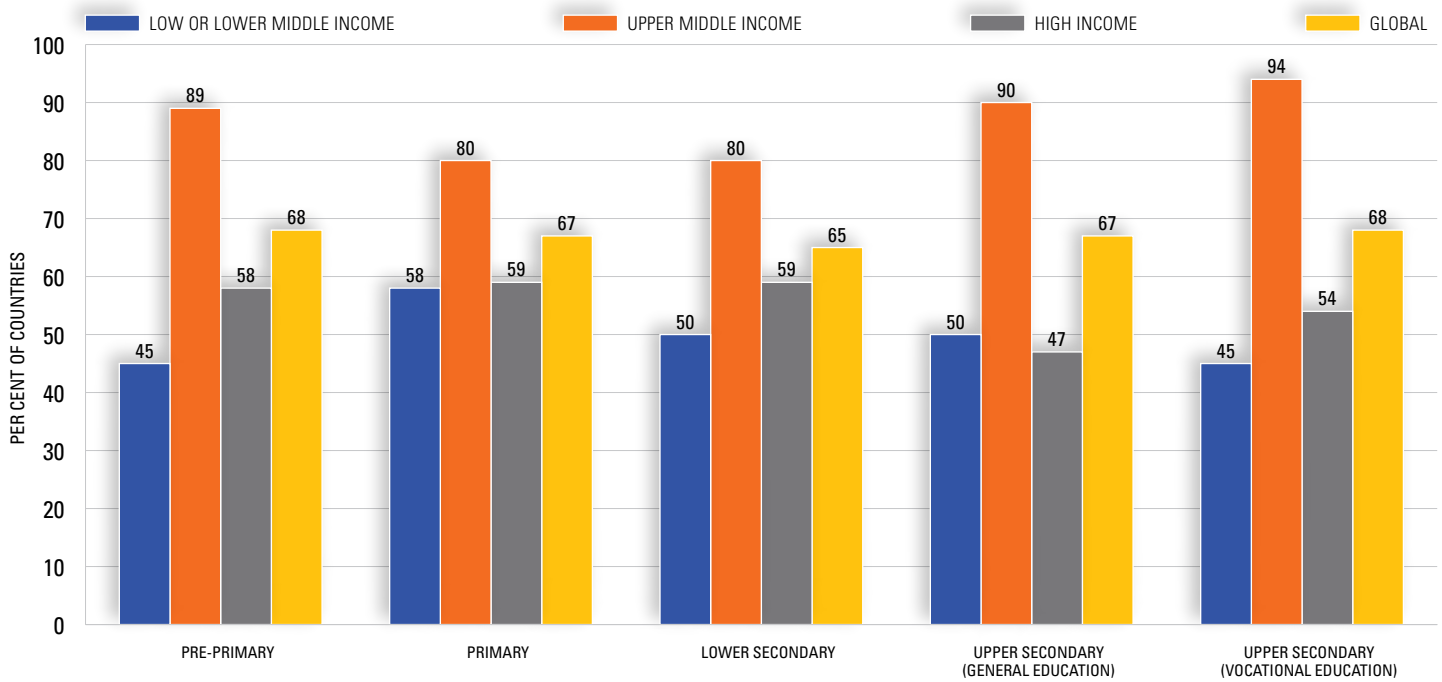
Yet, to date, some systems cannot provide policymakers with reliable information on whether or not the number of children back in school has reached pre-pandemic levels. According to data from the GERT, out of 115 countries where information was available, only 75 per cent are collecting information on children who have returned to school. Even within that cohort, about 15 per cent still do not have that information available nationwide (across all their regions). That proportion is higher among low- and lower-middle-income countries, where 20 per cent reported that the data is not available at a national level. Additionally, only 7 of the 60 countries with data reported they can disaggregate data on returning students by refugee or displacement status.

Understanding who is not there is as critical as knowing who is. Chronic student absenteeism can often lead to dropout, as previous experience has reflected that the longer children are out of school the less likely they are to return (UNICEF, 2015). Early evidence suggests that select groups of students have dropped out during the pandemic: a study in rural Kenya found a tripled risk of dropout among secondary school aged girls; and in Nigeria, declines in enrolment were most pronounced among adolescents – especially girls in regions where child marriage is prevalent. Data from the joint survey shows that, on average, 60 per cent of countries had collected data on student absence in primary and secondary school over the three school years covered by the pandemic (2020–2022). Of the 49 countries that provided information, two thirds of respondents across all levels of education reported that they observed an increase in the number of student absences (*Figure 1-1*). More than 80 per cent of upper-middle-income countries reported such increases, potentially because of longer school closures in the two regions with more middle-income countries, namely Latin America and the Caribbean and South Asia.

RE-ENROLMENT REQUIRES ADDRESSING A COMBINATION OF FACTORS.

While evidence of increased dropout due to COVID-related school closures is still emerging, the re-enrolment challenge will likely become apparent in the medium term, as students who fall behind eventually do leave school. Therefore, countries must proactively undertake preventive and targeted efforts now to reach all children and keep them in school.

FIGURE 1-1. Share of respondent countries observing an increase in student absences over 3 years covered by the pandemic (2020–2022)



Note: For each level of education, only countries with valid responses are included. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses may cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

Addressing disengagement from school

Automatic re-enrolment, flexibility on enrolment deadlines, and clear enrolment guidance and support can remove constraints that parents and caregivers face when sending their children back to school. While 70 per cent of low- and lower-middle-income respondent countries implemented these measures in the school year 2021/2022 for primary to upper secondary education levels, only 30 per cent of high-income countries reported the same (*Figure 1-2*).

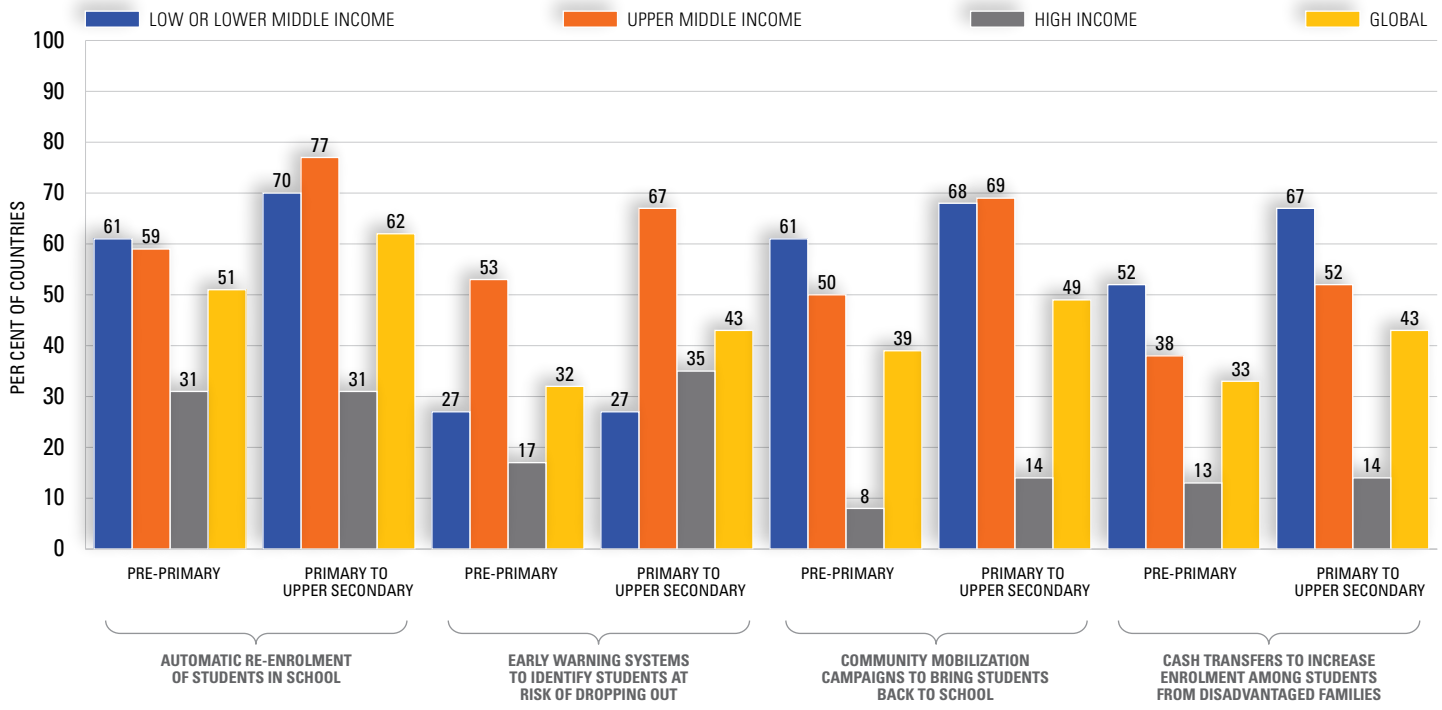
Early warning systems to identify which students are at risk of dropping out have been implemented in a number of countries (e.g., Chile, Romania, Brazil). They are primarily focused on identifying key obstacles such as financial constraints, peer influence and lack of community support. While almost two thirds of upper-middle-income countries reported implementing these systems in the current school year, only a quarter of low- and lower-middle-income countries reported the same. As students with poor academic performance, chronic absenteeism and financial hardships are most at risk of dropping out, the use of early warning systems in low- and lower-middle-income countries should be expanded.

Back-to-school communication campaigns, both general and targeted towards at-risk students, can help increase attendance and re-enrolment rates. Overall, back-to-school community mobilization campaigns were the highest priority for low- and lower-middle-income countries. In 2022, about two thirds of respondent countries – excluding high-income ones – reported implementing such campaigns across primary to upper secondary levels. Encouragingly, this measure was also implemented by 60 per cent of low- and lower-middle-income countries for pre-primary education.

Addressing economic barriers

Financial incentives like cash support in the form of subsidies or vouchers for school enrolment can help

FIGURE 1-2. Share of respondent countries implementing policy measures related to re-enrolment and dropout prevention in school year 2021/2022 (or 2022)



Note: For each level of education, only countries with valid responses are included. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses may cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

mitigate the financial hardship that families may have faced over the past three years. Cash transfers have proven effective in Mexico and Brazil; in Lebanon, $23 million in cash support is being aimed at youth aged 13–18 from extremely poor families at risk of dropping out. While two thirds of low- and lower-middle-income countries reported implementing such measures for primary to upper secondary levels, high-income countries rarely reported the same – though in some cases, allowances to support enrolment may be provided to students from disadvantaged and low-income families.

Addressing health concerns

In addition to the above factors that lead to dropout, parental concern over the health risks of sending their children back to school was evident. According to data by UNESCO and McKinsey (2020), more than eight in 10 parents in France, Kuwait and Colombia reported concerns about sending their children to school. Consistent, targeted messaging on the precautions being taken to ensure children will not be at risk can be used to communicate to parents that it is safe to return their children to school.

Measures such as promotion of handwashing and maintaining minimum physical distancing were universally

Preventing dropout at the tertiary level of education

In 2020, UNESCO projected that about 24 million students (from pre-primary to tertiary education) will be at risk of not returning to education institutions, causing an estimated 3.5 per cent decline in enrolment (an estimated 7.9 million fewer students). Because the opportunity cost of schooling is higher at tertiary level, governments took different approaches to retaining students during the pandemic and in its aftermath. While fewer countries reported using automatic enrolment (17 per cent), many – including 56 per cent of low- and lower-middle-income countries – introduced incentives like cash transfers and subsidies to prevent dropout at this level and reduce the financial burden of schooling on households. More low- and lower-middle-income countries reported plans to implement measures to bring students back to tertiary education in the school year 2022/2023: automatic re-enrolment (increasing from 38 to 50 per cent of countries), community mobilization campaigns (from 56 to 67 percent) and cash transfers (from 56 to 67 per cent).

BACK-TO-SCHOOL CAMPAIGN IN GHANA

Ghana conducted a successful back-to-school campaign in 2021, achieving nearly 100 per cent re-enrolment.

INCLUDE COMMUNITY INFLUENCERS

- Regional advocacy taskforces were set up; members included government representatives, CSOs, religious leaders and the media.
- Taskforces visited all the districts in the country.

MASS COMMUNICATION IN MULTIPLE LANGUAGES

- Broadcasted on TV and radio
- Broadcasted in English and selected local languages in June 2020 (during partial school re-openings)

FOCUS ON GIRLS

- Training for 524 national cadres of trainers who, in turn, trained over 260,000 people in 120 districts, providing messages on preventing pregnancy among schoolgirls.

98%
OF STUDENTS HAVE RETURNED TO SCHOOL

Source: World Bank, Bill & Melinda Gates Foundation, FCDO, UNESCO, UNICEF, & USAID. (2022). *Guide for learning recovery and acceleration: Using the RAPID framework to address COVID-19 learning losses and build forward better*. World Bank.

reported by countries across all income levels (*Figure 1-3*). However, in low and lower-middle-income countries, class sizes remain large and space for physically distanced classrooms is a challenge. In such cases, the creation of more flexible schedules (such as split or alternating days) to reduce contact can mitigate some of the health risks related to in-person schooling. Three quarters of low- and lower-middle-income countries (76 per cent) and upper-middle-income countries (79 per cent) reported implementing such a protocol for at least some part of the school year. Additionally, 72 per cent of respondent countries had implemented a risk assessment of school re-opening based on an epidemiological criterion during the school year – lessons that could prove useful for future increases in cases. Lastly, infrastructure adaptations, especially in poorly equipped schools, could help assuage parental concerns about health risks. Globally, three fourths of respondent countries had made investments in school infrastructure (e.g., ventilation, sick bays, sanitation stations) during the school year 2021/2022.

MOVING FROM RECOVERY TO TRANSFORMATION

Plans for the school year 2022/2023 look promising, as they show countries' commitments to ensure all students return to school, with automatic re-enrolment and early warning systems continuing to be the most popular measures. Additionally, more low- and lower-middle-income countries plan to implement such measures for primary to upper secondary levels in the school year 2022/2023. The share of countries planning to use early warning systems increased from 27 to 40 per cent of respondents; community mobilization campaigns, from 68 to 73 per cent; and cash transfers for students from disadvantaged families, from 67 to 75 per cent. By contrast, fewer upper-middle-income countries reported plans to implement these policy measures in the upcoming school year as compared to the current school year: the share of respondent countries planning to use early warning systems decreased from 67 to 63 per cent and those planning to use community mobilization programmes reduced from 69 to 57 per cent.

A true and deep 'reach all' effort is imperative for education systems to shift from recovery to transformation. Governments can eliminate barriers to education for vulnerable and marginalized groups by ensuring that the **right to education for all is fully captured in national legal and regulatory frameworks.** This can include, for example, laws and policies that do not discriminate

FIGURE 1-3. Share of respondent countries that implemented health protocols for at least some part of school year 2021/2022 (or 2022)

0% 100%

	LOW OR LOWER MIDDLE INCOME	UPPER MIDDLE INCOME	HIGH INCOME	GLOBAL
Promotion of frequent handwashing and/or use of hand sanitizer	92%	93%	95%	93%
Enhanced cleaning and disinfection	86%	89%	89%	89%
Minimum physical distancing requirements	92%	89%	85%	88%
Mandatory mask usage for teachers	96%	93%	79%	88%
Adjustment in activities	84%	86%	84%	84%
National contact tracing protocols	84%	80%	85%	83%
Mandatory mask usage for students	92%	89%	67%	80%
Infrastructure adaptations	67%	81%	76%	75%
Risk assessment of school reopening	84%	73%	62%	72%
Adjusting the schedule to decrease contact	76%	79%	36%	60%
Required teacher vaccinations	72%	56%	26%	48%
Required student vaccinations	42%	38%	5%	25%

Note: The chart shows the per cent of countries with valid responses that report implementing a health measure for primary, lower secondary and upper secondary (general) education levels for at least some periods of the school year 2021/2022 (or 2022). While the results represented in this figure cover more than 50 per cent of the total 4- to 17-year-old population, this may not apply to specific income groups. More information on the population coverage of each income group can be found in Annex 1.

against the enrolment of refugees, migrants, students with disabilities and pregnant girls. Countries can also legally mandate that schools adopt the policy of re-enrolling all students regardless of the duration of their absence.

Long-term transformation also requires continued or increased investment in schools' capacity to rely on **flexible models, including multiple modes of learning,** to capture and retain greater numbers of students. Data from the joint survey shows that two thirds of countries were planning to enhance the provision of hybrid learning from primary to upper secondary levels beyond the pandemic. For secondary-aged students, this could mean opening alternative pathways to obtaining qualifications, such as non-formal or alternative learning programmes.

Education systems can **invest in preparedness plans** to prevent complete future shutdowns, including undertaking periodic risk assessments at school or community level. Strengthened regulations in relation to better ventilation, improved quality of air and more flexible spaces will serve as a transformative action and create a healthier learning environment for students and teachers (Barrett et al., 2019).

Additionally, upgrading to nimble and **digitized Education Management Information Systems (EMIS)** would ensure real-time and individualized monitoring of staff and students both in crisis and outside, as well as help gather disaggregated data for student groups most at risk. Data from 166 countries in the GERT survey shows that 30 per cent of countries were using EMIS data to monitor student return, with 36 per cent of low- and lower-middle-income countries using this measure.

Finally, **providing parents with information on the benefits, costs, and quality of education** can improve school participation (World Bank et al., 2020). Local authorities can engage with parents to strengthen school-community relationships and raise awareness about the benefits of education. Likewise, school authorities can engage with local teachers, especially those who are members of the community, as local 'influencers' to encourage parents to return their children to school.

CONCLUSION

Reaching all children and safely welcoming them back to school is the common denominator of education's recovery from COVID-19 disruptions. The data shows that governments are taking varied approaches to achieve this, most notably: campaigns to encourage families to return their children to school, automatic re-enrolment, and incentives, particularly for the most vulnerable groups. Evaluating how effective these measures are depends heavily on data. Yet in low and lower-middle -income countries – comprising one third of respondents – there is not enough data to inform targeting of national or regional policies, leaving policymakers to hypothesize about the effectiveness of solutions. Therefore, capturing data on who is returning to the classroom and who is not (for both students and teachers) is crucial to ensure that all children are reached. Lastly, bringing students back is only the first step towards recovery and a shift to transformation in the long term. A genuine change of paradigm in terms of educational policy is also needed, as systemic reforms will require changes in the structures, legal frameworks, governance, and management of educational systems.

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ASSESS LEARNING LEVELS REGULARLY

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Learning assessment is the process through which stakeholders gather, analyze, disseminate and use information from various sources on what students know, understand, and can do, to inform policies and practices for the improvement of learning outcomes. While a wide range of methods and tools can be used to assess student learning, countries commonly participate in standardized international large-scale assessments, implement national and sub-national standardized assessments, conduct high-stakes examinations, and develop resources and tools for formative and summative assessments in classrooms and schools.

High-stakes examinations and large-scale assessments serve different but critical functions within an education system. High-stakes examinations are typically used to certify students at their successful completion of an educational cycle, which is required for decisions such as progression to the next educational level or entrance into the labor market. Large-scale assessments are conducted to understand students' competencies at a population level, thereby providing critical information about the performance of the education system and identifying areas for systemic improvement.

Data from previous rounds of the joint survey provided critical insights on how countries adapted their learning assessment policies and strategies in response to school closures. For example, data from the first round of the joint survey revealed that, as of May 2020, more than half of the respondent countries postponed or rescheduled high-stakes examinations (Nugroho et al., 2021)(UNESCO, 2022). Similarly, data from the second round of the joint survey highlighted that, as of October 2020, few respondent countries were planning to assess their students' learning levels once schools reopened (UNESCO et al., 2021).

MOST COUNTRIES MAINTAINED NATIONAL STANDARDIZED ASSESSMENT PROGRAMMES.

In the fourth round of the joint survey, approximately four in five respondent countries reported that standardized assessment programmes continued or resumed in the school year 2021/2022 at each education level from primary to upper secondary (*Figure 2-1*). At the primary education level, the share of countries reporting the continuation of standardized assessment programmes increases relative to country income; however, the relationship is less clear at the secondary education level. Some countries, particularly upper-middle-income ones, reported that the continuation of standardized assessment programmes was left to the the discretion of schools, school districts, or the most local levels of governance.

Data from the GERT presents a more sobering picture when it comes to the use of diagnostic or formative assessments. Of the 166 countries, 68 per cent did not have a systemic plan to measure the extent of learning loss or gaps in the form of diagnostic or formative assessment when children returned to school. Of the countries that had some student diagnostic or formative assessment activity in place, 20 per cent conducted these assessments

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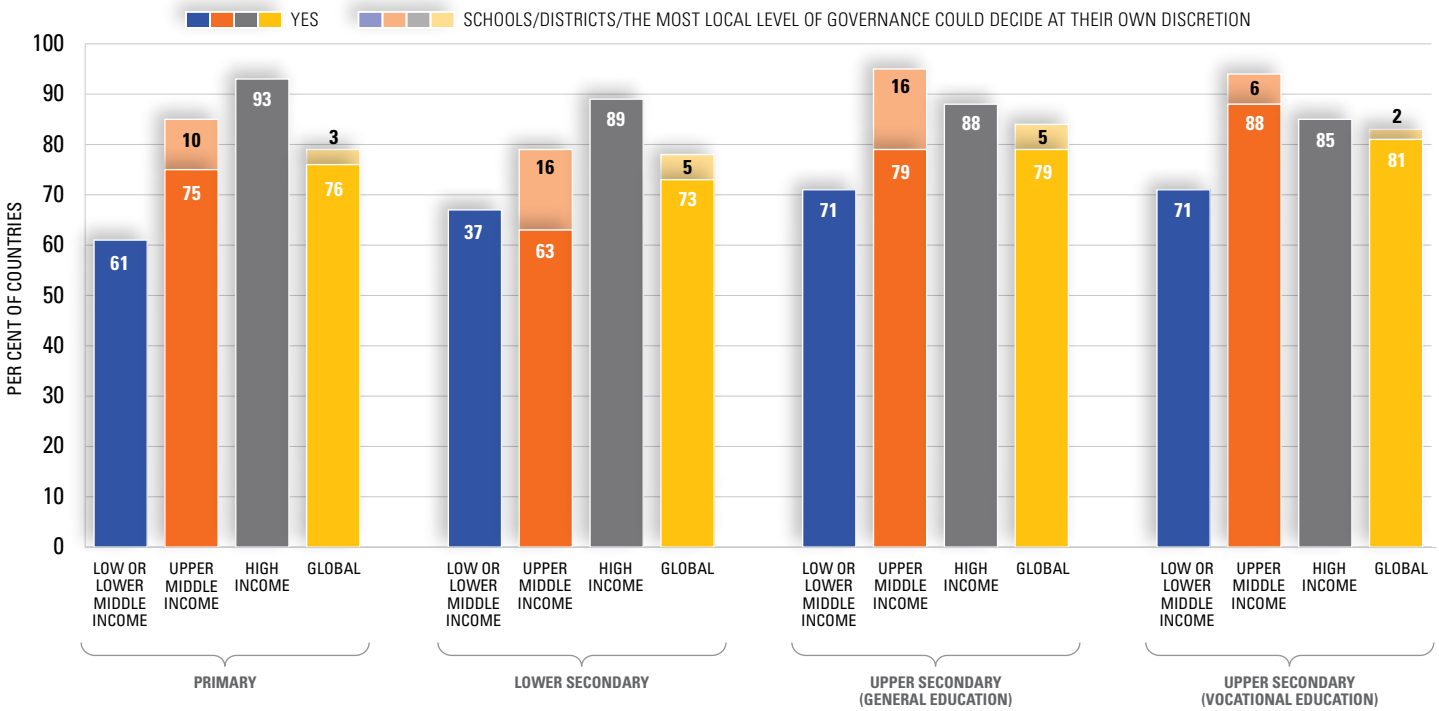
FIGURE 2-1. Share of respondent countries reporting continuation of standardized testing programmes in the school year 2021/2022 (or 2022)



Note: For each level of education, only countries with valid responses are included. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses may cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

nationwide, while fewer conducted partial/sub-national (7 per cent) or small-scale, school-based implementation (5 per cent). The use of diagnostic and formative assessments are critical after long periods of learning disruption in order for teachers and schools to identify learning gains achieved during school closures and how to mitigate learning gaps upon school reopening, so that children are back on track with expected learning progress. The results of such assessments can be useful in making decisions around prioritizing, condensing or adapting the curriculum when developing recovery plans at school or district levels.

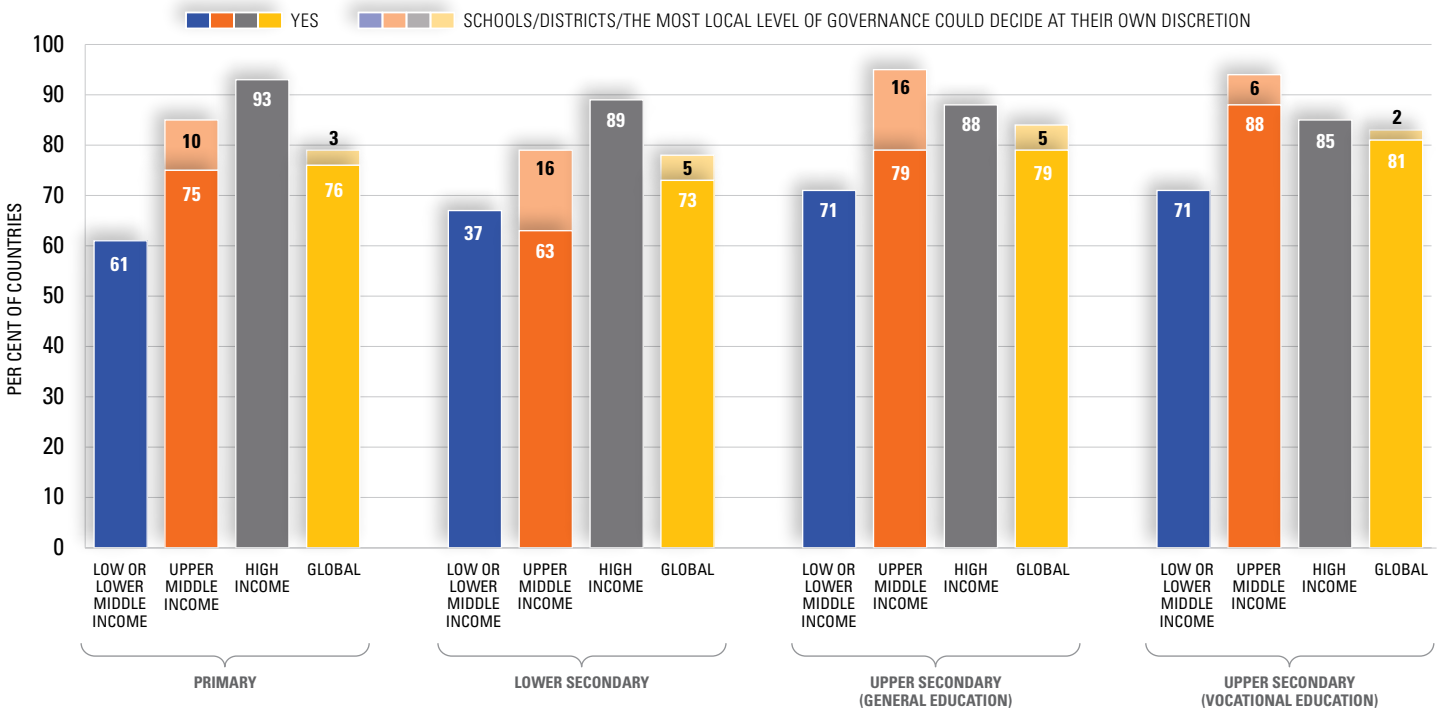
While a majority of countries are continuing their efforts to maintain standardized assessments, fewer than half of the respondent countries conducted nationwide studies in the school years 2020/2021 and/or 2021/2022 to evaluate the impact of school closures on learning outcomes (*Figure 2-2*). Some countries, particularly those in the upper-middle-income bracket, have left this decision up to sub-national jurisdictions. The proportion of countries with nationwide assessment studies decreased slightly from 46 per cent in primary to 40–42 per cent in the different levels and paths of secondary education.

These findings are similar that of the GERT survey, where 87 of 166 countries (52 per cent) reported having implemented measurement of student learning outcomes since March 2020. It is also important for countries to disaggregate data on learning outcomes to identify whether select groups are performing worse than others. In the GERT survey, among countries reporting that data has been collected to measure learning outcomes, only 39 per cent disaggregate learning data by gender and 32 per cent by age. It is encouraging that disaggregation of learning outcomes data by gender is more common in low- and middle-income countries, as low-income countries still face a challenge with dropout among girls and can use such data to monitor early warning signs of dropout due to poor academic performance.

THE MAJORITY OF COUNTRIES CONTINUED STANDARDIZED ASSESSMENTS OF THE CORE LEARNING DOMAINS OF SDG INDICATOR 4.1.1, I.E., MATHEMATICS AND READING.

Among countries that continued to conduct standardized assessments of learning outcomes during this period, the vast majority included the assessment of mathematics and

FIGURE 2-2. Share of respondent countries reporting that studies were conducted to evaluate the impact of school closures on learning outcomes through standardized national or sub-national assessments in the school years 2020/2021 and/or 2021/2022



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reading, which are the two learning domains prioritized in Sustainable Development Goal (SDG) Indicator 4.1.1. This share of countries approaches nine out of 10 countries at the primary education level, and then declines slightly in secondary – particularly in the vocational stream in upper secondary (*Figure 2-3*). Given the focus of SDG Indicator 4.1.1 on primary and lower secondary levels, this is not entirely surprising. Differences between the shares of countries reporting the assessment of mathematics and reading are not substantial, showing that countries generally accord equal importance to both learning domains.

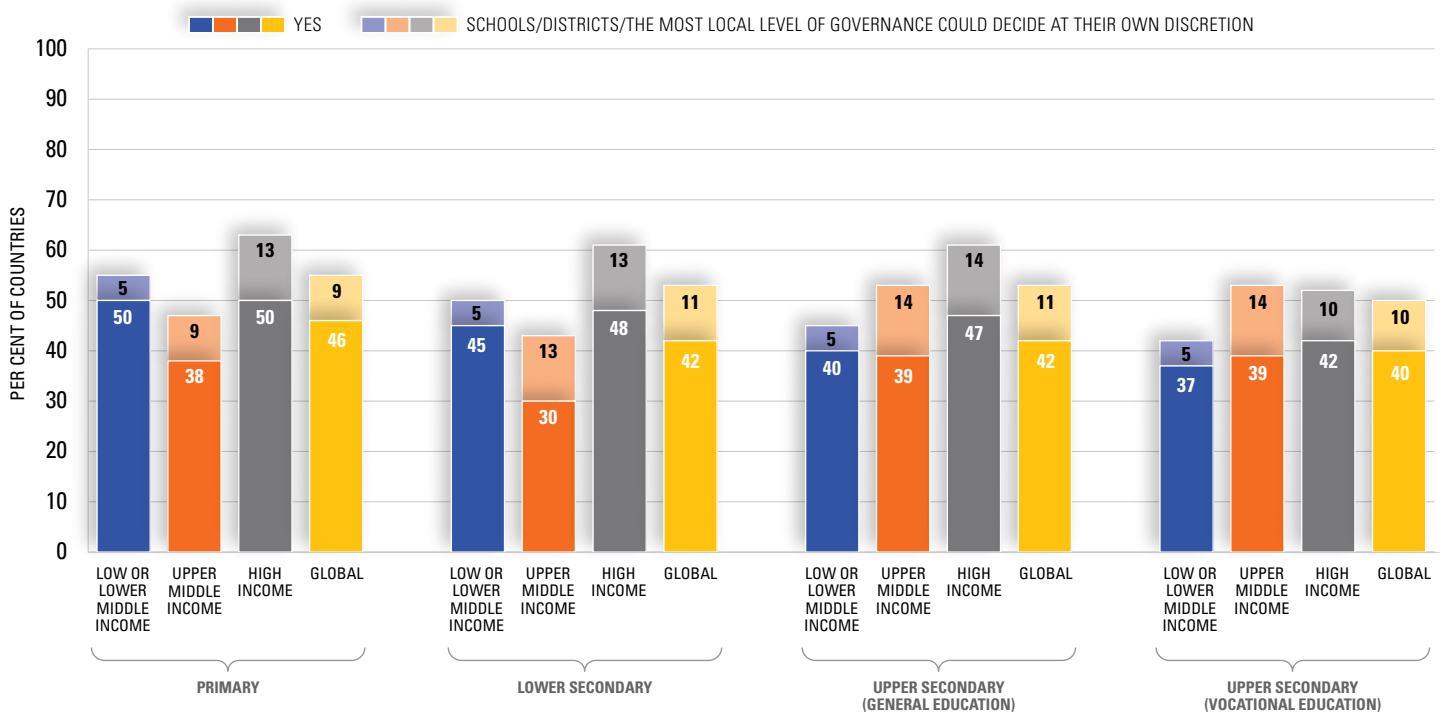
EVALUATION OF ADDITIONAL SUPPORT PROGRAMMES CAN HELP COUNTRIES SCALE UP PROVEN STRATEGIES FOR RECOVERY.

In addition to assessing student learning for core academic subjects, a majority of countries reported conducting or planning to conduct an evaluation of national programmes implemented to provide additional support to students affected by the pandemic (*Figure 2-4*). While fewer countries reported conducting such evaluations at the pre-primary level, 80–90 per cent of countries reported that additional support programmes offered at the primary to secondary levels were assessed or are planned to be assessed in the school year 2021/2022. Moreover, the frequency of evaluation decreases as national income increases. Even though evaluation of support programmes can be resource-intensive, identifying which support measures were effective will help policymakers scale up evidence-based programmes and achieve a greater return on their education investments.

THE MEASUREMENT OF NON-COGNITIVE SKILLS SHOULD BE AWARDED SIMILAR IMPORTANCE GIVEN THEIR RISING DEMAND IN THE LABOR MARKET.

While the main priority for many countries remains assessing student learning outcomes, it is equally important to measure non-cognitive or social-emotional skills. Social-emotional processes, which include skills such as attention and self-regulation, are essential for learning and strongly linked to academic performance (Duraiappah et al., 2022). Approximately one in four countries conducted nationwide studies to evaluate the impact of school closures on students' non-cognitive skills, without much variation by education level or country income group.

FIGURE 2-3. Share of respondent countries reporting mathematics and reading have been assessed in a standardized way in the school years 2020/2021 and/or 2021/2022



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MOVING FROM RECOVERY TO TRANSFORMATION

During the last three years of the pandemic, learning assessments have evolved in their function and modality. Even though national standardized assessment continued to take place in many countries and the ability to collect more comprehensive data from students and teachers increased, the pandemic re-emphasized the need for changing learning assessment practices. The following changes and recommendations should be reflected in future learning environments and considered for designing, implementing and strengthening any national learning assessment programmes and classroom assessment practices.

Assessment culture matters. The role of assessment in the learning process mediates how it is understood and accomplished. In contexts where assessment policies and programmes are primarily used for high-stakes purposes, summative assessments are of the greatest use to schools and decisionmakers, rather than serving a formative role for students in their learning process or aiding teachers in their teaching practices. As policymakers seek to strengthen their national assessment systems, they need to consider the implementation and diversification of learning

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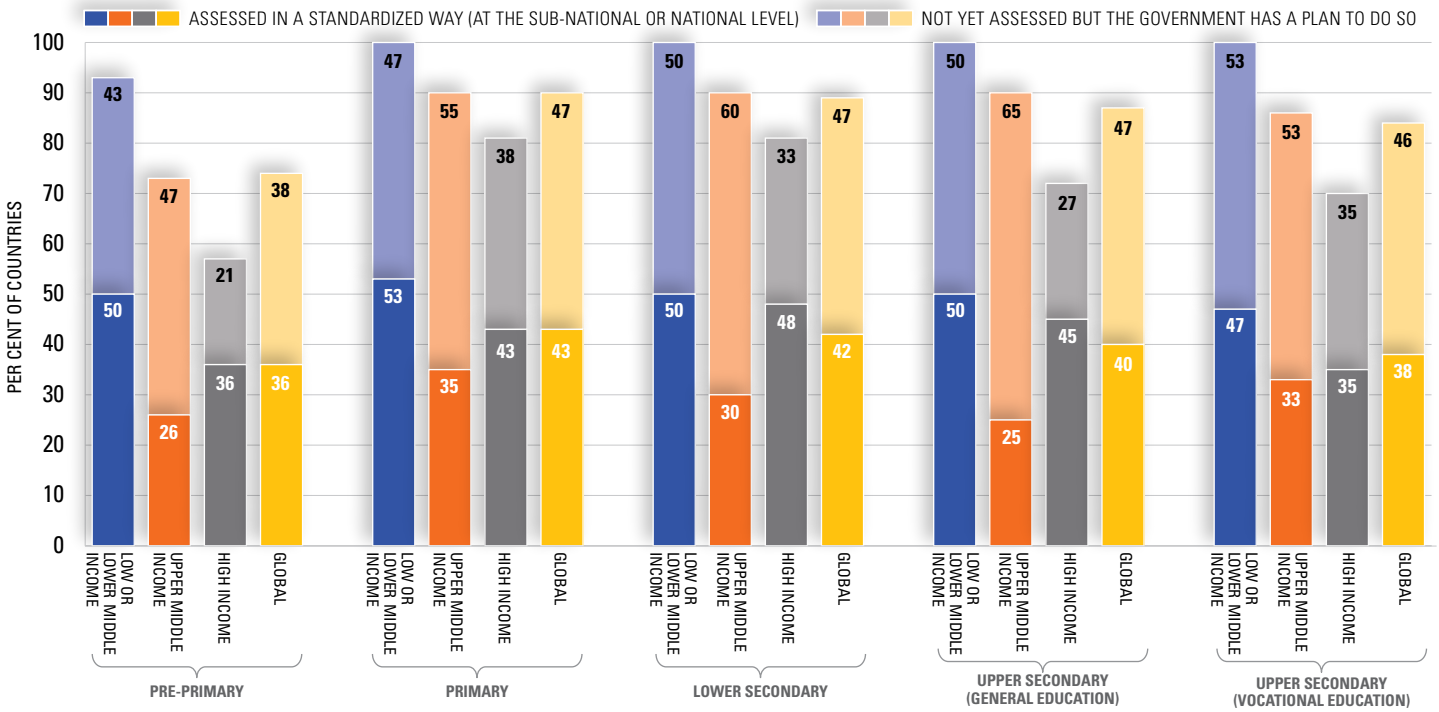
FIGURE 2-4. Share of respondent countries reporting evaluation or plans for evaluation of national programmes to provide additional support to students



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CHILE'S NEW ASSESSMENT OF LEARNING AND SOCIOEMOTIONAL WELLBEING ADMINISTERED DURING THE PANDEMIC

REDESIGNED ASSESSMENT TOOLS

- Chile's national assessment agency produced a new set of student assessment tools for formative purposes.
- These included assessments for reading and math, as well as questionnaire to measure socioemotional wellbeing and skills.
- The tools were designed to be applied three times a year.

ADMINISTRATION SUPPORT

- The assessments included supporting materials such as video tutorials and administration protocols to guide remote learning.
- The Ministry of Education (MoE) provided summary diagnostic reports to all schools.

WIDE REACH AND RELEVANT RESULTS

- The MoE aggregated the national-level data to understand learning levels across the country after a year of using a consolidated curriculum.
- The tools reached 1.8 million students in March–April 2021. Results found low levels of learning: none of the participating classes between upper primary and lower secondary scored higher than 60 per cent in reading and 47 per cent in mathematics.

Source: World Bank, Bill & Melinda Gates Foundation, FCDO, UNESCO, UNICEF, & USAID. (2022). Guide for learning recovery and acceleration: Using the RAPID framework to address COVID-19 learning losses and build forward better. World Bank.

assessment activities and approaches that are designed in alignment with curricula, pedagogies and the overarching objective of improving the quality of education. These include large-scale assessments, high-stakes examinations and formative classroom-based assessments.

The pandemic, with its associated lockdowns and school closures, drew attention to topics like mental health and wellbeing, as well as to social-emotional skills, including empathy, self-management and motivation, among others. Yet only one out of four respondent countries reported conducting studies on the impact of COVID-19 on non-cognitive skills. This finding shows an area for future development on the **scope of assessment and the breadth of competencies to be developed and assessed,** highlighting an example of a lesson that we can draw from this 'crisis within a crisis'.

Formative assessment comes into play to help teachers and students learn together. Data from the GERT shows that less than a third of countries had diagnostic or formative assessment activities in place. Countries should expand the use of formative assessments, conduct further research based on their results, and communicate findings to schools and policymakers so that appropriate interventions and policies can be developed to address learning needs.

Digital transformation in higher education: Alternative credentials

Alternative credentials – such as certificates, digital badges and microcredentials – have gained popularity in higher education, especially during the pandemic. These learning models offer an efficient and innovative way to assess and validate the learning of new skills and competencies. Alternative credentials offer flexible opportunities to gain skills and provide a customized learning experience, facilitating the school-to-work transition among youth. Often administered digitally, alternative credentials also make the acquisition of digital and social-emotional skills more visible and portable as compared to traditional forms of assessment.

The pandemic has accelerated the shift to digitalization in education and spurred innovation and agility that made it possible for learning assessments to continue with remote administration, even in countries with limited digital infrastructure or no prior experience and capacity. For instance, technologies supporting formative assessments

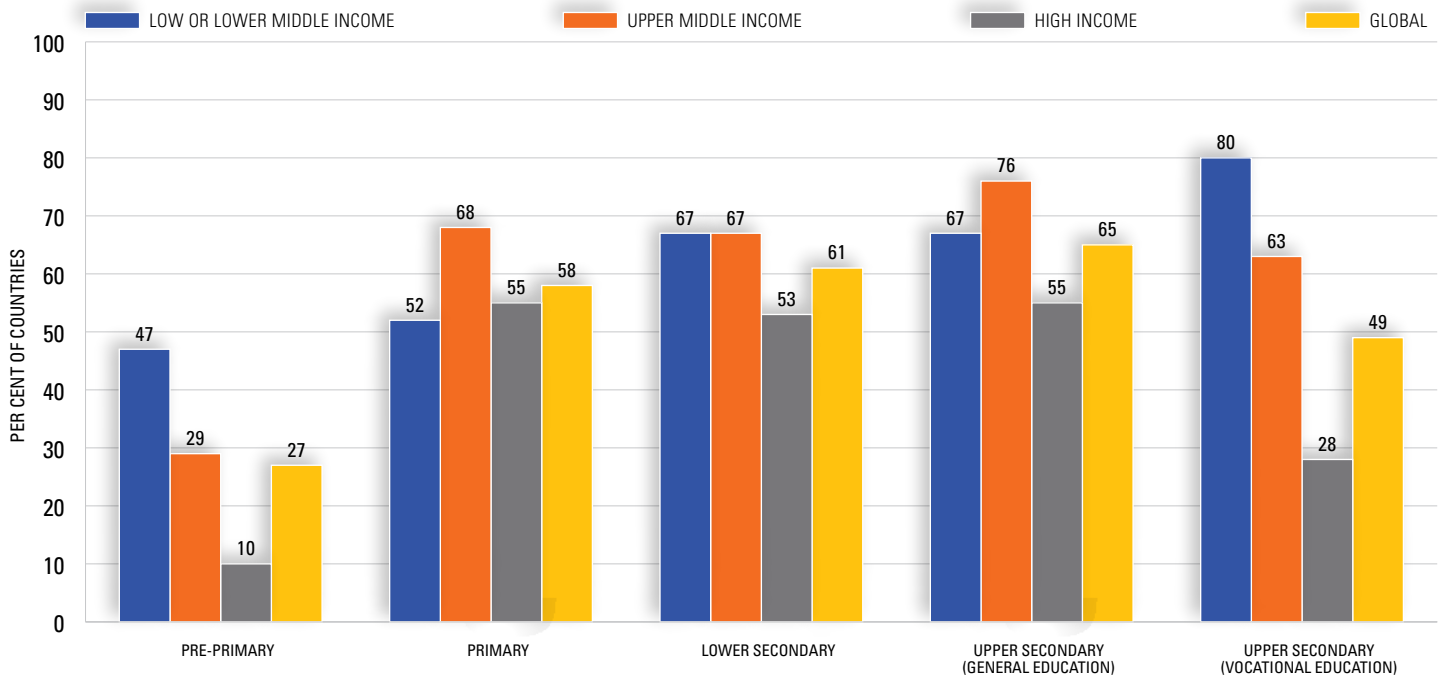
can be a tool that provides longitudinal and real-time feedback on students' learning and progress, allowing learners to receive immediate feedback and participate in exercises adapted to their ability level. These tools also seem promising for teachers who need to manage classes with large numbers of students but have limited printed resources for tailored formative assessment experiences.

Findings from the joint survey show that while a little over 60 per cent of countries planned to maintain and develop **digitalized learning assessments** for primary and secondary levels beyond the pandemic, only a quarter planned to do so at the pre-primary level and about half reported the same for upper secondary vocational programmes (*Figure 2-5*). Interestingly, the data shows a pattern where low- and middle-income countries tend to implement many more technology-enhanced learning assessments and high-stakes examinations than high-income countries, signaling a greater interest in administering digital tests and exams. As countries explore the use of digital assessments beyond the pandemic, certain design and logistical considerations must be kept in mind, including assessments designed specifically for remote learning, student and teacher familiarity with technology, access to internet connectivity at home and in school, and data privacy issues.

CONCLUSION

Learning assessments provide data, evidence and insights about what, how and how much students have learned, and on what factors may hinder or facilitate their learning progress. Looking at the purpose of learning assessments, greater emphasis should be placed on **assessment as learning** – as opposed to assessment *of* learning and assessment *for* learning – with a focus on making students become more aware of how and what they learn. This process will help them take more responsibility for and monitor their own learning progress, thus helping build their resilience in times of change or difficulty. By building on the lessons of the past two years and leveraging the advancements in learning assessments beyond the pandemic, countries are presented with an opportunity to close the learning gap and inequities, in both core academic outcomes and social-emotional skills.

FIGURE 2-5. Share of respondent countries reporting plan to maintain or further develop enhanced use of digital assessments/exams beyond the COVID-19 pandemic



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PRIORITIZE TEACHING THE FUNDAMENTALS

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Even before the pandemic, many children lacked basic literacy and numeracy skills. Over the past three years, the staggering loss of instructional time and limited access to remote learning have pushed students behind their grade-appropriate learning levels. Students need to learn concepts and skills such as reading, mathematics and socioemotional skills, which build a solid foundation from which they can move ahead. Without this foundation, students will be unable to master more complex topics in the curriculum. An inflexible adherence to curricula, without a good grasp of gateway skills, will set students back even further in their learning.

To effectively recover learning, countries will need to adjust curriculum across and within subjects. This could mean adjusting time allocations to devote more time to priority subjects, as well as fundamental skills and competencies within these subjects. This could also present an opportunity to redesign curricula, which in many countries are often overloaded or overly ambitious, moving faster than with which students and teachers can keep pace and thus often resulting in shallow learning (Pritchett & Beatty, 2015).

DESPITE THE LOSS OF INSTRUCTIONAL TIME, MANY COUNTRIES DID NOT IMPLEMENT CURRICULAR ADJUSTMENTS IN THE SCHOOL YEAR 2021/2022.

In the third round of the survey conducted in 2021, 42 per cent of respondent countries reported prioritizing certain skills or areas of the curriculum for at least one education level among pre-primary to upper secondary levels (UNESCO et al., 2021). The fourth survey round conducted in 2022 reveals that more countries are now implementing curricular adjustments: 51 per cent reported implementing adjustments to the curriculum in any subject or grade for at least one education level in the school year 2021/2022.

However, the implementation of this policy measure varies by education level and country income group. Just under half of the respondent countries (49 per cent) reported currently implementing adjustments to the curriculum at the primary to upper secondary levels, while only about a third (35 per cent) reported the same at the pre-primary level (*Figure 3-1*). At least one in every two low- or middle-income countries, compared to fewer than one in five high-income countries, reported making curriculum adjustments in the school year 2021/2022. Finally, this policy measure appears to be less common in the upcoming school year. Across nearly all income groups and education levels, fewer countries reported plans to implement adjustments to the curriculum in the school year 2022/2023 – with declines most noticeable in the primary to upper secondary levels.

ASSESSMENT RESULTS ARE CRITICAL TO UNDERSTANDING STUDENTS' LEARNING NEEDS AND INFORMING CURRICULAR ADJUSTMENTS.

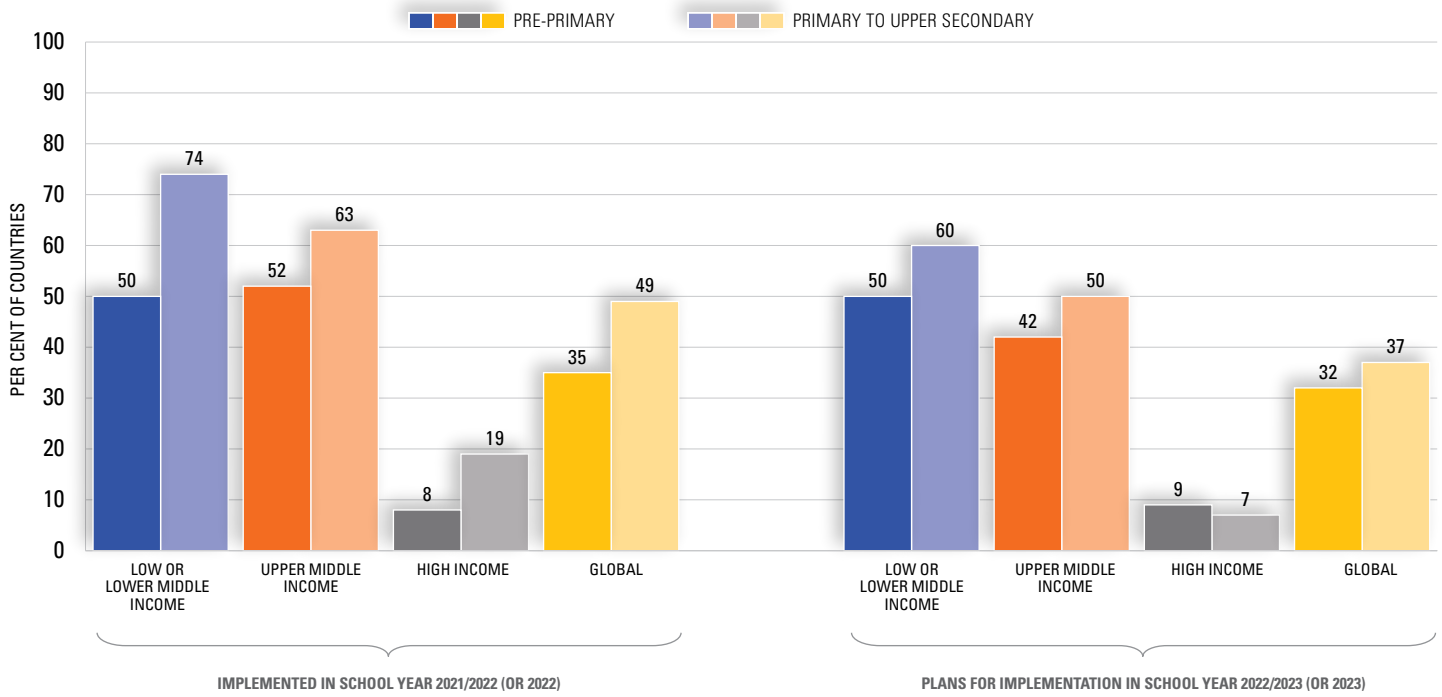
Overall, among countries that are implementing or planning to implement adjustments to the curriculum, less than three quarters reported that such adjustments are based on the results of students' assessments undertaken in the context of school reopening (*Figure 3-2*). In the school year 2021/2022, the use of assessment results as a basis for curricular adjustments was more likely to be reported at the pre-primary level than at primary to upper secondary levels, except among upper-middle-income countries. Fewer countries – particularly upper-middle- and high-income countries – reported plans to adjust the curriculum based on students' assessment results in the upcoming school year.

MOVING FROM RECOVERY TO TRANSFORMATION

Countries will need to act urgently to mitigate the damage brought by COVID-19-related disruptions, including prioritizing foundational skills and conceptual prerequisites – content that must be learned prior to progressing to more advanced skills and topics. Rather than large-scale curricular reform, these adjustments have often taken the form of relatively quick curricular and instructional adaptations such as modifying time allocations, focusing on critical competencies and streamlining or integrating topics.

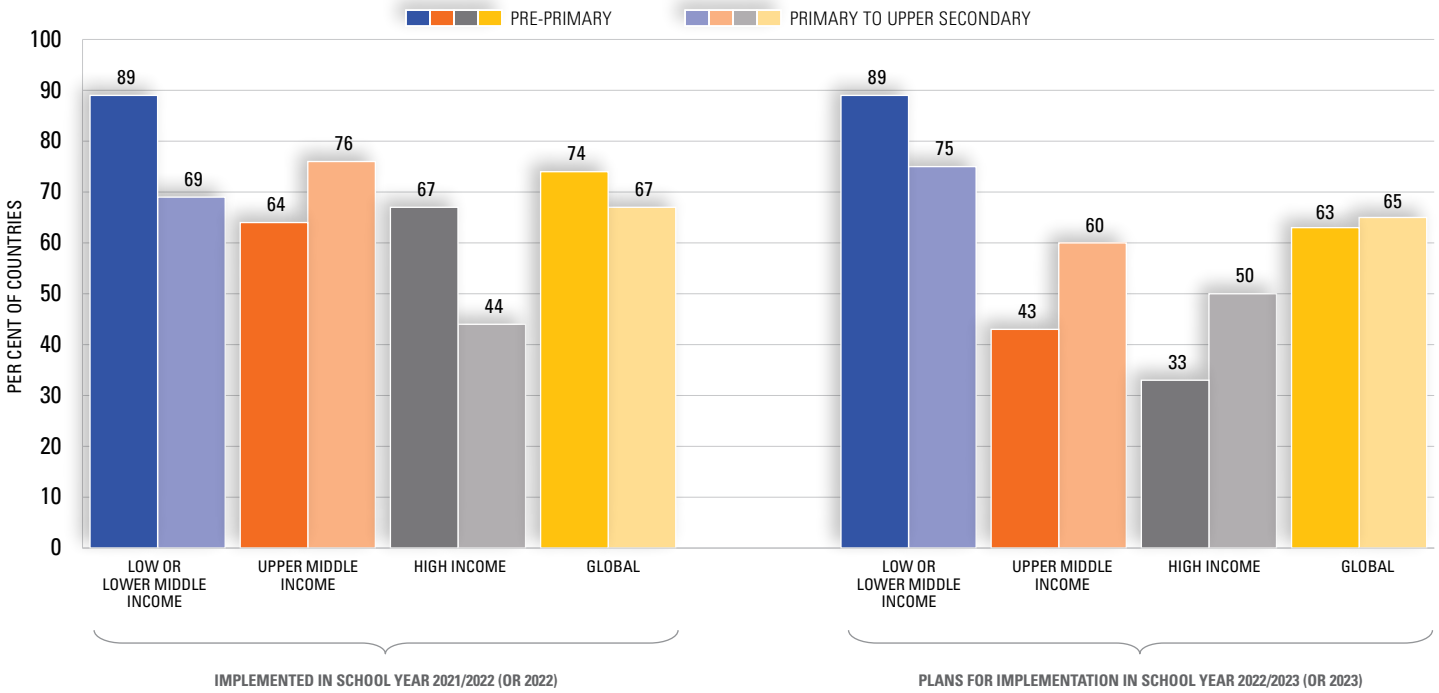
However, in addition to taking measures to address learning losses and limited instructional time in the short term, countries can also use this opportunity as a springboard towards curricular transformation in the long run. **Curricular transformation should aim to**

FIGURE 3-1. Share of respondent countries reporting adjustments to the curriculum in any subject or grade at the national level



Note: For each level of education, only countries with valid responses are included. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

FIGURE 3-2. Share of respondent countries reporting that adjustments to the curriculum are/will be based on the results of students' assessments undertaken in the context of school opening



Note: For each level of education, only countries with valid responses are included. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

bring stronger alignment of curriculum, assessment and pedagogy to ensure coherence and consistency between the intended outcomes as specified in the formal curriculum and teaching methods, assessment tasks and learning activities in the classroom. Transforming education through curricular reform will entail establishing

Improving TVET curriculum and programmes to meet learners' and societal needs

COVID-19-related school closures arguably were even more challenging in the technical and vocational education and training (TVET) sector than in general education due to the strong practical components of many programmes (OECD, 2021a). Stronger economies have been more resilient to the effects of the pandemic, transitioning faster to new digital modes of working and providing support to industries affected by the crisis. By contrast, the dramatic consequences of the pandemic on economies and resulting labor market shortages have hit less-developed economies with a deeper recession, more poverty and higher unemployment rates, particularly among youth and women. The crisis can, however, be an opportunity to change course and take action towards recovery, resilience and the transformation of the TVET sector. Especially in times of crises and in anticipation of shortfalls, it is important to use appropriate analysis and labor market intelligence to identify the new skills and competencies that will be needed, such as digital, entrepreneurship and green skills, as well as broader competencies for sustainability, civic and political engagement and global citizenship. This analysis should inform adjustments to curriculum during crisis and post-crisis periods, new programmes through social dialogue and effective partnerships between governments and the private sector. One recent initiative to reform the TVET sector is India's Skill Council for Green Jobs, led by India's Ministry of New and Renewable Energy (MNRE) and the Confederation of Indian Industry (CII). It aims to identify the skilling needs in the Green Businesses sector, and implement nationwide, industry-led, collaborative skills development and entrepreneur development initiatives that will enable India to meet its potential for green businesses.

GUYANA: 2021 CURRICULAR CONSOLIDATION

DATED CURRICULUM

- Guyana's curriculum had not been cohesively reviewed for 20 years.
- In August 2021, ahead of school reopening in September, Guyana introduced a new consolidated curriculum to streamline the existing national curriculum.
- Four core subject areas – mathematics, language, science and social studies – were crafted for Grades 1 to 9.

REFORM PROCESS

- The consolidation process involved integrating topics based on logical connections.
- Duplication of content areas was also assessed to determine what could be omitted without detrimentally affecting students.

RESULT AND REACH

- The new curriculum will be implemented for four years based on assessments of its success and the rate at which students catch up.
- The Ministry of Education also piloted a new curriculum for Grades 1 and 2 that included a shift to student-centered pedagogies.

Source: World Bank, Bill & Melinda Gates Foundation, FCDO, UNESCO, UNICEF, & USAID. (2022). Guide for learning recovery and acceleration: Using the RAPID framework to address COVID-19 learning losses and build forward better. World Bank.

a team of experts for each subject to guide the process of reviewing learning objectives, content progressions and corresponding time allocations and producing the necessary curricular materials. In reviewing the curriculum, countries can also consider integrating social and emotional learning, which are associated with a range of positive life outcomes, including academic achievement (Portela-Pino et al., 2021; Duraiappah et al., 2022).

Curricular transformation is no easy task, and it is necessary to ensure that the **financial, technical, political and organizational support** needed for its implementation is in place. In particular, **teacher participation** in curricular decisions is critical and serves multiple purposes, such as the use of formative assessment, diagnostic analyses and curricular adaptations to include content on topics like health, sustainable development, climate change, or civic engagement and participation that have proven to be fundamental during the pandemic. Teachers will also need training and guidance in implementing, adapting and prioritizing the curriculum, including understanding how to use teaching and learning materials flexibly to meet students' learning levels; diversifying the means, formats and methods of instruction; and, most importantly, tailoring content and pedagogies according to learners' needs.

CONCLUSION

Curriculum and teaching should meet students where they are. The need to take measures to do so is more urgent than ever, given the unprecedented disruptions brought about by the pandemic. Results from the survey suggest that about half of countries are currently implementing adjustments to the curriculum at primary to upper secondary levels, and only about a third at the pre-primary level. Moreover, even fewer countries plan to implement the same measure next year. Even though the use of assessments is essential to understanding students' current learning levels and to inform the alignment of curricula and pedagogy, findings from the survey suggest that fewer than three in four countries used assessment results as the basis for curriculum adjustments. To give children the best chance at catching up with missed learning, education systems will need to take urgent action to prioritize teaching the fundamentals.

By using this opportunity to conduct a much-needed adjustment of the curriculum, education systems can build on this momentum towards curricular transformation in the long term, including opening up the definition of what foundational learning is and engaging teachers in the identification of what is fundamental, for whom, when, and under what conditions.

INCREASE THE EFFICIENCY OF INSTRUCTION, INCLUDING THROUGH CATCH-UP LEARNING

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Given the compounding scale of the learning crisis post-COVID-19, education recovery cannot be limited to the resumption of learning and making up for hours lost due to school closures. It is imperative that education systems move with speed and scale up catch-up interventions that both address pre-COVID-19 gaps and mitigate growing levels of learning poverty. Moving forward includes maximizing efficiency by using approaches that align instruction with learning needs, as proposed in the RAPID framework.

Critical to the success of all 'catch-up' approaches and strategies, however, are teachers. Indeed, pre-pandemic, the evidence was overwhelming that teachers are the key to children's learning. With school closures and the shift to remote and hybrid education, the role of teachers became even more critical; yet low access to information and communication technology placed added pressure on teachers to adapt their practices (UNESCO, 2020).

As learning recovery now places additional demands on teachers, systems need to ensure that support is provided and that the working conditions of teachers are commensurate with the responsibility placed upon them at individual, systems and policy levels.

MOST COUNTRIES IMPLEMENTED NATIONWIDE PROGRAMMES TO SUPPORT STUDENTS AFFECTED BY THE PANDEMIC.

The majority of respondent countries implemented national programmes designed specifically to provide additional support to students affected by the pandemic (e.g., remedial education and mental health support programmes) in the school year 2021/2022 *(Figure 4-1)*. This ranged from about 80 per cent of countries in primary, lower and upper secondary (general programmes) levels to 69 per cent of countries in pre-primary education and 72 per cent in upper-secondary vocational programmes.

Generally, high-income countries implemented these programmes less frequently compared to low- and middle-income countries. This could be associated with a shorter duration of school closures and lower levels of learning poverty before the pandemic in high-income countries. While a greater proportion of low- and middle-income countries implemented support programmes, substantial gaps remain at some education levels. For example, 68 per cent of low- and lower-middle-income countries implemented such programmes at the pre-primary level, while just 56 per cent of high-income countries reported the same.

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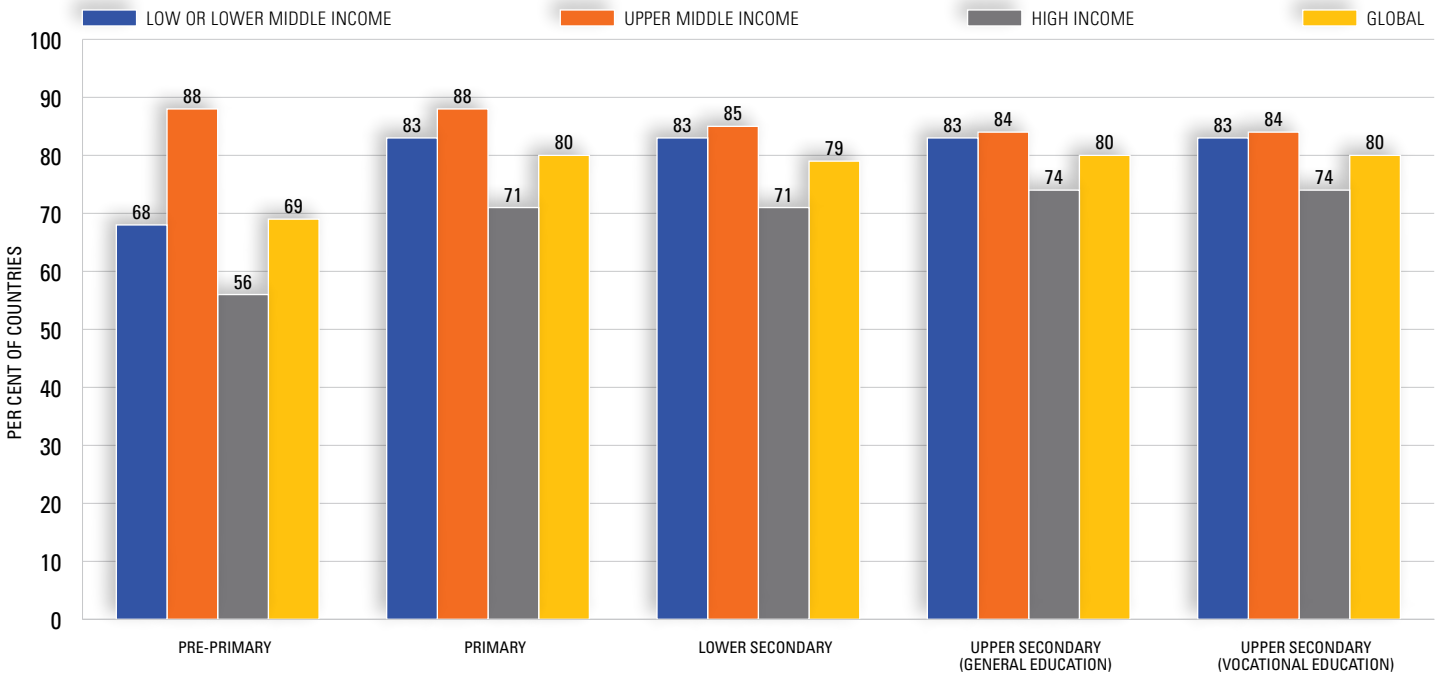
A VARIETY OF POLICY MEASURES WERE IMPLEMENTED TO INCREASE EFFICIENCY OF INSTRUCTION, BUT LESS LIKELY SO AT THE PRE-PRIMARY LEVEL.

The most common national-level policy measures implemented to address lost learning opportunities were accelerated education programmes or catch-up programmes for students who dropped out of school (43 per cent). Another 14 per cent of countries indicated these policy measures were decided at the local level. All policy

FIGURE 4-1. Share of respondent countries where national programmes were implemented specifically to provide additional support (e.g., remedial education programmes and mental health support programmes) to students affected by the pandemic



Note: The chart shows the per cent of countries with valid responses for each level of education that answered either 'Yes, as in school year 2020/2021' or 'Yes, contrary to school year 2020/2021'. While the results represented in this figure cover more than 50 per cent of the total 4- to 17-year-old population, this may not apply to specific income groups. More information on the population coverage of each income group can be found in Annex 1.

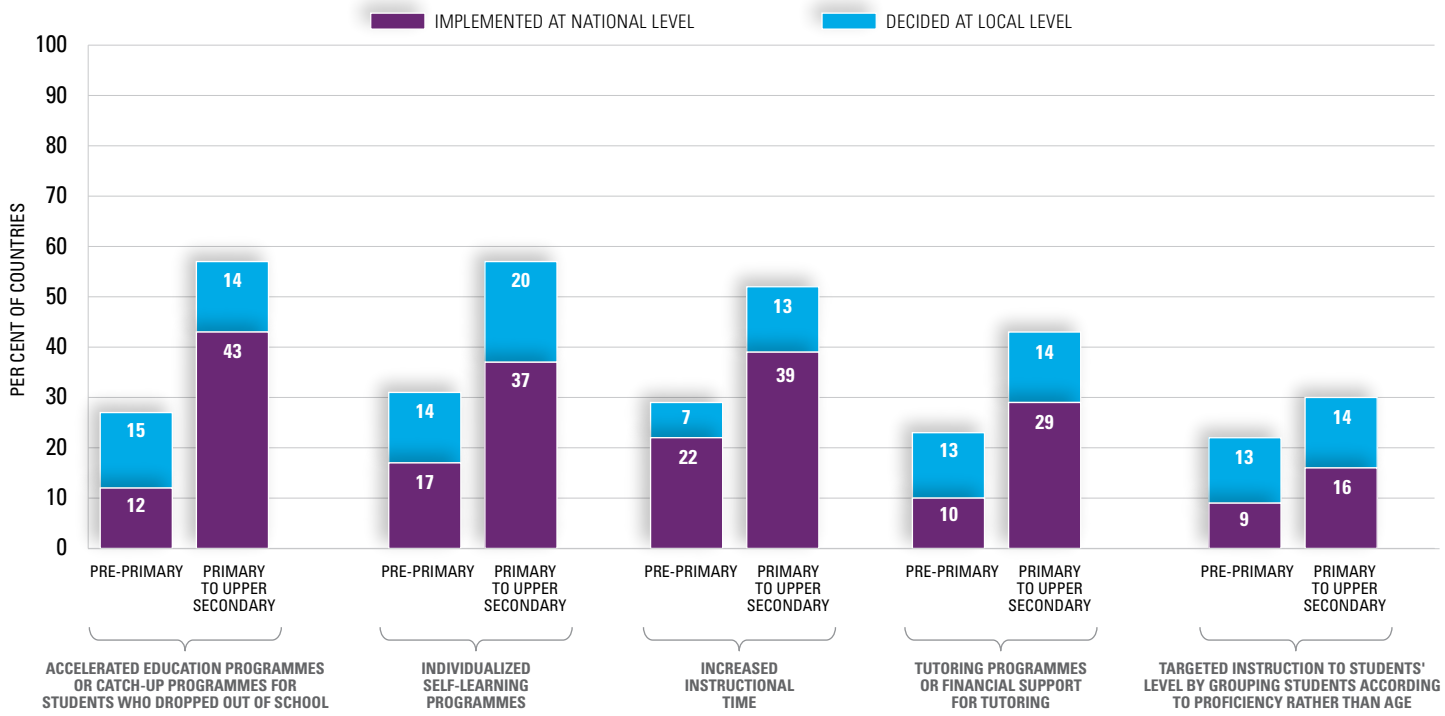
measures were less frequently implemented in pre-primary education compared to other education levels. Compared with pre-primary education, at least twice as many countries implemented national-level accelerated education, individualized self-learning and tutoring programmes for primary to upper secondary education (*Figure 4-2*).

Targeting instruction to students' learning levels by grouping students according to proficiency level rather than age was the least common measure across all education levels: for primary to upper secondary education, only 16 per cent of countries implemented this at the national level, while 14 per cent indicated student grouping according to proficiency was decided at the local level. This is particularly discouraging as targeted instruction is one of the most cost-effective ways for governments to improve learning outcomes (World Bank et al., 2020). Similarly, only 29 per cent of respondent countries cited implementing tutoring programmes, with another half that number leaving it up to the discretion of local officials. While pre-pandemic evidence shows that high-dose tutoring – mostly in small group or one-to-one – can help improve learning outcomes, new evidence also shows the promise of online (Gortazar et al., 2022) and remote (SMS messages) tutoring (Angrist et al., 2020).

FEWER THAN HALF OF COUNTRIES IMPLEMENTED INCREASED INSTRUCTIONAL TIME TO CATCH UP ON MISSED LEARNING.

Evidence suggests that extending instructional time can help improve student learning. A review of 15 studies measuring the effects of longer school days in Latin America and the Caribbean found positive impacts across a range of outcome variables, including gains in student learning (Holland et al., 2015). Data from the joint survey reveals that only two in five respondent countries increased instructional time at the primary to upper secondary levels and only one in five at the pre-primary level. Across country income groups, less than a third of low- and lower-middle-income countries reported currently implementing extended instructional time in the school

FIGURE 4-2. Share of respondent countries implementing policy measures related to mitigating learning loss in the school year 2021/2022 (or 2022)



Note: For each level of education, only countries with valid responses are included. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses may cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

year 2021/2022, yet more countries reported planning to increase instructional time in the school year 2022/2023 (*Figure 4-3*). By contrast, fewer upper-middle-income countries reported a plan to increase instructional time next school year compared to the current school year. For upper-middle-income countries, where full school closures have been longest, extending instructional time can help students catch up on missed learning.

Schools can increase instructional time using a mix of approaches such as modifying the school calendar (adjusting for holidays), organizing summer schools and extending the school day or week. However, such programmes will only work if teachers and students are actively interested in attending so that resources are not spent on programmes with low attendance. Data from the GERT survey shows that 30 per cent of 166 countries implemented changes in the school day and school year as a response to COVID-19-induced disruption to schooling. While upper-middle- and high-income countries were more likely than low-income countries to implement changes to school days, almost half of low- and lower-middle-income countries reported implementing changes in the school year calendar.

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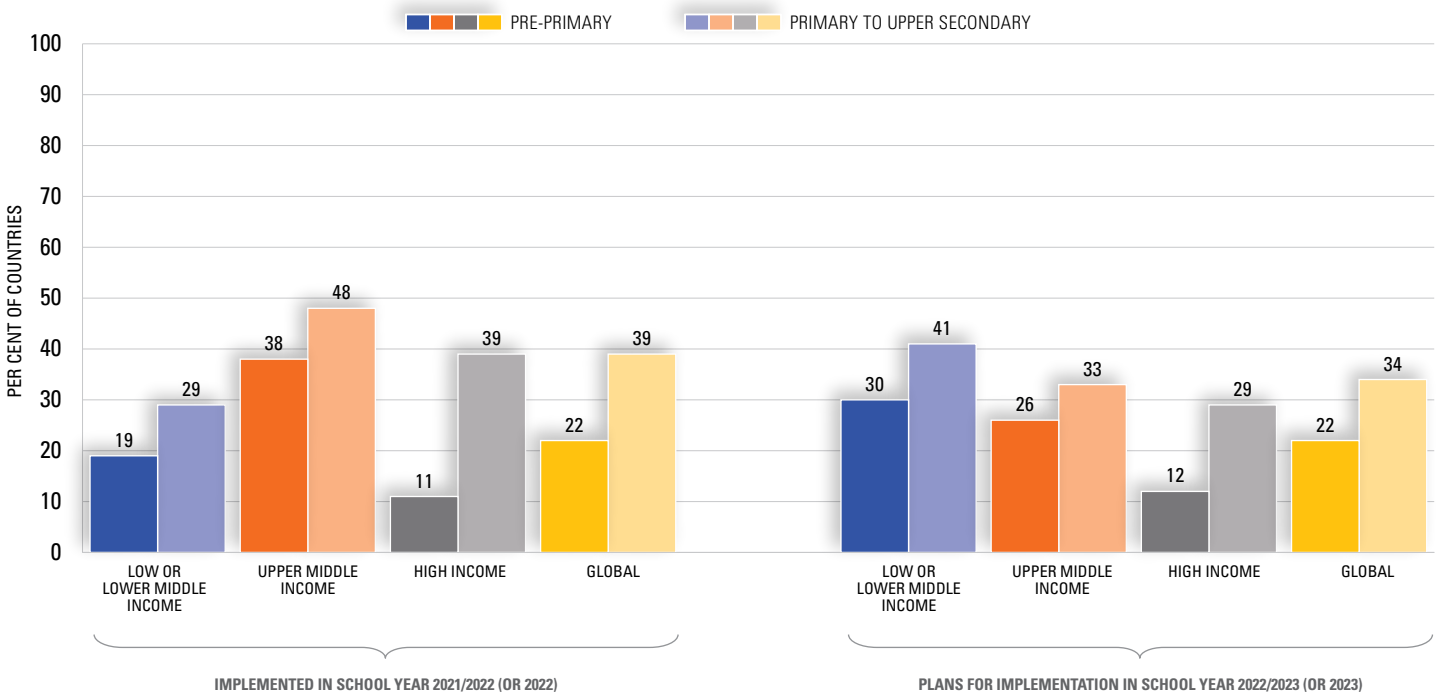
FIGURE 4-3. Share of respondent countries reporting current or planned implementation of national-level policy measures on increased instructional time



Note: For each level of education, only countries with valid responses are included. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses may cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

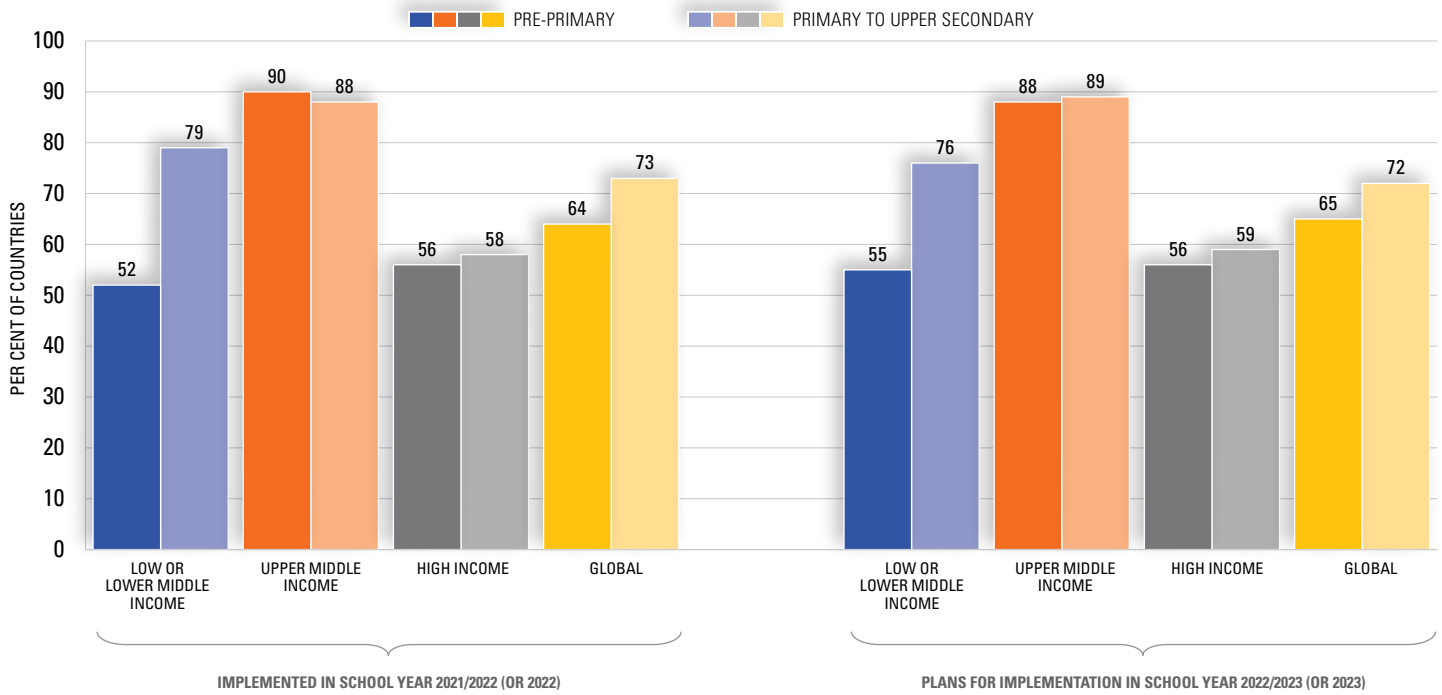
TEACHERS WERE SUPPORTED WITH STRUCTURED PEDAGOGY.

The evidence is overwhelming that structured pedagogy programmes – including supporting teachers with teachers' guides, structured lesson plans, student materials and teacher training – leads to improved learning outcomes (World Bank, 2018; Snilstveit et al., 2015). In particular, structured pedagogy has been proven to be one of the most effective interventions to improve student learning at scale in low- and lower-middle-income countries, where poor teacher training remains prevalent. Data from the joint survey shows that, overall, 73 per cent of respondent countries – and 79 per cent of low- to lower-middle-income countries – reported implementing measures on structured pedagogy for primary and secondary levels of education in the school year 2021/2022 *(Figure 4-4)*. Between the school years 2021/2022 and 2022/2023, very little change is expected in the implementation of structured pedagogy at all levels. These findings are a concern as they highlight that an average of at least one in four respondent countries are not adequately supporting teachers pedagogically to address the challenges of catch-up learning.

During school closures, teaching shifted online and to the use of various high-, medium- and low-technology remote modes of communication. To support this transition, teacher professional development on the effective use of technologies was implemented during the school years 2020/2021 and 2021/2022. Across low- or middle-income countries, more than 80 per cent reported implementing such professional development activities at the primary to upper secondary levels in the school year 2020/2021, while fewer countries reported the same at the pre-primary level. However, between the school years 2020/2021 and 2021/2022, the share of countries that implemented these professional development activities among pre-primary teachers increased from 48 to 62 per cent. A majority of countries, about 80 per cent globally, reported plans to maintain or develop in-service digital skills training for primary to upper secondary teachers. Additionally, slightly fewer countries – between 67–71 per cent – reported such plans for pre-service digital skills training for primary to upper secondary teachers *(Figure 4-5)*.

The use of educational technology for both teachers and students should be guided by a clear purpose and focus on educational objectives, reach all learners, empower

FIGURE 4-4. Share of respondent countries reporting current or planned implementation of national-level policy measures on structured pedagogy



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CORE FOR TEACHERS – A WELL-BEING AND SUPPORT INTERVENTION

COACHING – OBSERVING – REFLECTING – ENGAGING (CORE) PILOT PROJECT

- Tested in Colombia and Uganda by War Child Holland
- Project worked in formal schools with teachers who have had some pre-service training
- To help teachers build skills in
  a) teacher social-emotional competencies,
  b) teacher well-being, and
  c) positive classroom management

TEACHER-FOCUSED MODEL

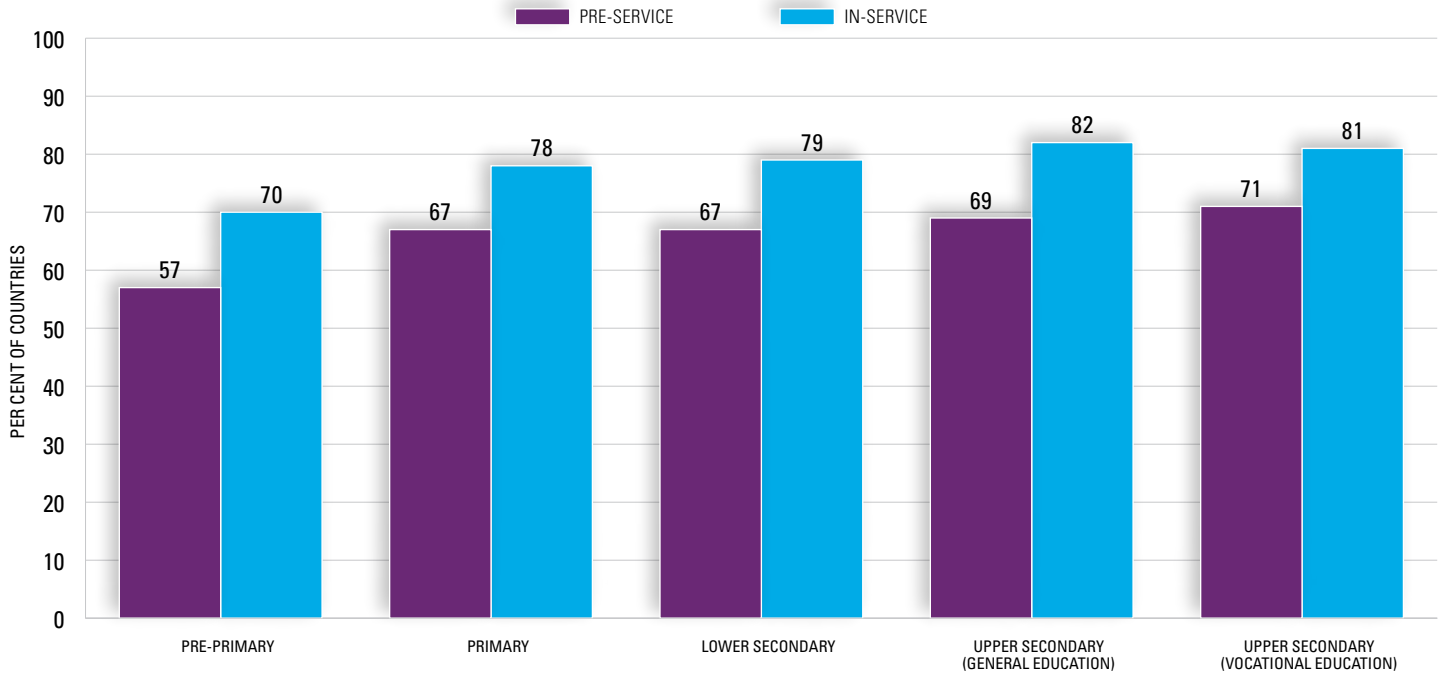
- Model was developed to work with individual teachers as much as possible, allowing for some adaptions on individual needs
- Teachers worked with trained coaches in small groups and in one-to-one sessions
- Model uses a whole-school approach, with teacher-focused support, and aims for continuous quality improvement

EXPECTED RESULTS

- Expected that teachers' improved ability to directly model social-emotional skills and improve classroom interaction quality will lead to changes in student teacher engagement
- Improvements can also be expected in whole-school climate and peer support

Source: Coetzee, A. (2019, December 17). *Coaching – Observing – Reflecting – Engaging (CORE) for Teachers: A well-being and support intervention for teachers*. Inter-agency Network for Education in Emergencies.

FIGURE 4-5. Share of respondent countries reporting enhanced provision of digital skills training for teachers beyond the pandemic



Note: For each level of education, only countries with valid responses are included. While the results represented in this figure cover more than 50 per cent of the total 4- to 17-year-old population, this may not apply to specific income groups. More information on the coverage of each income group can be found in Annex 1.

teachers, engage an ecosystem of partners, and rigorously and routinely use data to learn and monitor what strategies, policy measures and programmes are effective to maximize student learning and enhance human connections (World Bank, 2021).

THE PANDEMIC HAS EXACERBATED TEACHER ABSENTEEISM IN AT LEAST HALF OF COUNTRIES.

Teacher shortages remain a challenge: in 2016, the UNESCO Institute for Statistics estimated that an additional 68.8 million teachers are needed to achieve the SDG 4 target on universal primary and secondary education, while the Teacher Task Force more recently projected an additional 15 million teachers are required just to meet the needs in sub-Saharan Africa. As a result of COVID-related disruptions, many teachers have left the profession, including a number of whom who were not paid during the pandemic. The challenge around attrition was particularly acute amongst contract- and community-based teachers whose payments were suspended or paid late in several countries, including in Burkina Faso, Guinea, Kenya and Togo. High attrition rates have implications for sustainability and incur high costs for training and recruiting new teachers. It also has implications for quality, as experienced teachers are lost from the workforce.

The issue of absenteeism is also pertinent when discussing teacher shortages. Pre-pandemic research found teacher absenteeism rates ranging from 15 to 45 per cent in 19 countries in Eastern and Southern Africa, and the collated evidence from the World Bank's World Development Report 2018 suggests that this situation is also reflected in South America, South Asia, and the Middle East. The studies highlight poor teacher motivation as a critical factor in teacher absenteeism, emerging from poor working conditions such as high pupil-teacher ratios, lack of pedagogical materials, low pay, burnout, and lack of recognition and autonomy. One key and overarching factor in absenteeism is the disconnect between the demands of the profession and systemic support to teachers to meet these demands. To make matters more challenging, COVID-19 has added to the demands on teachers.

During the three years covering the pandemic (2020–2022), about half of respondent countries reported an increase in teacher absences, with slight variation across country income groups at primary and secondary education. While few low- and lower-middle-income countries reported information on teacher absences, data suggests that teacher absenteeism was a challenge globally. Although more research is required to better understand the causes of teacher absenteeism and the extent to which absences are COVID-19-related, one reason for fewer absences in some low- and lower-middle-income countries during the pandemic could be due to relatively greater slack in the labor market, as compared to high-income countries.

For students requiring additional support with learning recovery and catch-up, the challenges posed by teacher absenteeism are significant. To address this, schools have been using a variety of strategies to support children during teacher absences, including using a pool of temporary teachers, assigning students to another class, supervising

How can technology be leveraged to deliver and enhance Teacher Professional Development (TPD)?

1. **By increasing access:** A combination of technologies (high- and low-tech) to deliver TPD can provide higher levels of flexibility for a diverse target group, thus broadening teachers' opportunities to access professional learning.
2. **By facilitating engagement:** Technology can facilitate more frequent opportunities for teachers to communicate, observe, and model practices using devices or resources that are part of their daily routines. The technology chosen to support teachers' needs should consider the characteristics and voices of teachers and their levels of digital skills.
3. **By supporting ongoing application:** Tech-based solutions can ensure sustainability in delivering high-quality TPD by facilitating ongoing support and delivery of resources. This may include materials on how to use the technology, on learning content and application in digital settings, and other knowledge pieces that may aid implementation fidelity and maintain quality application of learned skills when teachers are back in the classroom.

Source: Quota, M., Cobo, C., Wilichowski, T., & Patil, A. *Effective teacher professional development using technology: Technology-based strategies from across the globe to enhance teaching practices – A guidance note*. World Bank.

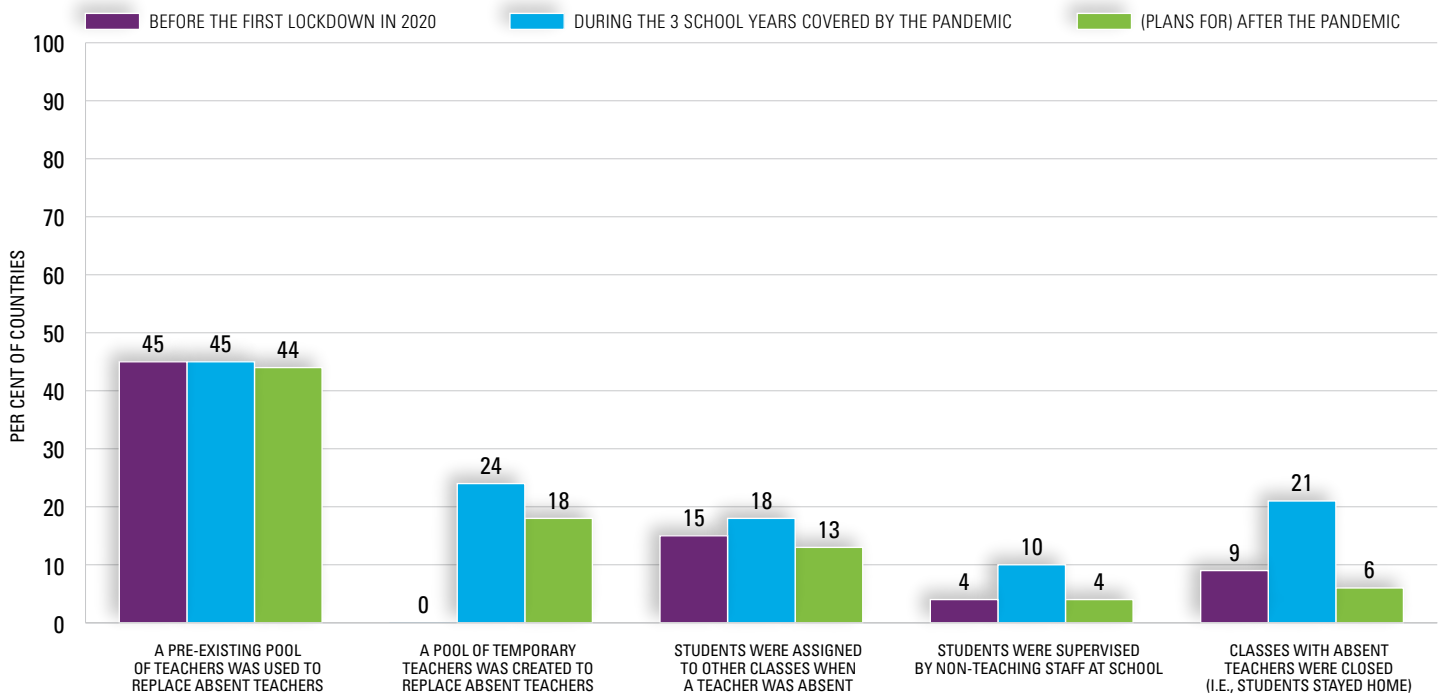
students by non-teaching staff or closing the class. At the primary education level, 45 per cent of countries reported using a pre-existing pool of teachers during the pandemic period (*Figure 4-6*). As these measures only provide a temporary solution, countries can therefore ensure that teachers who want to remain in the profession are supported to acquire and maintain relevant teacher qualifications and provided with ongoing professional development support. This is especially relevant for countries that have hired contract-based teachers but want to retain them long-term.

MOVING FROM RECOVERY TO TRANSFORMATION

Catch-up programmes for students affected by COVID-19 and the support given to teachers during learning recovery are both important to mitigate learning poverty and achieve the SDG targets. However, ensuring instructional efficiency over the long term requires a bold and creative reimagining of education that looks past rapid responses towards sustainable solutions. Policy measures undertaken to catch up on missed learning can be continued even beyond the pandemic to ensure all students are effectively supported. Such evidence-based approaches include **structured pedagogy** and **targeted instruction** which can be implemented at scale for all students, as well as **small-group tutoring** and **self-guided learning** to improve the efficiency of instruction for students with the largest learning needs.

Focusing on **support for teachers** to address children's learning loss provides an opportunity to not only refine recovery measures but provide insights on systemic reforms on teacher development. **Investments in teacher professional development are long overdue in many education systems.** Strengthened licensing and accreditation schemes, including the recognition of prior and experiential learning, can provide new pathways for teacher qualifications and are known to be related to higher learning scores. For longer-term transformation of the teaching profession, governments need to reform and increase investments in teacher education more broadly, beginning with modernizing the pre-service teacher education curriculum so that it includes an intensive period of supervised field teaching experiences, followed by a period of induction and mentoring of novice teachers by expert classroom teachers.

FIGURE 4-6. Share of respondent countries with measures put in place to replace primary teachers who are absent from public institutions



Note: For each level of education, only countries with valid responses are included. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

Meanwhile, continuing professional development should be reformed within a framework of peer learning, self and collective formative assessment, and opportunities for specialization and career advancement. Pre-service teacher education is just the beginning of a teacher's career, and further training should focus on subject-specific instructional needs, target specific skills and meet a minimum duration with appropriate follow-up. Teachers will also need in-depth and regular training to use digital tools and methods to adapt instruction to optimize the learning of each student. Obtaining an understanding of how technology, pedagogy and content knowledge intersect can gradually underpin transformation of classroom teaching practices. System reform should also foster and reward experimentation, innovation, teacher agency and autonomy, as well as document and promote transformative practices and outcomes for evaluation and scaling up.

Countries can capitalize on developing holistic and comprehensive teacher policy, as fragmentation of policies can undermine the achievement of education sector objectives. Policy dialogue should also take place within a wide stakeholder collaborative framework to ensure all perspectives are incorporated. Finally, to build and sustain effective teaching workforces into the long term, countries must also give due importance to social dialogue processes between governments and education providers with teachers and their representatives (including teacher trade unions and associations). Teachers are on the frontline of education policy implementation; therefore, ensuring their voices are incorporated is paramount in formulating policies that impact teachers and teaching. In Burkina Faso, Ghana, Malawi and Uganda, governments are supporting social dialogue processes by including teachers and their representatives in governance bodies; training teacher union members in social dialogue, policy analysis and collective bargaining; and developing awareness-raising and training information and materials (UNESCO, in press).

CONCLUSION

School systems will need to adopt effective strategies to address the immediate challenges brought about by the COVID-19 pandemic, including the larger and more varied learning deficits seen among children as they return to classrooms. While survey findings suggest that a majority of countries have implemented national-level programmes to provide additional support to students affected by the pandemic, the type of policy measures implemented vary widely. A much smaller number of countries is implementing proven measures to catch up on missed learning, such as extending instructional time, providing tutoring programmes and using targeted instruction. Such strategies not only are critical to accelerating learning recovery but can also improve student learning post-pandemic. Importantly, teachers are at the heart of the learning recovery response and are critical to building forward better. To meet the enormous challenges of the learning crisis, teachers will need adequate instructional support. Ensuring they are well-equipped with appropriate strategies, training and support, such as on adapting pedagogy to meet students' individual learning needs, is crucial to not only helping children catch up on missed learning in the short term but also to transforming teaching and learning beyond the recovery period.

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DEVELOP PSYCHOSOCIAL HEALTH AND WELLBEING

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The impact of COVID-related school closures reaches far beyond lost learning, affecting children's mental health and psychosocial wellbeing, physical health and nutrition. School closures have introduced drastic modifications to children's and families' daily routines, reduced opportunities for physical exercise, decreased opportunities for social and emotional development and increased the likelihood of experiencing violence at home. At the peak of school closures, millions of children missed out on in-school meals and other essential nutrition services delivered in school (Borkowski et al., 2021).

Multiple consultations with adolescents around the globe reveal that school is perceived as a source of self-esteem, a place that fosters greater awareness of the world at large, an environment for spending time with friends, a venue for emotional support and an escape from violent home environments (Johns Hopkins Bloomberg School of Public Health & UNICEF, 2022). When schools closed, children, adolescents and youth – who increasingly rely on connections with peers – were cut off from their social networks, fueling feelings of anxiety, uncertainty and loneliness (WHO, 2022). Ensuring access to comprehensive services in school, including those related to mental health and psychosocial support (MHPSS), nutrition, and water, sanitation and hygiene (WASH), is critical for supporting student learning and attendance. Research suggests, for instance, that mental health programmes at schools are associated with improved learning outcomes (Guzmán et al., 2015).

WHILE MHPSS IS FUNDAMENTAL TO LEARNING AND OVERALL WELLBEING, MANY COUNTRIES – PARTICULARLY LOW- AND LOWER-MIDDLE-INCOME ONES – HAVE YET TO IMPLEMENT MHPSS MEASURES.

Schools and learning environments provide an opportunity to reach large numbers of children, adolescents and youth, including those from marginalized communities who may otherwise lack access to MHPSS interventions and services. About three in five respondent countries (62 per cent) reported providing **psychosocial and mental health support to students** at a national level for primary to upper secondary levels in the school year 2021/2022, while only about two in five (41 per cent) reported the same for students at the pre-primary level (*Figure 5-1*). Across country income groups, low- and lower-middle-income countries were less likely than upper-middle- and high-income countries to provide such support.

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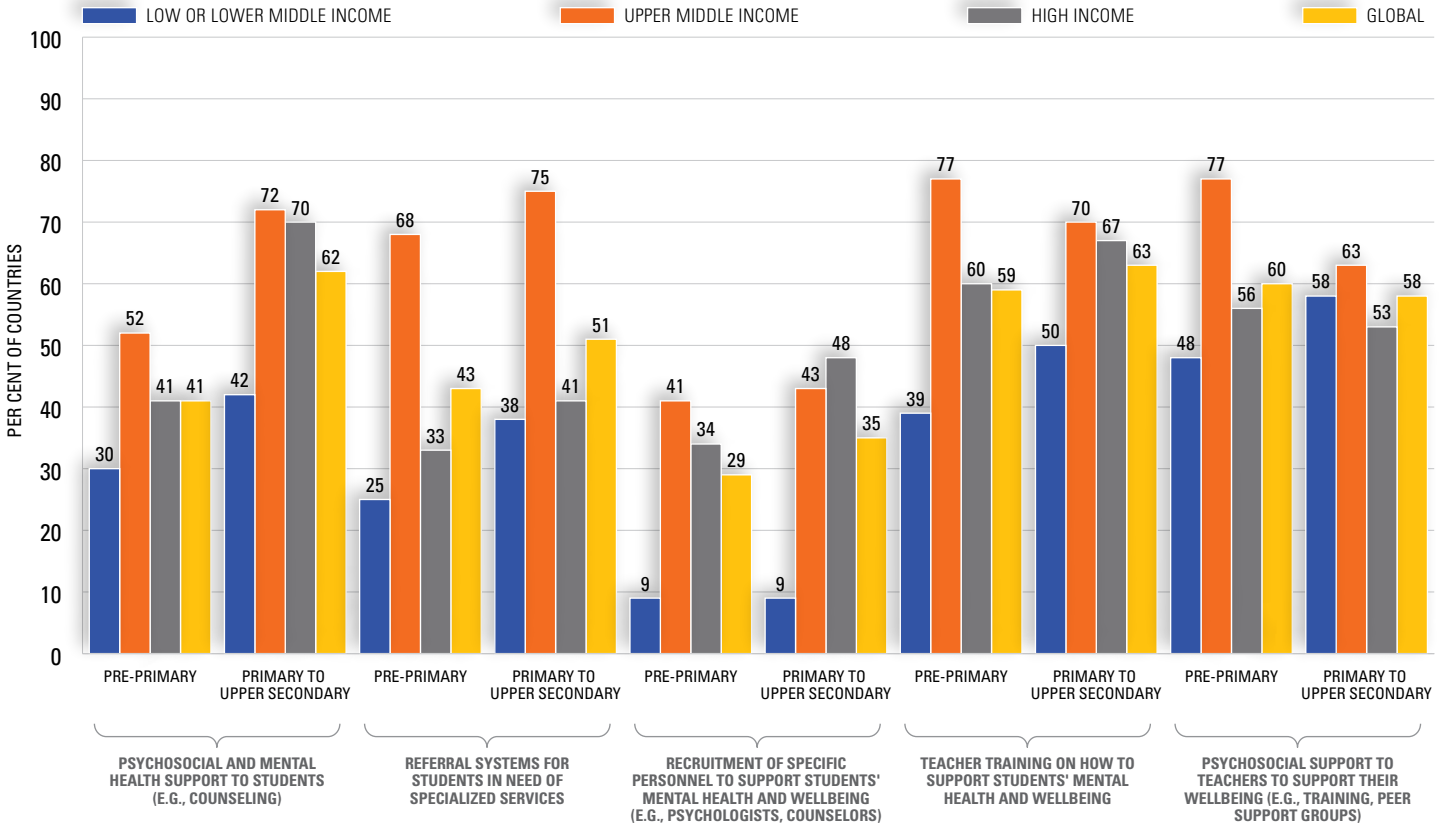
FIGURE 5-1. Share of respondent countries implementing policy measures related to MHPSS in the school year 2021/2022 (or 2022)



Note: For each level of education, only countries with valid responses are included. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses may cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

Schools can also put in place **referral systems for students in need of specialized services**, a measure implemented by half of respondent countries at the primary to upper secondary level and 43 per cent at the pre-primary level. Averages, however, mask large differences across income groups: for instance, only a quarter of low- and lower-middle-income countries and a third of high-income countries, compared to over two thirds of upper-middle-income countries, reported implementing this at the pre-primary level. Similar disparities across income groups are observed at the primary to upper secondary levels.

Within the school context, MHPSS professional staff include school psychologists, school counselors, school social workers and other qualified service providers. Professionals can work with learners and their families, teachers and the broad school community to provide a comprehensive range of services, including the universal promotion of mental health, identification and referral for community services, and support to learners with disabilities. Yet, only about a third of countries reported the **recruitment of specific personnel to support students' mental health and wellbeing** in school. Among low- to lower-middle-income countries, only 9 per cent of countries reported implementing this measure at pre-primary and primary to upper secondary levels.

Finally, teachers play a pivotal role in promoting and protecting learners' mental health and psychosocial well-being. Overall, about three in five respondent countries reported providing **teacher training on supporting students' mental health and wellbeing**. However, only 39 per cent low- and lower-middle-income countries reported implementing this measure at the pre-primary level, and only half of such countries reported the same at primary to upper secondary levels. As COVID-19 has exposed educators to new challenges and stressors, it is crucial that education systems also **provide teachers with psychosocial support**, such as thorough training and peer support groups. For both pre-primary and primary to upper secondary levels, about 60 per cent of countries reported providing teachers with such support.

ENCOURAGINGLY, MORE LOW- AND LOWER-MIDDLE-INCOME COUNTRIES REPORTED A PLAN TO IMPLEMENT NATIONAL-LEVEL POLICY MEASURES FOR MHPSS IN THE SCHOOL YEAR 2022/2023.

Overall, there is not much change between the shares of countries currently implementing national-level policy measures for MHPSS in the school year 2021/2022 and those planning to implement such measures in the school year 2022/2023 (*Figure 5-2*). However, across nearly all

ECUADOR (MHPSS)

- Teachers and school counselors, with the support of UNICEF, were trained in providing psychosocial support for children during the COVID-19 pandemic.
- Traning and supervision were provided to 1,200 teachers, reaching 48,000 primary and secondary students in 14 provinces.
- Additionally, cell phones, data plans and tablets were provided to make telephone calls for psychosocial support to 82,572 students during school closures.

KYRGYZSTAN (WASH)

- Under the World Bank's Sustainable Rural Water Supply and Sanitation Development Project, efforts to gather and monitor WASH data increased through the existing rural Water Supply and Sanitation system.
- Project targeted efforts to rehabilitation water supply systems and handwashing and sanitation facilities in schools.
- Project included training for teachers on sanitary hygiene practices and interactive instructional strategies for teaching handwashing techniques to students.

IRAQ (NUTRITION)

- On the International Day of Education 2022, the World Food Programme (WFP) and the Iraqi Ministry of Education announced school openingss would coincide with an expansion of the School Feeding Program.
- Initiative was fully funded by the Government of Iraq (with technical support offered by WFP).
- Government has expanded the program to 13 governates in 2022 so far and plans to reach 3.6 million children by 2025.

Source: World Bank, Bill & Melinda Gates Foundation, FCDO, UNESCO, UNICEF, & USAID. (2022). *Guide for learning recovery and acceleration: Using the RAPID framework to address COVID-19 learning losses and build forward better*. World Bank.

education levels, sizable increases are seen among low- and lower-middle-income countries for most MHPSS measures. For instance, in the school year 2022/2023, at least half of such countries reported a plan to provide psychosocial and mental health support to students in pre-primary (50 per cent, compared to 30 per cent in the school year 2021/2022) and primary to upper secondary levels (57 per cent, compared to 24 per cent in the school year 2021/2022).

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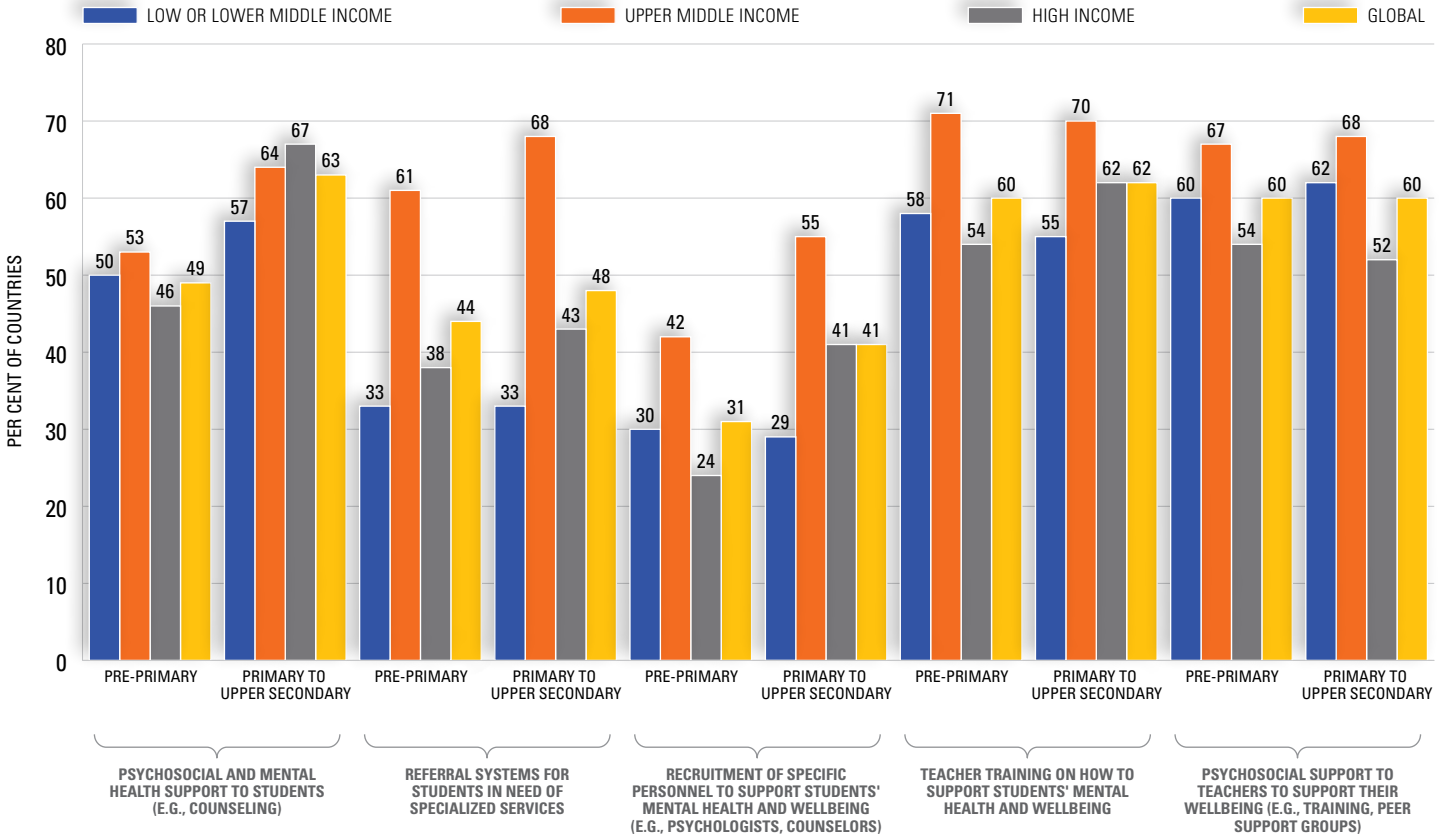
MOST COUNTRIES IMPLEMENTED MEASURES ON STRENGTHENED OR ADDITIONAL WASH SERVICES, BUT FAR FEWER IMPLEMENTED THE SAME FOR NUTRITION SERVICES.

Improved WASH facilities are vital to enabling good practices such as frequent and proper handwashing to help prevent the spread of COVID-19 as children return to school. Across country income groups, national-level measures to strengthen or provide additional WASH services (e.g., creation of toilet and handwashing facilities, provision of supplies, installation of drinking water

FIGURE 5-2. Share of respondent countries planning to implement policy measures related to MHPSS in the school year 2022/2023 (or 2023)



Note: For each level of education, only countries with valid responses are included. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses may cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

stations) were more likely to be implemented at primary to upper secondary levels than at the pre-primary level in the school year 2021/2022 (*Figure 5-3*). At the primary to upper secondary levels, 91 per cent of low- and lower-middle-income countries reported currently implementing these measures. Overall, slightly fewer countries plan to implement national level strengthened or additional WASH policy measures in the school year 2022/2023.

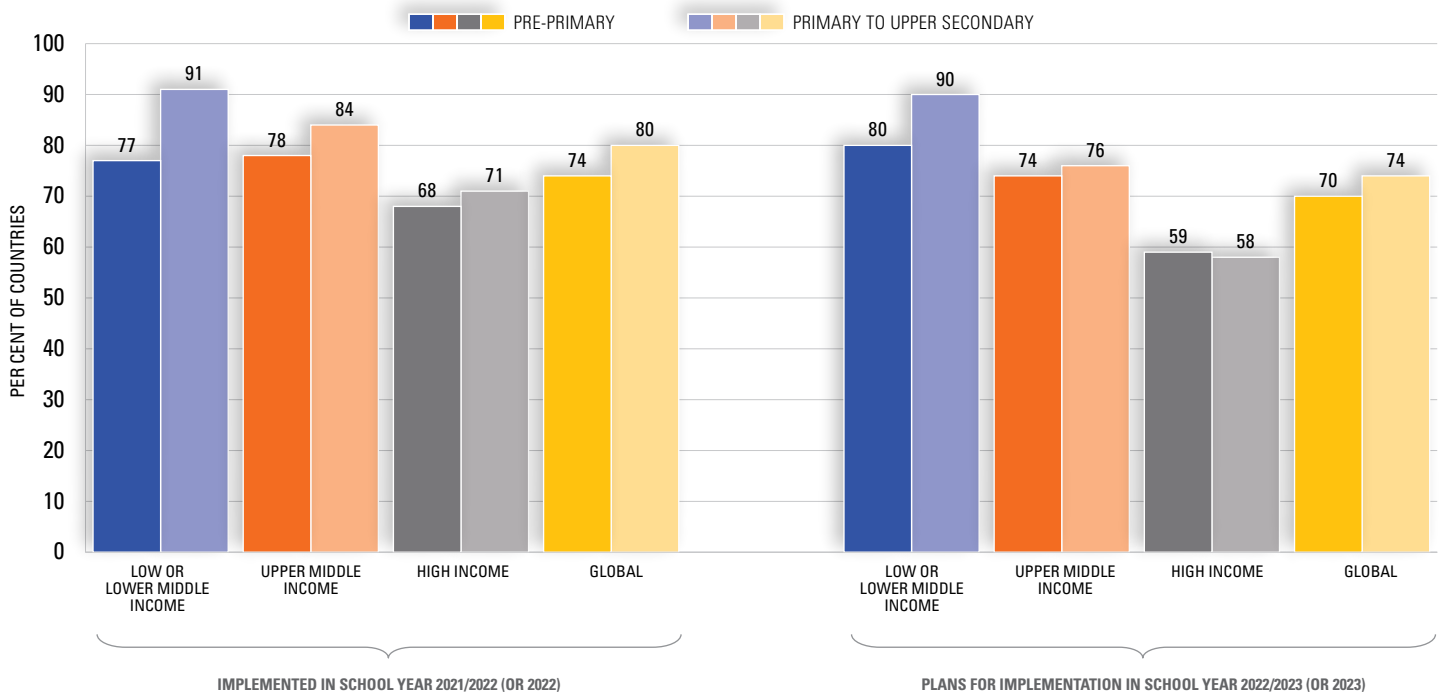
In addition to improved WASH infrastructure, strengthening nutrition services in school is also critical in mitigating the effects of school closures on children's health. However, among countries that responded to the survey, only two in five reported either currently implementing or planning to implement national-level policy measures on strengthened or additional school nutrition services (*Figure 5-4*). While fewer high-income respondent countries reported implementing school nutrition services, such programmes create important benefits for vulnerable groups such as girls and children from low-income households (Adelman et al., 2019; Gelli et al., 2019). Yet, half of low- or lower-middle-income countries do not plan to implement national-level policy measures on strengthened or additional school nutrition services in the upcoming school year.

MOVING FROM RECOVERY TO TRANSFORMATION

Transforming education calls for schools and other learning environments to become more responsive to learners' needs. The reopening of schools and the start of the new school year present an exceptional opportunity to ensure that all children have access to a safe and supportive learning environment that promotes and responds to their learning, mental health and psychosocial wellbeing needs. While immediate action is needed to ensure the safe return of students to school, such efforts should be sustained to build more effective, inclusive and resilient education systems.

Comprehensive school-based MHPSS – including policies, education workforce development, and increased MHPSS services and programmes – can lead to enhanced academic achievement, increased retention, and improved mental health and psychosocial wellbeing outcomes. To guide the development of measures on MHPSS, countries can leverage the use of assessments to understand learners' and teachers' needs. Yet, in the school year 2021/2022, fewer than half of respondent countries conducted nationwide studies to evaluate the impact

FIGURE 5-3. Share of respondent countries reporting current or planned implementation of national-level policy measures on strengthened/additional WASH services



Note: For each level of education, only countries with valid responses are included. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

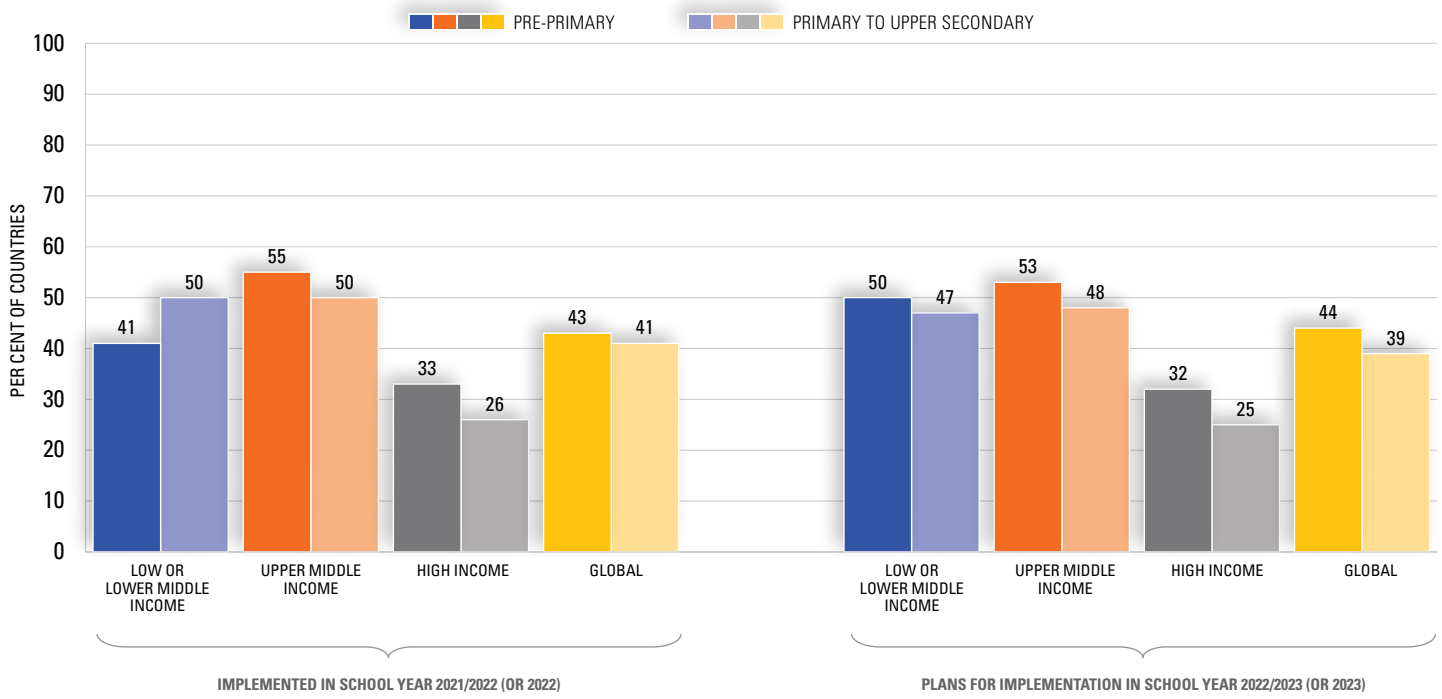
of school closures on the mental health and wellbeing of learners, while fewer than two in five conducted the same for that of teachers. To truly transform education, school systems must ensure learners' and educators' mental health and psychosocial wellbeing are monitored, addressed and prioritized, even post-pandemic.

Addressing mental health, promoting good hygiene practices and health protocols – which must be complemented with safe and reliable WASH facilities – can help schools strengthen **preparedness and resilience against future shocks**. Providing students with nutritious meals is important for the return of students upon school reopening, and beyond the pandemic, these school-based services will continue to be vital in encouraging school attendance and ensuring students are healthy and ready to learn. A **whole-of-society approach**, involving collaboration across sectors including education, child protection, health and nutrition, will be needed to ensure children, adolescents and youth receive comprehensive services and education systems build forward better.

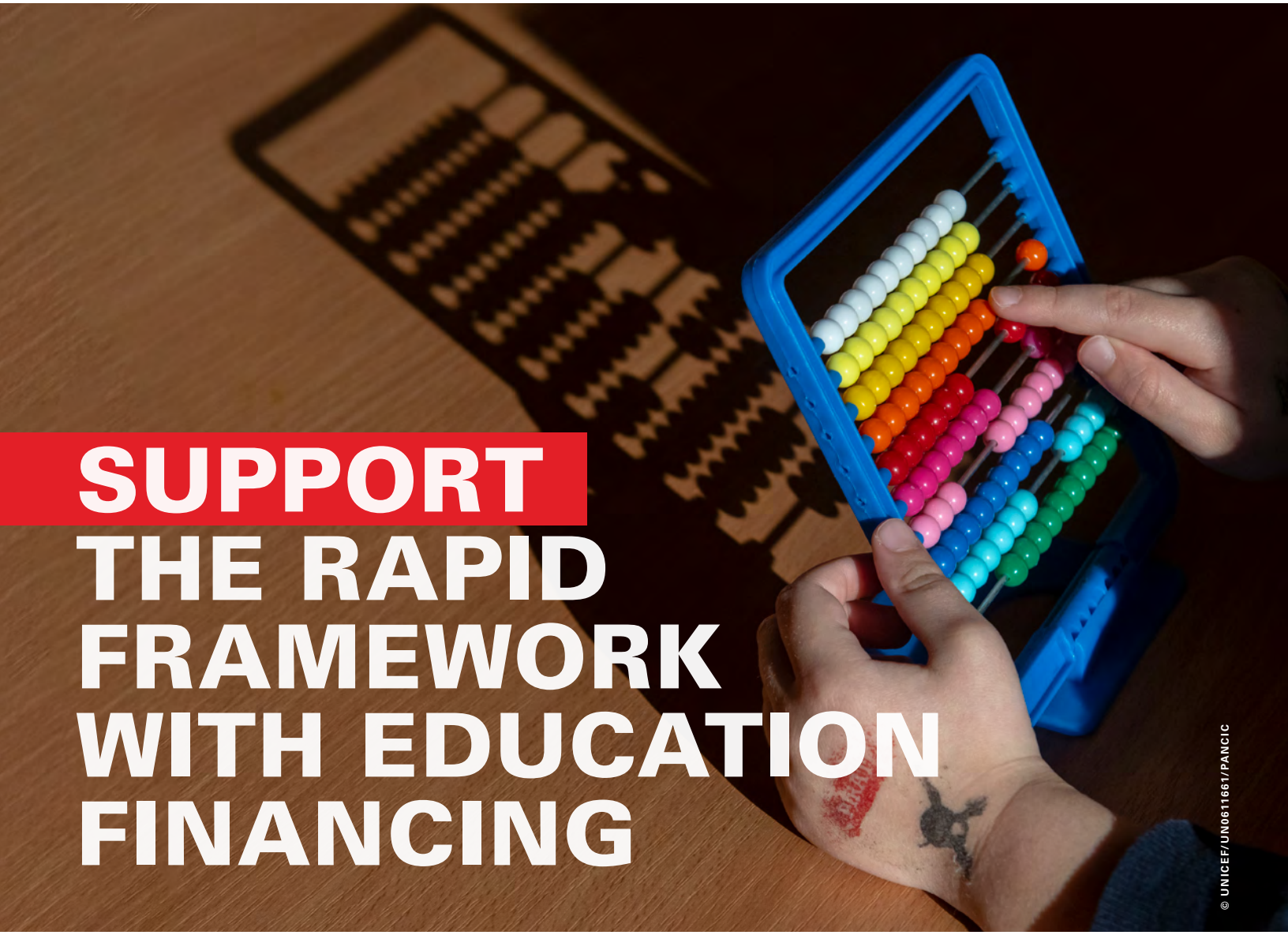
CONCLUSION

To help address the impacts of the pandemic on students' learning, mental health and wellbeing, schools must ensure that children, adolescents and youth have access to essential services, including MHPSS, nutrition, and WASH services. Survey findings reveal that while most countries are implementing or planning to implement national-level policy measures on strengthened WASH services, only about two in five report the same for nutrition. Furthermore, despite the urgency to pair learning recovery with a broader mental health and social-emotional support system for teachers and students, many countries have yet to make MHPSS a priority in learning recovery. Safeguarding the wellbeing of children, adolescents and youth is important in itself and also critical to recovering learning and transforming education systems for the better. The need to provide comprehensive support to learners is more urgent than ever, and a concerted effort by stakeholders will be required to ensure that all schools provide a safe and inclusive environment in which children, adolescents and youth can learn and thrive.

FIGURE 5-4. Share of respondent countries reporting current or planned implementation of national-level policy measures on strengthened/additional school nutrition services



Note: For each level of education, only countries with valid responses are included.



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SUPPORT THE RAPID FRAMEWORK WITH EDUCATION FINANCING

The effects of COVID-19 have endangered education budgets around the world (UNICEF, 2022). As a consequence, there is a need to prioritize protecting and expanding education budgets to safeguard a full return to learning. In 2020, following the onset of COVID-19, government education spending decreased in more countries than in the previous year. Forty per cent of low- and lower-middle-income countries reduced their real education spending – an average decline of 13.5 per cent in 2020 from 2019 (World Bank, UNESCO-GEMR & UNESCO-UIS, 2022). In 2021, more than 60 per cent of countries in each income group increased their education budgets from 2020, except for upper-middle-income countries (UNESCO et al., 2021). However, the education sector diminished its space in national budgets of low- and lower-middle-income countries: the share of education fell in 2020, rebounded slightly in 2021 below 2019 levels, and decreased again in 2022. By contrast, the education share of total government budgets in upper-middle- and high-income countries was stable between 2019 and 2021, and remained higher in 2022 than in 2019 (World Bank & UNESCO, 2022).

MOST COUNTRIES MAINTAINED OR INCREASED THEIR EDUCATION BUDGETS IN NOMINAL TERMS, WITH LARGE DIFFERENCES BETWEEN INCOME GROUPS.

Globally, at primary to upper secondary levels, over 70 per cent of respondent countries reported that they increased their government budgets in 2021 relative to 2020, in nominal terms. The share of countries whose budget amount decreased was small, at 4 per cent for pre-primary and 7 per cent for primary to upper secondary levels *(Figure 6-1)*. However, these global-level averages conceal differences across income groups. The difference is pronounced between low- and lower-middle-income countries and high-income countries. Over 90 per cent of high-income countries and 83

per cent of upper-middle-income-countries increased their budgets for primary to upper secondary education in 2021 compared to 2020. Only 3 per cent of high-income countries decreased their education budget.

By contrast, only 45 per cent of low- and lower-middle-income countries increased their budgets for primary to upper secondary education. Nearly 40 per cent of low- and lower-middle-income countries' budgets stayed the same in nominal terms, while 17 per cent decreased their budgets. This pattern of differences by country income groups at primary to upper secondary levels is similarly observed at the pre-primary level.[1]

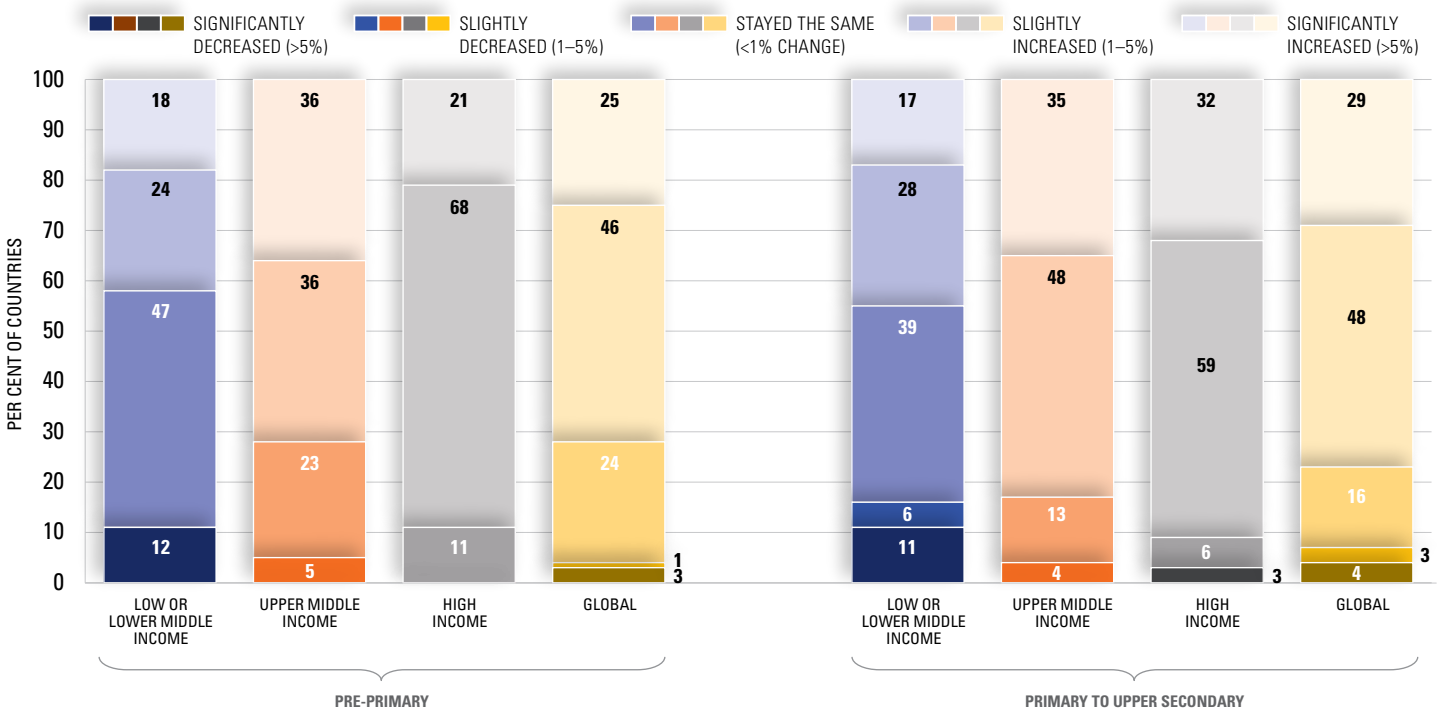
Investment in tertiary education

In the joint survey, only a quarter of low- and lower-middle-income countries reported increasing their budget for tertiary education. However, these countries made up for the lack of increase in public education allocation by investing in COVID-relevant measures for personnel and infrastrucuture. The share of countries that implemented at least two measures to support tertiary education due to the pandemic was 50 per cent for low- and lower-middle-income countries, much higher than the global average of 34 per cent.

THERE IS POTENTIAL FOR INCREASED INVESTMENT IN PERSONNEL, SCHOOL MEALS AND INFRASTRUCTURE, ESPECIALLY IN LOW- AND LOWER-MIDDLE-INCOME COUNTRIES.

Data shows there is still room for improvement regarding COVID-relevant measures that have been taken to support education and directly impact the public budget. In both school years, three quarters of countries offered further support for teachers/staff (e.g., funding masks, COVID tests, healthcare, etc.), over half invested in infrastructure to improve the sanitary conditions of schools (e.g., installation of air filters in classrooms), about 40 per cent

FIGURE 6-1. Change in public education resources for financial year 2021 compared to 2020, in nominal terms



Note: For each level of education, only countries with valid responses are included. While the results represented in this figure cover more than 50 per cent of the total 4- to 17-year-old population, this may not apply to specific income groups. More information on the population coverage of each income group can be found in Annex 1.

1 It should be remembered that the level of education budgets in real terms, with inflation being considered, should also be examined. Inflation rate is 4.1 per cent for global, 7.2 per cent for low-income, 4.6 per cent for lower-middle-income, 5.6 per cent for upper-middle-income, and 2.8 per cent for high- income countries in 2021. Data retrieved on August 19, 2022 from World Development Indicators (GDP deflator, annual %).

recruited additional temporary teachers and/or other staff for primary and secondary education, nearly 30 per cent provided discounted or free school meals and a quarter provided additional bonuses for teachers.

Figure 6-2 provides an overview of the percentage of respondent countries where at least two of the COVID-relevant measures mentioned in the previous paragraph have been taken to support education. Overall, in the school year 2021/2022, at least two measures have been taken for pre-primary education in half of the respondent countries, and for primary and secondary education in 60 per cent of countries. Compared to upper-middle- and high-income countries, low- and lower-middle-income countries slightly lagged in the school year 2020/2021. Yet, they maintained their level in the school year 2021/2022, while declines were found among high-income and especially upper-middle-income countries.

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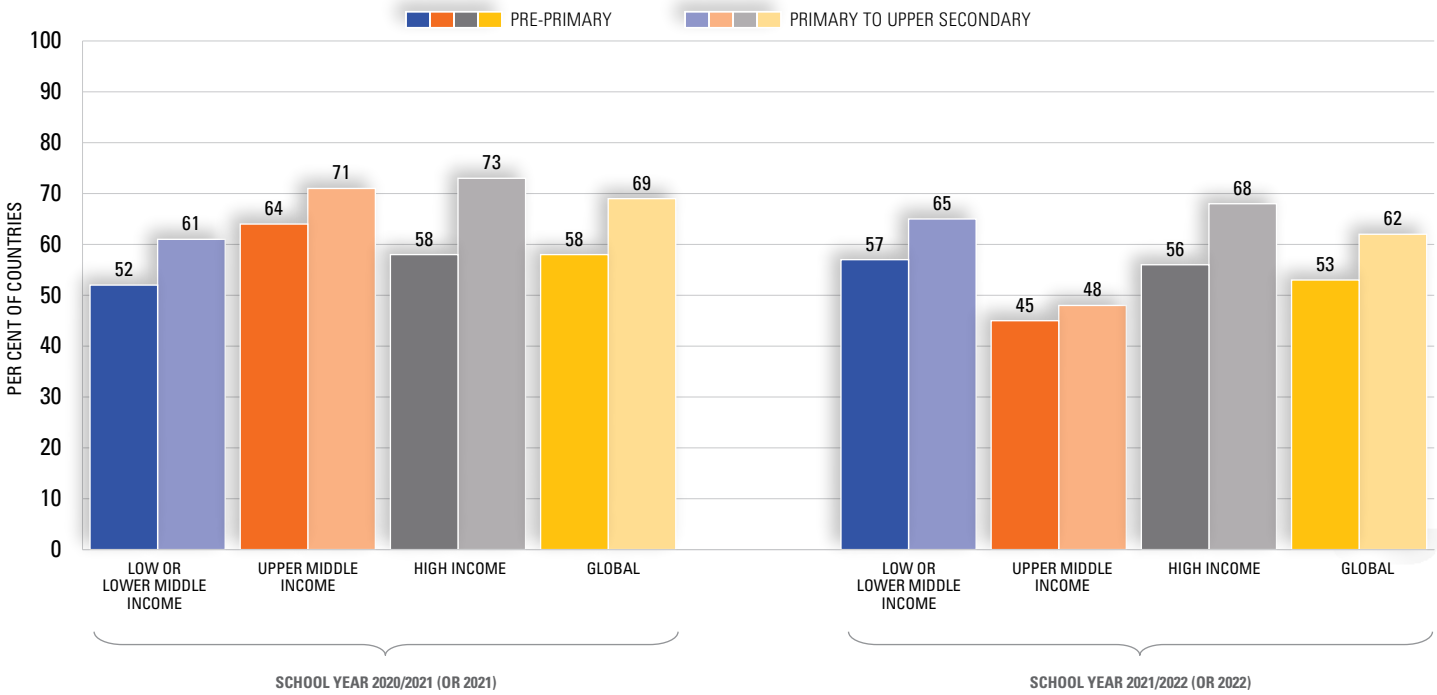
THE MOMENTUM FOR INVESTMENT IN DIGITALIZATION IS WANING FOR PRIMARY AND SECONDARY EDUCATION LEVELS.

In the school year 2021/2022, digitalization investments were more prevalent at the primary to upper secondary levels than at the pre-primary level (*Figure 6-3*). About 80 per cent of respondent countries implemented at least

FIGURE 6-2. Share of respondent countries reporting that at least two measures have been taken due to COVID-19 to support education and have a direct impact on the public budget



Note: For each level of education, only countries with valid responses are included. More information on the population coverage of each income group can be found in Annex 1.

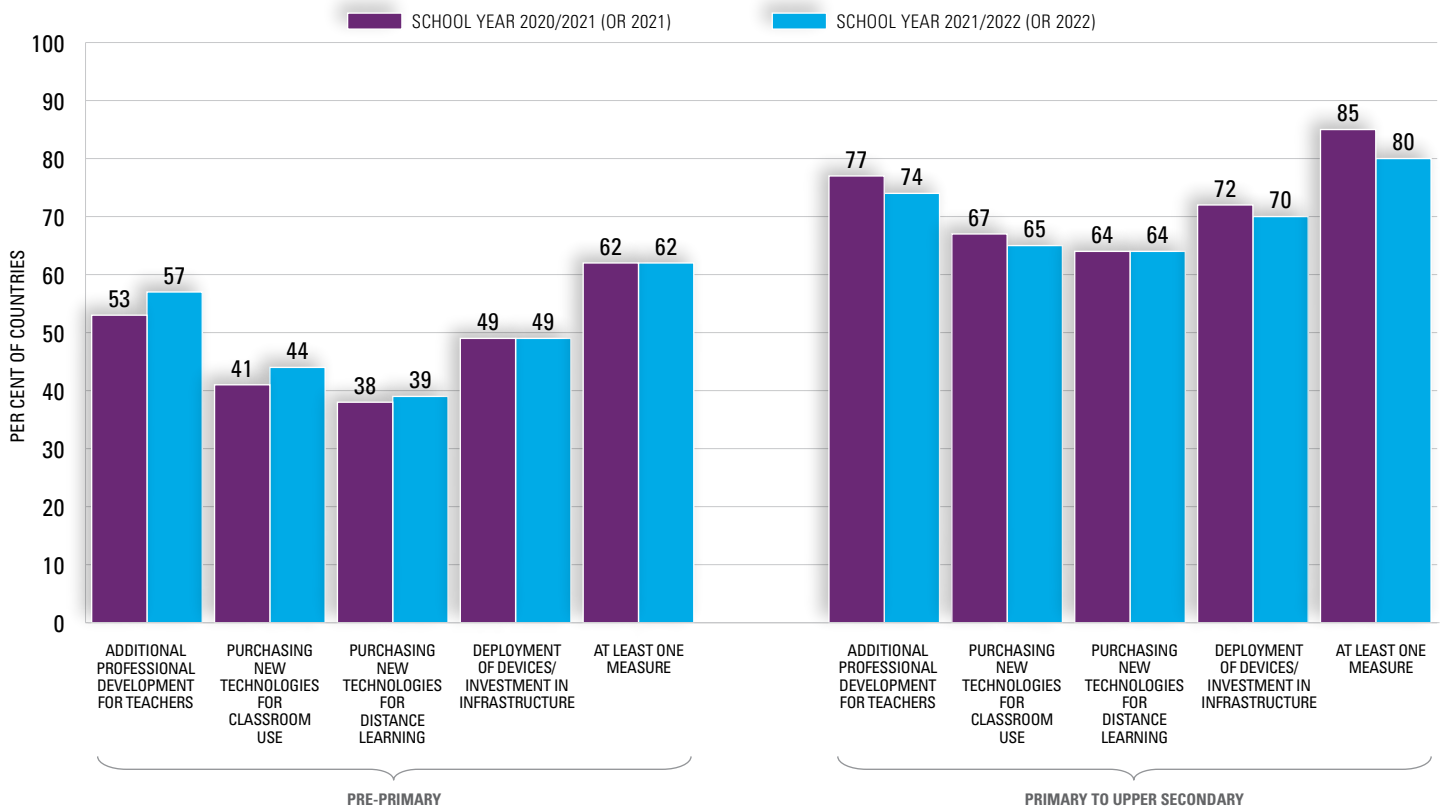
one digitalization measure for primary to upper secondary levels, compared with 62 per cent for pre-primary.[2] The prevalence of each measure also differs by education level, with professional development for teachers (e.g., workshops, webinars) on the effective use of technologies as the measure adopted by most countries for both pre-primary and primary to upper secondary levels. Other digitalization measures taken that had a direct impact on the public budget included distributing devices and investing in infrastructure (e.g., connectivity, electricity) for distance learning.

Between the school years 2020/2021 and 2021/2022, some features seem to be emerging in countries' digitalization measures that impact education budgets. Actions for primary to upper secondary levels seem to be waning. The percentage of countries taking at least one digitalization measure declined slightly for primary to upper secondary levels from 85 per cent in the school year 2020/2021 to 80 per cent in 2021/2022. Governments were possibly more attentive to these education levels a year ago, while the percentage remains unchanged for pre-primary. Governments continue to support digital learning, but the perception of urgency appears to have diminished despite the persistent need to address the digital divide and learning losses.

MOVING FROM RECOVERY TO TRANSFORMATIVE FINANCING

Governments have spent the past two to three years concerned about how to secure the short-term expenditures and investments required for the COVID-19 response, learning recovery and acceleration. Still, the world was already falling short in the financing

FIGURE 6-3. Share of respondent countries reporting digitalization measures were taken to support education due to the pandemic and had a direct impact on the public budget



Note: For each level of education, only countries with valid responses are included. 'At least one measure' includes countries who responded 'Other'. Caution is advised in generalizing the results represented in the figure, as the countries with valid responses may cover less than 50 per cent of the total 4- to 17-year-old population. More information on the coverage of each income group can be found in Annex 1.

2 At the pre-primary level, upper-middle-income countries (75 per cent) and low- and lower-middle-income countries (67 per cent) are more likely to implement at least one measure than high-income ones (52 per cent). The same pattern is observed at the primary level (83 per cent for low- and lower-middle-income, 91 per cent for upper-middle-income, and 72 per cent for high-income countries).

commitments for SDG 4 before COVID-19 struck, let alone in addressing the education transformation and financing challenges of a reimagined future (International Commission on the Futures of Education, 2021).

Transforming education financing requires sustained action in at least two areas (United Nations Transforming Education Summit, 2022). First, it includes mobilizing more resources to continue implementing the RAPID policy actions and realize other transformative education measures. **Global financial solidarity** and a renewed social contract entail broadening the tax and resources base for education and lifelong learning, and ensuring that aid spending matches the SDG 4 commitments. It requires new obligations, dialogue and voices in key global negotiations affecting the domestic fiscal space for education. Intersectoral collaboration, contributions and partnerships with non-state national and international actors became essential for harnessing the potential of technology and leveraging digital learning during the pandemic, ultimately changing the shape of education and lifelong learning (UNESCO, Government of France & OECD, 2021).

Second, a **renewed social contract for education** implies sacrifices in how current resources are used, in order to protect equity and efficiency. It means eliminating misuse and corruption, maximizing alignment around the RAPID framework and taking deliberate transformative policy actions. The most vulnerable receive less than their fair share of education financial resources when education spending is not targeted, posing further challenges to their educational trajectories and overall wellbeing.

In sum, COVID-related school closures affected many children, youth and adults, including teachers. Unless the world takes bold and urgent action to stop confining them from the financing transformation needed, the pervasive learning and societal consequences will continue to be felt by current and future generations.

CONCLUSION

Financing matters – its volume, what sources to use, and how to use it. To recover and accelerate learning, governments need adequate financial resources and must use them efficiently with an equity perspective. Budgetary and capacity constraints are critical as each country assesses the most suitable policy actions in the RAPID framework to establish a contextually appropriate learning recovery programme. Additional investment in all educational components and at all levels is needed, including digital infrastructure and digital learning, which are vital to transforming education. The process of acquiring financing itself also needs to be recalibrated to a changing economic and fiscal space, and innovative financing mechanisms for education can be explored. Increasing education financing and continuing investment in measures that support education are crucial to recover losses brought about by the pandemic and transform education systems to become more efficient, equitable and resilient.

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CONCLUSION

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The Where are we on Education Recovery report, released earlier this year, had introduced the RAPID framework as a tool to support the implementation and monitoring of the three priorities underpinning the Mission: Recovering Education: all children and youth are back in school and receive tailored services needed to meet their learning, health, mental health, psychosocial well-being, and other needs; all children receive support to catch up on lost learning; and all teachers are prepared and supported so they can address learning losses among their students and incorporate digital technology into their teaching. The report had concluded with several recommendations for effective recovery of education systems and their subsequent transformations built on the lessons from the pandemic: the necessity to support teachers, engage with communities, align with education partners and stakeholders on education recovery plans, and strengthen accountability mechanisms.

The present report is a joint effort to apply the RAPID framework to assess and monitor national responses to educational disruptions caused by the COVID-19 pandemic at the critical juncture of transitioning from crisis and 'unconventional' responses towards education 'normalcy' and transformation. The data used for this purpose was mainly sourced from the fourth round of the joint survey, together with additional information obtained from the GERT survey and other sources. Although we need more data and evidence to develop and support our conclusions, this report posits in the interim that countries' responses must go beyond learning recovery and address the decades-long bottlenecks and systemic issues that have impeded progress. This is vital to effectively address the global learning crisis and transform education systems to be more relevant and effective in meeting the needs of future generations and the aspirations of our societies. In line with recent commitments made by the international

education community (Transforming Education Summit: A Commitment to Action; the International Commission on the Futures of Education's Reimagining our Futures Together: A New Social Contract for Education), transforming education requires the whole education community to support long-terms changes in education service delivery.

Below, we provide these interim conclusions by summarizing the main findings from the survey and their possible implications for the transformation in the future:

***Reach* every child and keep them in school**: While all countries have lifted nationwide school closures, a quarter of countries were not able to collect information on who has returned to school, and as much as 40 per cent the information on student absences. Data on enrolment and attendance are critical information that education authorities at all levels can use to develop and implement necessary measures for mitigating learner disengagement and dropouts. Education systems should draw lessons from the COVID-19 disruptions and invest in real-time **Education Management Information Systems (EMIS)** that go beyond mere annual school census and statistical collection, and can play the role of **early warning systems** to understand which groups of students need targeted interventions, prevent dropout and support effective school management. At a policy level, national education sector plans must mandate risk and vulnerability analyses to identify groups at the highest risk of dropout and update their preparedness plans accordingly. Finally, education authorities should work towards ensuring that the **right to education for all is not only fully captured in national legal and regulatory frameworks**, including laws and policies that do not discriminate against the enrolment of marginalized groups, but also effectively enforced.

***Assess* learning levels regularly**: Most countries have maintained or resumed standardized assessment programmes, particularly for mathematics and reading, which are the core learning domains of SDG Indicator 4.1.1. Furthermore, most countries also reported current or planned evaluations of remedial education programmes, a crucial step in identifying evidence-based recovery strategies. More efforts may be needed to strengthen future assessments to equally capture areas of learning and competencies that are often neglected in national learning assessments despite the increasing evidence of their importance not only for the acquisition of foundational knowledge but also in life and the labor market. **Promoting a regular and inclusive learning assessment culture** involves not only diversifying the types of tools, including formative and summative classroom-based assessments, but also developing and using **innovative approaches to assessment**. **Leveraging technologies** such as digitalized and hybrid assessments will enable countries to more effectively use assessments to transform both learning and teaching, at home and in the classroom.

***Prioritize* teaching the fundamentals**: The scale of the learning crisis requires flexibility in curriculum adherence and relevance in order to focus on the academic foundation in the short term and ensure the key competencies and prerequisites that enable student grade progression are in place. Yet, despite the loss of instructional time due to COVID-19 disruptions, more than half of respondent countries reported that they did not implement curricular adjustments. More research and evidence-building may be required before developing curricular reform and transformation to genuinely guide processes, review learning objectives, **content progressions,** and corresponding **time allocations**, and produce the necessary **curricular materials**. The lessons learned and challenges faced during the COVID-19 pandemic can be used as building blocks and enablers in the review, design and strengthening of future curriculum.

***Increase* the efficiency of instruction through catch-up policy measures and comprehensive teacher support**: Curricular adjustments must also be accompanied by measures that **enhance the efficiency and effectiveness of learning**. Fewer than half of countries reported implementing national-level policy measures on increased instructional time, tutoring programmes and targeted instruction, despite evidence that they work at scale. There are various reasons that may explain these shortcomings, including lack of appropriate preparation and capacity of system managers, school leaders and teachers, inadequate financial and physical resources, and difficulty in identifying children most in need of additional support, especially those from the most vulnerable groups. More efforts are therefore needed to **invest in teachers**, including implementing measures to track long-term teacher absence and retention, supporting them with pedagogical tools and digital skills, and ensuring access to mental health and wellbeing resources. To **attract the best candidates to the teaching profession and retain them**, countries must ensure effective and efficient teacher support and compensatory systems, improve working conditions in schools, and provide continuing professional development. As teachers are central to the learning recovery response and the transformation of education, engaging them through **social dialogue** facilitates their ownership of and commitment to adopted strategies.

***Develop* psychosocial health and wellbeing**: While about 60 per cent of countries reported providing or planning to provide psychosocial and mental health support to primary- and secondary-level students and teachers in the current or upcoming school year, there is scope for more comprehensive offerings and better targeting of MHPSS interventions at the school level. Psychosocial health and wellbeing support is required for the well-rounded development of learners, and can help improve their learning performance and attitudes towards learning. In addition to MHPSS services, WASH and school nutrition services should be strengthened in the post-pandemic era to increase resilience against any future shocks and ultimately support increased attendance, academic achievement, and mental health and wellbeing outcomes. A **whole-of-society approach**, involving collaboration across sectors such as education, child protection, health and nutrition, will be needed to ensure children, adolescents and youth receive comprehensive, tailored services.

An effective implementation of the RAPID framework is difficult to achieve without sustainable and equitable **education financing**. In the third round of the joint survey, 58 per cent of countries reported that they expected their education budget to increase from financial year 2020 to 2021. Findings from the fourth survey round suggest countries outperformed this expectation, with over 70 per cent of countries reporting that their education budgets increased in 2021. However, this global situation hides disparities across country income groups: about nine in 10 high-income countries, compared to less than five in 10 low- to lower-middle-income countries, have increased their education budgets. Only 2.9 per cent of COVID-19 stimulus package funding worldwide, and only 0.9 per cent on average across low- and lower-middle-income countries, went to education (UNESCO, 2021). In addition, international financing for education remains of critical importance in some countries and specific contexts – yet aid to education has fallen from 8.8 per cent of total aid expenditures in 2019 to 5.5 per cent in 2020 (UNESCO et al., 2022). The Transforming Education Summit: Global Compact on Education Financing (forthcoming) and the Paris Declaration of the 2021 Global Education Meeting recall governments' commitment to allocate at least 4–6 per cent of GDP and at least 15–20 per cent of total public expenditure to education. Transforming education should involve transforming the way financial resources are invested in the future, prioritizing allocations of public spending to where it can best work to improve access to and quality in education and promoting innovations for more inclusive quality learning.

Finally, the pandemic has shown how the international community is capable of working together to mobilize resources and innovate to ensure continuity of learning. Within two years, four surveys have been conducted to map and share countries' education responses to the pandemic. Global Education Meetings were organized and a Transforming Education Summit will take place in September 2022. The incredible mobilization of countries, stakeholders and partners gives a political impetus for recovering and transforming education together.

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ANNEX 1

COUNTRY AND POPULATION COVERAGE IN EACH FIGURE

The table below provides information on the survey questions used to produce the analyses presented in each figure in this report.[3] 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 enrolment (in pre-primary, primary and secondary education) as a proportion of the total population of school-aged children and the total enrolment in education (pre-primary, primary and secondary), respectively. Where the population coverage falls below 50 per cent, this is noted under the relevant figure in the text.

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
1. REACH EVERY CHILD AND KEEP THEM IN SCHOOL						
Fig 1-1	C4	Pre-primary	Low or low middle income	11	48	53
			Upper middle income	18	21	20
			Higher income	12	18	20
			Global	41	36	37
Fig 1-1	C4	Primary	Low or low middle income	12	48	54
			Upper middle income	20	21	20
			Higher income	17	32	35
			Global	49	38	39
Fig 1-1	C4	Lower Secondary	Low or low middle income	12	48	54
			Upper middle income	20	21	20
			Higher income	17	31	34
			Global	49	38	39
Fig 1-1	C4	Upper Secondary (General Education)	Low or low middle income	12	48	54
			Upper middle income	21	22	21
			Higher income	15	30	33
			Global	48	38	39
Fig 1-1	C4	Upper Secondary (Vocational Education)	Low or low middle income	11	48	53
			Upper middle income	17	13	11
			Higher income	13	16	18
			Global	41	34	33
Fig 1-2	R3 Automatic re-enrolment of students in school	Pre-primary	Low or low middle income	18	20	20
			Upper middle income	17	27	26
			Higher income	16	56	56
			Global	51	26	27
Fig 1-2	R3 Automatic re-enrolment of students in school	Primary to Upper Secondary	Low or low middle income	20	21	20
			Upper middle income	22	75	76
			Higher income	16	48	48
			Global	58	41	44

3 The survey questionnaire and data for the fourth round of the joint survey are forthcoming. Questionnaires and data for previous survey rounds can be found at the following page: https://tcg.uis.unesco.org/survey-education-covid-school-closures/

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 1-2	R3 Early warning systems to identify students at risk of dropping out	Pre-primary	Low or low middle income	22	27	26
			Upper middle income	19	23	22
			Higher income	18	58	59
			Global	59	29	29
Fig 1-2	R3 Early warning systems to identify students at risk of dropping out	Primary to Upper Secondary	Low or low middle income	22	25	23
			Upper middle income	24	73	74
			Higher income	23	65	67
			Global	69	44	47
Fig 1-2	R3 Community mobilization campaigns to bring students back to school	Pre-primary	Low or low middle income	23	54	58
			Upper middle income	22	28	27
			Higher income	24	69	71
			Global	69	48	49
Fig 1-2	R3 Community mobilization campaigns to bring students back to school	Primary to Upper Secondary	Low or low middle income	25	61	64
			Upper middle income	26	75	77
			Higher income	29	75	78
			Global	80	67	70
Fig 1-2	R3 Cash transfers (i.e. allocations or subsidies given to students or family) to	Pre-primary	Low or low middle income	21	26	26
			Upper middle income	21	61	61
			Higher income	24	72	74
			Global	66	42	45
Fig 1-2	R3 Cash transfers (i.e. allocations or subsidies given to students or family) to	Primary to Upper Secondary	Low or low middle income	24	28	27
			Upper middle income	23	66	67
			Higher income	28	76	79
			Global	75	45	48
Fig 1-3	H1 Promotion of frequent handwashing and/or use of hand sanitizer	Pre-primary	Low or low middle income	25	61	64
			Upper middle income	27	75	77
			Higher income	37	81	84
			Global	89	68	71
Fig 1-3	H1 Promotion of frequent handwashing and/or use of hand sanitizer	Primary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	38	82	85
			Global	91	68	71
Fig 1-3	H1 Promotion of frequent handwashing and/or use of hand sanitizer	Lower Secondary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71
Fig 1-3	H1 Promotion of frequent handwashing and/or use of hand sanitizer	Upper Secondary (General Education)	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 1-3	H1 Promotion of frequent handwashing and/or use of hand sanitizer	Upper Secondary (Vocational Education)	Low or low middle income	24	60	63
			Upper middle income	24	72	73
			Higher income	34	51	55
			Global	82	63	65
Fig 1-3	H1 Enhanced cleaning and disinfection	Pre-primary	Low or low middle income	22	51	54
			Upper middle income	27	75	77
			Higher income	37	80	82
			Global	86	62	66
Fig 1-3	H1 Enhanced cleaning and disinfection	Primary	Low or low middle income	22	51	54
			Upper middle income	28	76	77
			Higher income	38	81	84
			Global	88	62	66
Fig 1-3	H1 Enhanced cleaning and disinfection	Lower Secondary	Low or low middle income	22	51	54
			Upper middle income	28	76	77
			Higher income	38	81	84
			Global	88	62	66
Fig 1-3	H1 Enhanced cleaning and disinfection	Upper Secondary (General Education)	Low or low middle income	22	51	54
			Upper middle income	28	76	77
			Higher income	38	81	84
			Global	88	62	66
Fig 1-3	H1 Enhanced cleaning and disinfection	Upper Secondary (Vocational Education)	Low or low middle income	21	51	53
			Upper middle income	24	72	73
			Higher income	33	50	54
			Global	78	57	60
Fig 1-3	H1 Minimum physical distancing requirements	Pre-primary	Low or low middle income	25	61	64
			Upper middle income	27	75	77
			Higher income	36	77	80
			Global	88	67	70
Fig 1-3	H1 Minimum physical distancing requirements	Primary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71
Fig 1-3	H1 Minimum physical distancing requirements	Lower Secondary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71
Fig 1-3	H1 Minimum physical distancing requirements	Upper Secondary (General Education)	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 1-3	H1 Minimum physical distancing requirements	Upper Secondary (Vocational Education)	Low or low middle income	24	60	63
			Upper middle income	24	72	73
			Higher income	34	51	55
			Global	82	63	65
Fig 1-3	H1 Mandatory mask usage for teachers	Pre-primary	Low or low middle income	25	61	64
			Upper middle income	27	75	77
			Higher income	38	81	84
			Global	90	68	71
Fig 1-3	H1 Mandatory mask usage for teachers	Primary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71
Fig 1-3	H1 Mandatory mask usage for teachers	Lower Secondary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71
Fig 1-3	H1 Mandatory mask usage for teachers	Upper Secondary (General Education)	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71
Fig 1-3	H1 Mandatory mask usage for teachers	Upper Secondary (Vocational Education)	Low or low middle income	24	60	63
			Upper middle income	24	72	73
			Higher income	34	51	55
			Global	82	63	65
Fig 1-3	H1 Adjustment in activities	Pre-primary	Low or low middle income	25	61	64
			Upper middle income	27	75	77
			Higher income	36	75	77
			Global	88	67	70
Fig 1-3	H1 Adjustment in activities	Primary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	38	82	85
			Global	91	68	71
Fig 1-3	H1 Adjustment in activities	Lower Secondary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	38	82	85
			Global	91	68	71
Fig 1-3	H1 Adjustment in activities	Upper Secondary (General Education)	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	37	82	85
			Global	90	68	71

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 1-3	H1 Adjustment in activities	Upper Secondary (Vocational Education)	Low or low middle income	24	60	63
			Upper middle income	24	72	73
			Higher income	32	51	55
			Global	80	63	65
Fig 1-3	H1 National contact tracing protocols	Pre-primary	Low or low middle income	25	61	64
			Upper middle income	24	74	75
			Higher income	38	81	84
			Global	87	67	70
Fig 1-3	H1 National contact tracing protocols	Primary	Low or low middle income	25	61	64
			Upper middle income	25	74	75
			Higher income	39	82	85
			Global	89	67	71
Fig 1-3	H1 National contact tracing protocols	Lower Secondary	Low or low middle income	25	61	64
			Upper middle income	25	74	75
			Higher income	39	82	85
			Global	89	67	71
Fig 1-3	H1 National contact tracing protocols	Upper Secondary (General Education)	Low or low middle income	25	61	64
			Upper middle income	25	74	75
			Higher income	39	82	85
			Global	89	67	71
Fig 1-3	H1 National contact tracing protocols	Upper Secondary (Vocational Education)	Low or low middle income	24	60	63
			Upper middle income	22	72	73
			Higher income	34	51	55
			Global	80	63	65
Fig 1-3	H1 Mandatory mask usage for students	Pre-primary	Low or low middle income	25	61	64
			Upper middle income	27	75	77
			Higher income	38	81	84
			Global	90	68	71
Fig 1-3	H1 Mandatory mask usage for students	Primary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71
Fig 1-3	H1 Mandatory mask usage for students	Lower Secondary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71
Fig 1-3	H1 Mandatory mask usage for students	Upper Secondary (General Education)	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 1-3	H1 Mandatory mask usage for students	Upper Secondary (Vocational Education)	Low or low middle income	24	60	63
			Upper middle income	24	72	73
			Higher income	34	51	55
			Global	82	63	65
Fig 1-3	H1 Infrastructure adaptations	Pre-primary	Low or low middle income	24	55	58
			Upper middle income	25	75	77
			Higher income	35	80	83
			Global	84	64	68
Fig 1-3	H1 Infrastructure adaptations	Primary	Low or low middle income	24	55	58
			Upper middle income	26	75	77
			Higher income	38	82	85
			Global	88	64	68
Fig 1-3	H1 Infrastructure adaptations	Lower Secondary	Low or low middle income	24	55	58
			Upper middle income	26	75	77
			Higher income	38	82	85
			Global	88	64	68
Fig 1-3	H1 Infrastructure adaptations	Upper Secondary (General Education)	Low or low middle income	24	55	58
			Upper middle income	26	75	77
			Higher income	38	82	85
			Global	88	64	68
Fig 1-3	H1 Infrastructure adaptations	Upper Secondary (Vocational Education)	Low or low middle income	23	54	57
			Upper middle income	23	72	73
			Higher income	33	50	54
			Global	79	59	62
Fig 1-3	H1 National contact tracing protocols	Pre-primary	Low or low middle income	25	61	64
			Upper middle income	25	74	75
			Higher income	35	72	74
			Global	85	66	69
Fig 1-3	H1 National contact tracing protocols	Primary	Low or low middle income	25	61	64
			Upper middle income	26	74	75
			Higher income	37	74	77
			Global	88	66	70
Fig 1-3	H1 National contact tracing protocols	Lower Secondary	Low or low middle income	25	61	64
			Upper middle income	26	74	75
			Higher income	37	74	77
			Global	88	66	70
Fig 1-3	H1 National contact tracing protocols	Upper Secondary (General Education)	Low or low middle income	25	61	64
			Upper middle income	26	74	75
			Higher income	37	74	77
			Global	88	66	70

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 1-3	H1 National contact tracing protocols	Upper Secondary (Vocational Education)	Low or low middle income	23	60	62
			Upper middle income	23	72	73
			Higher income	32	42	46
			Global	78	62	64
Fig 1-3	H1 Adjusting the schedule to decrease contact	Pre-primary	Low or low middle income	25	61	64
			Upper middle income	27	75	77
			Higher income	38	81	84
			Global	90	68	71
Fig 1-3	H1 Adjusting the schedule to decrease contact	Primary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71
Fig 1-3	H1 Adjusting the schedule to decrease contact	Lower Secondary	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71
Fig 1-3	H1 Adjusting the schedule to decrease contact	Upper Secondary (General Education)	Low or low middle income	25	61	64
			Upper middle income	28	76	77
			Higher income	39	82	85
			Global	92	68	71
Fig 1-3	H1 Adjusting the schedule to decrease contact	Upper Secondary (Vocational Education)	Low or low middle income	23	60	62
			Upper middle income	24	72	73
			Higher income	34	51	55
			Global	81	63	65
Fig 1-3	Required teacher vaccinations	Pre-primary	Low or low middle income	25	61	64
			Upper middle income	26	74	75
			Higher income	37	81	84
			Global	88	67	70
Fig 1-3	Required teacher vaccinations	Primary	Low or low middle income	25	61	64
			Upper middle income	27	74	75
			Higher income	38	82	85
			Global	90	67	71
Fig 1-3	Required teacher vaccinations	Lower Secondary	Low or low middle income	25	61	64
			Upper middle income	27	74	75
			Higher income	38	82	85
			Global	90	67	71
Fig 1-3	Required teacher vaccinations	Upper Secondary (General Education)	Low or low middle income	25	61	64
			Upper middle income	27	74	75
			Higher income	38	82	85
			Global	90	67	71

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 1-3	Required teacher vaccinations	Upper Secondary (Vocational Education)	Low or low middle income	24	60	63
			Upper middle income	24	72	73
			Higher income	33	51	55
			Global	81	63	65
Fig 1-3	Required student vaccinations	Pre-primary	Low or low middle income	24	55	58
			Upper middle income	24	74	75
			Higher income	37	81	84
			Global	85	63	67
Fig 1-3	Required student vaccinations	Primary	Low or low middle income	24	55	58
			Upper middle income	26	74	75
			Higher income	38	82	85
			Global	88	64	68
Fig 1-3	Required student vaccinations	Lower Secondary	Low or low middle income	24	55	58
			Upper middle income	27	74	75
			Higher income	38	82	85
			Global	89	64	68
Fig 1-3	Required student vaccinations	Upper Secondary (General Education)	Low or low middle income	25	61	64
			Upper middle income	27	74	75
			Higher income	38	82	85
			Global	90	67	71
Fig 1-3	Required student vaccinations	Upper Secondary (Vocational Education)	Low or low middle income	24	60	63
			Upper middle income	24	72	73
			Higher income	33	51	55
			Global	81	63	65
2. ASSESS LEARNING LEVELS REGULARLY						
Fig 2-1	A1 (2021-22 or 2022)	Pre-primary	Low or low middle income	11	42	45
			Upper middle income	10	10	11
			Higher income	8	12	13
			Global	29	29	28
Fig 2-1	A1 (2021-22 or 2022)	Primary	Low or low middle income	18	58	61
			Upper middle income	20	64	65
			Higher income	30	74	76
			Global	68	62	65
Fig 2-1	A1 (2021-22 or 2022)	Lower Secondary	Low or low middle income	18	58	61
			Upper middle income	19	65	66
			Higher income	28	70	71
			Global	65	62	64
Fig 2-1	A1 (2021-22 or 2022)	Upper Secondary (General Education)	Low or low middle income	17	58	60
			Upper middle income	19	64	65
			Higher income	32	67	69
			Global	68	61	63

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 2-1	A1 (2021-22 or 2022)	Upper Secondary (Vocational Education)	Low or low middle income	17	58	60
			Upper middle income	16	62	62
			Higher income	27	31	34
			Global	60	56	58
Fig 2-2	A2 (2020-21 or 2021)	Pre-primary	Low or low middle income	20	52	56
			Upper middle income	23	23	22
			Higher income	26	32	35
			Global	69	41	41
Fig 2-2	A2 (2020-21 or 2021)	Primary	Low or low middle income	21	53	57
			Upper middle income	23	25	24
			Higher income	30	63	65
			Global	74	45	46
Fig 2-2	A2 (2020-21 or 2021)	Lower Secondary	Low or low middle income	20	52	56
			Upper middle income	23	25	24
			Higher income	30	63	65
			Global	73	45	46
Fig 2-2	A2 (2020-21 or 2021)	Upper Secondary (General Education)	Low or low middle income	20	52	56
			Upper middle income	22	25	24
			Higher income	29	63	65
			Global	71	45	46
Fig 2-2	A2 (2020-21 or 2021)	Upper Secondary (Vocational Education)	Low or low middle income	19	51	55
			Upper middle income	22	64	65
			Higher income	29	33	36
			Global	70	53	56
Fig 2-3	A3 Reading	Primary	Low or low middle income	11	44	49
			Upper middle income	18	23	23
			Higher income	27	71	74
			Global	56	40	43
Fig 2-3	A3 Mathematics	Primary	Low or low middle income	11	44	49
			Upper middle income	18	23	23
			Higher income	27	71	74
			Global	56	40	43
Fig 2-3	A3 Reading	Lower Secondary	Low or low middle income	10	43	48
			Upper middle income	17	64	65
			Higher income	26	72	74
			Global	53	53	58
Fig 2-3	A3 Mathematics	Lower Secondary	Low or low middle income	11	44	49
			Upper middle income	17	64	65
			Higher income	26	72	74
			Global	54	53	58

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 2-3	A3 Reading	Upper Secondary (General Education)	Low or low middle income	11	43	48
			Upper middle income	19	71	72
			Higher income	26	63	66
			Global	56	54	59
Fig 2-3	A3 Mathematics	Upper Secondary (General Education)	Low or low middle income	12	44	49
			Upper middle income	19	71	72
			Higher income	26	63	66
			Global	57	54	59
Fig 2-3	A3 Reading	Upper Secondary (Vocational Education)	Low or low middle income	10	42	47
			Upper middle income	17	66	67
			Higher income	20	27	30
			Global	47	48	52
Fig 2-3	A3 Mathematics	Upper Secondary (Vocational Education)	Low or low middle income	11	43	48
			Upper middle income	18	69	70
			Higher income	20	27	30
			Global	49	49	53
Fig 2-4	R2	Pre-primary	Low or low middle income	14	44	47
			Upper middle income	19	22	21
			Higher income	14	21	22
			Global	47	35	35
Fig 2-4	R2	Primary	Low or low middle income	19	54	56
			Upper middle income	20	22	22
			Higher income	21	31	34
			Global	60	42	41
Fig 2-4	R2	Lower Secondary	Low or low middle income	18	53	57
			Upper middle income	20	24	23
			Higher income	21	31	34
			Global	59	41	41
Fig 2-4	R2	Upper Secondary (General Education)	Low or low middle income	18	53	57
			Upper middle income	20	24	23
			Higher income	22	31	34
			Global	60	41	41
Fig 2-4	R2	Upper Secondary (Vocational Education)	Low or low middle income	17	52	56
			Upper middle income	15	19	19
			Higher income	20	30	33
			Global	52	39	39
Fig 2-5	R2	Pre-primary	Low or low middle income	17	50	55
			Upper middle income	17	63	64
			Higher income	21	45	45
			Global	55	54	57

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 2-5	R2	Primary	Low or low middle income	21	58	62
			Upper middle income	22	65	65
			Higher income	29	74	75
			Global	72	62	65
Fig 2-5	R2	Lower Secondary	Low or low middle income	21	58	62
			Upper middle income	21	63	64
			Higher income	30	74	75
			Global	72	61	65
Fig 2-5	R2	Upper Secondary (General Education)	Low or low middle income	21	58	62
			Upper middle income	21	63	64
			Higher income	29	68	69
			Global	71	61	64
Fig 2-5	R2	Upper Secondary (Vocational Education)	Low or low middle income	20	51	56
			Upper middle income	19	60	60
			Higher income	26	40	43
			Global	65	53	56
3. PRIORITIZE TEACHING THE FUNDAMENTALS						
Fig 3-1	R3 2022	Pre-primary	Low or low middle income	20	53	57
			Upper middle income	21	25	24
			Higher income	24	70	72
			Global	65	46	47
Fig 3-1	R3 2023	Pre-primary	Low or low middle income	20	59	61
			Upper middle income	19	22	21
			Higher income	23	68	70
			Global	62	48	48
Fig 3-1	R3 2022	Primary to Upper Secondary	Low or low middle income	23	61	63
			Upper middle income	27	75	77
			Higher income	32	81	84
			Global	82	68	71
Fig 3-1	R3 2023	Primary to Upper Secondary	Low or low middle income	20	58	62
			Upper middle income	24	68	68
			Higher income	27	71	73
			Global	71	63	66
Fig 3-2	R3 2022	Pre-primary	Low or low middle income	9	39	43
			Upper middle income	11	19	18
			Higher income	3	2	2
			Global	23	29	28
Fig 3-2	R3 2023	Pre-primary	Low or low middle income	9	39	43
			Upper middle income	7	8	6
			Higher income	3	1	1
			Global	19	25	24

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 3-2	R3 2022	Primary to Upper Secondary	Low or low middle income	16	56	59
			Upper middle income	17	25	25
			Higher income	9	18	19
			Global	42	42	42
Fig 3-2	R3 2023	Primary to Upper Secondary	Low or low middle income	12	47	52
			Upper middle income	10	10	8
			Higher income	4	1	1
			Global	26	30	30
4. INCREASE THE EFFICIENCY OF INSTRUCTION, INCLUDING THROUGH CATCH-UP LEARNING						
Fig 4-1	R1	Pre-primary	Low or low middle income	22	54	55
			Upper middle income	24	65	66
			Higher income	34	50	54
			Global	80	57	59
Fig 4-1	R1	Primary	Low or low middle income	24	55	58
			Upper middle income	26	73	74
			Higher income	35	81	83
			Global	85	63	67
Fig 4-1	R1	Lower Secondary	Low or low middle income	24	55	58
			Upper middle income	26	73	74
			Higher income	35	81	83
			Global	85	63	67
Fig 4-1	R1	Upper Secondary (General Education)	Low or low middle income	23	54	58
			Upper middle income	25	65	66
			Higher income	35	81	83
			Global	83	60	64
Fig 4-1	R1	Upper Secondary (Vocational Education)	Low or low middle income	22	53	57
			Upper middle income	22	64	65
			Higher income	31	49	53
			Global	75	56	59
Fig 4-2	R3 Accelerated education programmes (programmes covering instructional content i	Pre-primary	Low or low middle income	22	27	26
			Upper middle income	19	23	23
			Higher income	27	62	64
			Global	68	30	30
Fig 4-2	R3 Accelerated education programmes (programmes covering instructional content i	Primary to Upper Secondary	Low or low middle income	22	27	26
			Upper middle income	24	75	77
			Higher income	31	70	72
			Global	77	47	50
Fig 4-2	R3 Individualized self-learning programmes (computer-assisted or pencil-and-pape	Pre-primary	Low or low middle income	21	21	20
			Upper middle income	19	26	25
			Higher income	23	55	56
			Global	63	26	27

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 4-2	R3 Individualized self-learning programmes (computer-assisted or pencil-and-pape	Primary to Upper Secondary	Low or low middle income	22	21	21
			Upper middle income	26	75	77
			Higher income	31	72	74
			Global	79	43	48
Fig 4-2	R3 Increased instruction time (e.g. through summer schools, extended school day,	Pre-primary	Low or low middle income	21	58	63
			Upper middle income	21	27	26
			Higher income	27	71	73
			Global	69	50	51
Fig 4-2	R3 Increased instruction time (e.g. through summer schools, extended school day,	Primary to Upper Secondary	Low or low middle income	24	55	58
			Upper middle income	25	74	75
			Higher income	33	81	84
			Global	82	64	68
Fig 4-2	R3 Tutoring programmes (in person or remote) or financial support for tutoring	Pre-primary	Low or low middle income	22	27	26
			Upper middle income	21	25	24
			Higher income	28	70	72
			Global	71	31	32
Fig 4-2	R3 Tutoring programmes (in person or remote) or financial support for tutoring	Primary to Upper Secondary	Low or low middle income	23	28	26
			Upper middle income	27	76	77
			Higher income	33	73	75
			Global	83	47	51
Fig 4-2	R3 Targeted instruction to students' level by grouping students according to pro	Pre-primary	Low or low middle income	21	21	21
			Upper middle income	21	27	26
			Higher income	25	68	70
			Global	67	28	29
Fig 4-2	R3 Targeted instruction to students' level by grouping students according to pro	Primary to Upper Secondary	Low or low middle income	21	21	21
			Upper middle income	27	76	77
			Higher income	28	62	65
			Global	76	42	47
Fig 4-3	R3 2022	Pre-primary	Low or low middle income	21	58	63
			Upper middle income	21	27	26
			Higher income	27	71	73
			Global	69	50	51
Fig 4-3	R3 2023	Pre-primary	Low or low middle income	20	52	56
			Upper middle income	19	25	24
			Higher income	25	69	71
			Global	64	45	47
Fig 4-3	R3 2022	Primary to Upper Secondary	Low or low middle income	24	55	58
			Upper middle income	25	74	75
			Higher income	33	81	84
			Global	82	64	68

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 4-3	R3 2023	Primary to Upper Secondary	Low or low middle income	22	53	56
			Upper middle income	21	67	67
			Higher income	28	70	73
			Global	71	59	62
Fig 4-4	R3 2022 Structured pedagogy (e.g. programmes to improve instruction with teacher	Pre-primary	Low or low middle income	23	28	27
			Upper middle income	20	66	66
			Higher income	27	72	74
			Global	70	44	47
Fig 4-4	R3 2023 Structured pedagogy (e.g. programmes to improve instruction with teacher	Pre-primary	Low or low middle income	20	20	19
			Upper middle income	17	55	55
			Higher income	25	61	62
			Global	62	35	38
Fig 4-4	R3 2022 Structured pedagogy (e.g. programmes to improve instruction with teacher	Primary to Upper Secondary	Low or low middle income	24	28	27
			Upper middle income	24	72	73
			Higher income	31	77	80
			Global	79	47	50
Fig 4-4	R3 2023 Structured pedagogy (e.g. programmes to improve instruction with teacher	Primary to Upper Secondary	Low or low middle income	21	20	20
			Upper middle income	19	57	56
			Higher income	30	66	68
			Global	70	37	39
Fig 4-5	D1 Pre-Service	Pre-primary	Low or low middle income	17	47	51
			Upper middle income	19	63	63
			Higher income	24	56	57
			Global	60	53	57
Fig 4-5	D1 In-Service	Pre-primary	Low or low middle income	18	50	55
			Upper middle income	22	65	66
			Higher income	29	66	67
			Global	69	57	60
Fig 4-5	D1 Pre-Service	Primary	Low or low middle income	20	49	53
			Upper middle income	22	65	66
			Higher income	30	71	74
			Global	72	57	60
Fig 4-5	D1 In-Service	Primary	Low or low middle income	21	52	56
			Upper middle income	24	66	66
			Higher income	34	80	83
			Global	79	59	63
Fig 4-5	D1 Pre-Service	Lower Secondary	Low or low middle income	20	49	53
			Upper middle income	20	61	62
			Higher income	30	71	74
			Global	70	55	59

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 4-5	D1 In-Service	Lower Secondary	Low or low middle income	21	52	56
			Upper middle income	23	64	65
			Higher income	34	80	83
			Global	78	59	63
Fig 4-5	D1 Pre-Service	Upper Secondary and General Education	Low or low middle income	20	49	53
			Upper middle income	20	62	63
			Higher income	30	71	74
			Global	70	55	59
Fig 4-5	D1 In-Service	Upper Secondary and General Education	Low or low middle income	20	52	56
			Upper middle income	23	64	65
			Higher income	33	80	83
			Global	76	59	63
Fig 4-5	D1 Pre-Service	Upper Secondary and Vocational Education	Low or low middle income	20	49	53
			Upper middle income	18	61	61
			Higher income	25	38	41
			Global	63	51	54
Fig 4-5	D1 In-Service	Upper Secondary and Vocational Education	Low or low middle income	20	52	56
			Upper middle income	20	61	61
			Higher income	30	49	53
			Global	70	54	57
Fig 4-6	C5 A pre-existing pool of teachers was used to replace absent teachers	Pre-primary (Before)	Low or low middle income	19	53	56
			Upper middle income	23	19	17
			Higher income	29	62	64
			Global	71	43	43
Fig 4-6	C5 A pre-existing pool of teachers was used to replace absent teachers	Primary (Before)	Low or low middle income	19	53	56
			Upper middle income	22	17	16
			Higher income	32	64	67
			Global	73	43	43
Fig 4-6	C5 A pre-existing pool of teachers was used to replace absent teachers	Lower Secondary (Before)	Low or low middle income	19	53	56
			Upper middle income	22	17	16
			Higher income	30	64	66
			Global	71	43	43
Fig 4-6	C5 A pre-existing pool of teachers was used to replace absent teachers	Pre-primary (During)	Low or low middle income	18	53	56
			Upper middle income	20	15	13
			Higher income	30	62	64
			Global	68	42	42
Fig 4-6	C5 A pre-existing pool of teachers was used to replace absent teachers	Primary (During)	Low or low middle income	19	53	56
			Upper middle income	23	19	17
			Higher income	32	64	67
			Global	74	43	44

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 4-6	C5 A pre-existing pool of teachers was used to replace absent teachers	Lower Secondary (During)	Low or low middle income	19	53	56
			Upper middle income	23	19	17
			Higher income	30	64	66
			Global	72	43	44
Fig 4-6	C5 A pre-existing pool of teachers was used to replace absent teachers	Pre-primary (After)	Low or low middle income	19	53	56
			Upper middle income	21	17	16
			Higher income	28	62	64
			Global	68	43	43
Fig 4-6	C5 A pre-existing pool of teachers was used to replace absent teachers	Primary (After)	Low or low middle income	19	53	56
			Upper middle income	22	17	16
			Higher income	31	64	67
			Global	72	43	43
Fig 4-6	C5 A pre-existing pool of teachers was used to replace absent teachers	Lower Secondary (After)	Low or low middle income	19	53	56
			Upper middle income	22	17	16
			Higher income	29	64	66
			Global	70	43	43
Fig 4-6	C5 A pool of temporary teachers was created to replace absent teachers	Pre-primary (Before)	Low or low middle income	0	.	.
			Upper middle income	1	0	0
			Higher income	1	0	0
			Global	2	0	0
Fig 4-6	C5 A pool of temporary teachers was created to replace absent teachers	Primary (Before)	Low or low middle income	0	.	.
			Upper middle income	1	0	0
			Higher income	1	0	0
			Global	2	0	0
Fig 4-6	C5 A pool of temporary teachers was created to replace absent teachers	Lower Secondary (Before)	Low or low middle income	0	.	.
			Upper middle income	1	0	0
			Higher income	1	0	0
			Global	2	0	0
Fig 4-6	C5 A pool of temporary teachers was created to replace absent teachers	Pre-primary (During)	Low or low middle income	17	51	55
			Upper middle income	21	22	21
			Higher income	30	62	64
			Global	68	43	44
Fig 4-6	C5 A pool of temporary teachers was created to replace absent teachers	Primary (During)	Low or low middle income	16	51	55
			Upper middle income	23	23	22
			Higher income	31	63	65
			Global	70	44	44
Fig 4-6	C5 A pool of temporary teachers was created to replace absent teachers	Lower Secondary (During)	Low or low middle income	16	51	55
			Upper middle income	23	23	22
			Higher income	30	63	65
			Global	69	44	44

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 4-6	C5 A pool of temporary teachers was created to replace absent teachers	Pre-primary (After)	Low or low middle income	16	18	18
			Upper middle income	19	14	12
			Higher income	28	62	64
			Global	63	21	22
Fig 4-6	C5 A pool of temporary teachers was created to replace absent teachers	Primary (After)	Low or low middle income	15	18	18
			Upper middle income	21	16	15
			Higher income	29	63	64
			Global	65	22	23
Fig 4-6	C5 A pool of temporary teachers was created to replace absent teachers	Lower Secondary (After)	Low or low middle income	15	50	53
			Upper middle income	21	16	15
			Higher income	28	63	64
			Global	64	41	41
Fig 4-6	C5 Students were assigned to other classes when a teacher was absent	Pre-primary (Before)	Low or low middle income	18	52	55
			Upper middle income	21	16	15
			Higher income	31	63	65
			Global	70	42	42
Fig 4-6	C5 Students were assigned to other classes when a teacher was absent	Primary (Before)	Low or low middle income	18	52	55
			Upper middle income	21	15	14
			Higher income	32	64	66
			Global	71	42	42
Fig 4-6	C5 Students were assigned to other classes when a teacher was absent	Lower Secondary (Before)	Low or low middle income	18	52	55
			Upper middle income	21	15	14
			Higher income	31	64	66
			Global	70	42	42
Fig 4-6	C5 Students were assigned to other classes when a teacher was absent	Pre-primary (During)	Low or low middle income	17	52	55
			Upper middle income	19	12	11
			Higher income	32	63	65
			Global	68	41	41
Fig 4-6	C5 Students were assigned to other classes when a teacher was absent	Primary (During)	Low or low middle income	18	52	55
			Upper middle income	22	17	15
			Higher income	33	64	67
			Global	73	42	42
Fig 4-6	C5 Students were assigned to other classes when a teacher was absent	Lower Secondary (During)	Low or low middle income	18	52	55
			Upper middle income	22	17	15
			Higher income	32	64	67
			Global	72	42	42
Fig 4-6	C5 Students were assigned to other classes when a teacher was absent	Pre-primary (After)	Low or low middle income	18	52	55
			Upper middle income	19	12	11
			Higher income	30	63	65
			Global	67	41	41

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 4-6	C5 Students were assigned to other classes when a teacher was absent	Primary (After)	Low or low middle income	18	52	55
			Upper middle income	21	15	14
			Higher income	31	64	66
			Global	70	42	42
Fig 4-6	C5 Students were assigned to other classes when a teacher was absent	Lower Secondary (After)	Low or low middle income	17	50	54
			Upper middle income	21	15	14
			Higher income	30	64	66
			Global	68	41	41
Fig 4-6	C5 Students were supervised by non-teaching staff at school	Pre-primary (Before)	Low or low middle income	17	49	52
			Upper middle income	21	16	15
			Higher income	30	60	61
			Global	68	40	40
Fig 4-6	C5 Students were supervised by non-teaching staff at school	Primary (Before)	Low or low middle income	17	49	52
			Upper middle income	21	15	14
			Higher income	31	61	63
			Global	69	40	40
Fig 4-6	C5 Students were supervised by non-teaching staff at school	Lower Secondary (Before)	Low or low middle income	17	49	52
			Upper middle income	21	15	14
			Higher income	29	61	63
			Global	67	40	40
Fig 4-6	C5 Students were supervised by non-teaching staff at school	Pre-primary (During)	Low or low middle income	16	49	52
			Upper middle income	20	15	14
			Higher income	30	60	61
			Global	66	40	40
Fig 4-6	C5 Students were supervised by non-teaching staff at school	Primary (During)	Low or low middle income	17	49	52
			Upper middle income	22	17	15
			Higher income	31	61	63
			Global	70	40	40
Fig 4-6	C5 Students were supervised by non-teaching staff at school	Lower Secondary (During)	Low or low middle income	17	49	52
			Upper middle income	22	17	15
			Higher income	30	61	63
			Global	69	40	40
Fig 4-6	C5 Students were supervised by non-teaching staff at school	Pre-primary (After)	Low or low middle income	17	49	52
			Upper middle income	20	15	14
			Higher income	29	60	61
			Global	66	40	40
Fig 4-6	C5 Students were supervised by non-teaching staff at school	Primary (After)	Low or low middle income	17	49	52
			Upper middle income	21	15	14
			Higher income	30	61	63
			Global	68	40	40

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 4-6	C5 Students were supervised by non-teaching staff at school	Lower Secondary (After)	Low or low middle income	16	47	51
			Upper middle income	21	15	14
			Higher income	29	61	63
			Global	66	39	39
Fig 4-6	C5 Classes with absent teachers were closed (i.e. students stayed home)	Pre-primary (Before)	Low or low middle income	18	52	55
			Upper middle income	21	16	15
			Higher income	30	62	64
			Global	69	42	42
Fig 4-6	C5 Classes with absent teachers were closed (i.e. students stayed home)	Primary (Before)	Low or low middle income	18	52	55
			Upper middle income	21	16	14
			Higher income	31	64	66
			Global	70	42	42
Fig 4-6	C5 Classes with absent teachers were closed (i.e. students stayed home)	Lower Secondary (Before)	Low or low middle income	18	52	55
			Upper middle income	21	15	14
			Higher income	29	64	66
			Global	68	42	42
Fig 4-6	C5 Classes with absent teachers were closed (i.e. students stayed home)	Pre-primary (During)	Low or low middle income	17	52	55
			Upper middle income	20	15	14
			Higher income	31	63	64
			Global	68	42	42
Fig 4-6	C5 Classes with absent teachers were closed (i.e. students stayed home)	Primary (During)	Low or low middle income	18	52	55
			Upper middle income	20	14	13
			Higher income	32	64	66
			Global	70	42	42
Fig 4-6	C5 Classes with absent teachers were closed (i.e. students stayed home)	Lower Secondary (During)	Low or low middle income	18	52	55
			Upper middle income	22	17	15
			Higher income	31	64	66
			Global	71	42	42
Fig 4-6	C5 Classes with absent teachers were closed (i.e. students stayed home)	Pre-primary (After)	Low or low middle income	18	52	55
			Upper middle income	20	15	14
			Higher income	29	62	64
			Global	67	42	42
Fig 4-6	C5 Classes with absent teachers were closed (i.e. students stayed home)	Primary (After)	Low or low middle income	18	52	55
			Upper middle income	20	14	13
			Higher income	30	64	66
			Global	68	42	42
Fig 4-6	C5 Classes with absent teachers were closed (i.e. students stayed home)	Lower Secondary (After)	Low or low middle income	17	50	54
			Upper middle income	21	15	14
			Higher income	29	64	66
			Global	67	41	41

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
5. DEVELOP PSYCHOSOCIAL HEALTH AND WELLBEING						
Fig 5-1	R3 Psychosocial and mental health support to students (e.g. counseling)	Pre-primary	Low or low middle income	23	60	63
			Upper middle income	21	27	26
			Higher income	27	70	72
			Global	71	51	51
Fig 5-1	R3 Psychosocial and mental health support to students (e.g. counseling)	Primary to Upper Secondary	Low or low middle income	24	61	64
			Upper middle income	25	74	75
			Higher income	33	81	84
			Global	82	67	70
Fig 5-1	R3 Referral systems for students in need of specialized services	Pre-primary	Low or low middle income	22	27	26
			Upper middle income	22	68	69
			Higher income	29	68	71
			Global	73	44	48
Fig 5-1	R3 Referral systems for students in need of specialized services	Primary to Upper Secondary	Low or low middle income	23	28	27
			Upper middle income	23	74	75
			Higher income	31	78	81
			Global	77	48	51
Fig 5-1	R3 Recruitment of specific personnel to support students' mental health and well	Pre-primary	Low or low middle income	20	26	26
			Upper middle income	22	20	19
			Higher income	21	57	59
			Global	63	28	28
Fig 5-1	R3 Recruitment of specific personnel to support students' mental health and well	Primary to Upper Secondary	Low or low middle income	21	27	26
			Upper middle income	24	66	67
			Higher income	27	68	70
			Global	72	44	47
Fig 5-1	R3 Teacher training in how to support students' mental health and wellbeing	Pre-primary	Low or low middle income	23	59	62
			Upper middle income	22	68	68
			Higher income	30	75	78
			Global	75	63	66
Fig 5-1	R3 Teacher training in how to support students' mental health and wellbeing	Primary to Upper Secondary	Low or low middle income	24	60	63
			Upper middle income	23	72	73
			Higher income	33	77	80
			Global	80	65	69
Fig 5-1	R3 Psychosocial support to teachers to support their wellbeing (training, peer s	Pre-primary	Low or low middle income	23	28	27
			Upper middle income	22	68	69
			Higher income	27	61	63
			Global	72	44	47
Fig 5-1	R3 Psychosocial support to teachers to support their wellbeing (training, peer s	Primary to Upper Secondary	Low or low middle income	24	28	27
			Upper middle income	24	74	75
			Higher income	30	63	66
			Global	78	46	49

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 5-2	R3 Psychosocial and mental health support to students (e.g. counseling)	Pre-primary	Low or low middle income	20	59	62
			Upper middle income	19	24	23
			Higher income	26	64	66
			Global	65	49	48
Fig 5-2	R3 Psychosocial and mental health support to students (e.g. counseling)	Primary to Upper Secondary	Low or low middle income	21	60	62
			Upper middle income	22	67	67
			Higher income	27	63	65
			Global	70	62	64
Fig 5-2	R3 Referral systems for students in need of specialized services	Pre-primary	Low or low middle income	20	26	25
			Upper middle income	19	59	59
			Higher income	25	57	58
			Global	64	39	41
Fig 5-2	R3 Referral systems for students in need of specialized services	Primary to Upper Secondary	Low or low middle income	21	27	25
			Upper middle income	20	59	59
			Higher income	27	66	68
			Global	68	41	43
Fig 5-2	R3 Recruitment of specific personnel to support students' mental health and well	Pre-primary	Low or low middle income	18	25	25
			Upper middle income	18	17	16
			Higher income	21	53	54
			Global	57	26	25
Fig 5-2	R3 Recruitment of specific personnel to support students' mental health and well	Primary to Upper Secondary	Low or low middle income	18	26	25
			Upper middle income	19	17	16
			Higher income	23	54	56
			Global	60	26	26
Fig 5-2	R3 Teacher training in how to support students' mental health and wellbeing	Pre-primary	Low or low middle income	19	51	55
			Upper middle income	17	54	54
			Higher income	26	61	63
			Global	62	53	55
Fig 5-2	R3 Teacher training in how to support students' mental health and wellbeing	Primary to Upper Secondary	Low or low middle income	20	52	55
			Upper middle income	20	58	58
			Higher income	29	63	65
			Global	69	55	57
Fig 5-2	R3 Psychosocial support to teachers to support their wellbeing (training, peer s	Pre-primary	Low or low middle income	20	26	25
			Upper middle income	18	59	59
			Higher income	24	51	52
			Global	62	39	41
Fig 5-2	R3 Psychosocial support to teachers to support their wellbeing (training, peer s	Primary to Upper Secondary	Low or low middle income	21	27	25
			Upper middle income	19	59	59
			Higher income	27	53	54
			Global	67	39	41

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 5-3	R3 (2022) Strengthened / provided additional WASH services	Pre-primary	Low or low middle income	22	21	21
			Upper middle income	23	68	68
			Higher income	31	65	66
			Global	76	40	44
Fig 5-3	R3 (2023) Strengthened / provided additional WASH services	Pre-primary	Low or low middle income	20	20	19
			Upper middle income	19	65	65
			Higher income	22	49	49
			Global	61	37	40
Fig 5-3	R3 (2022) Strengthened / provided additional WASH services	Primary to Upper Secondary	Low or low middle income	23	22	21
			Upper middle income	25	74	75
			Higher income	34	70	71
			Global	82	43	47
Fig 5-3	R3 (2023) Strengthened / provided additional WASH services	Primary to Upper Secondary	Low or low middle income	21	20	20
			Upper middle income	21	66	66
			Higher income	24	51	51
			Global	66	38	41
Fig 5-4	R3 (2022) Strengthened / provided additional school nutrition services	Pre-primary	Low or low middle income	22	60	63
			Upper middle income	22	66	67
			Higher income	24	54	55
			Global	68	62	63
Fig 5-4	R3 (2023) Strengthened / provided additional school nutrition services	Pre-primary	Low or low middle income	18	52	55
			Upper middle income	19	63	64
			Higher income	22	52	53
			Global	59	56	58
Fig 5-4	R3 (2022) Strengthened / provided additional school nutrition services	Primary to Upper Secondary	Low or low middle income	22	60	63
			Upper middle income	24	72	73
			Higher income	27	56	57
			Global	73	64	66
Fig 5-4	R3 (2023) Strengthened / provided additional school nutrition services	Primary to Upper Secondary	Low or low middle income	19	53	56
			Upper middle income	21	65	65
			Higher income	24	54	55
			Global	64	56	59
6. EDUCATION FINANCING						
Fig 6-1	F1	Pre-primary	Low or low middle income	17	57	61
			Upper middle income	22	63	64
			Higher income	28	34	38
			Global	67	57	59
Fig 6-1	F1	Primary to Upper Secondary	Low or low middle income	18	58	61
			Upper middle income	23	63	64
			Higher income	34	70	73
			Global	75	61	64

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 6-2	F2 2021	Pre-primary	Low or low middle income	23	60	63
			Upper middle income	22	24	23
			Higher income	36	81	83
			Global	81	51	52
Fig 6-2	F2 2022	Pre-primary	Low or low middle income	23	60	63
			Upper middle income	20	23	22
			Higher income	36	81	83
			Global	79	51	51
Fig 6-2	F2 2021	Primary to Upper Secondary	Low or low middle income	23	60	63
			Upper middle income	22	24	23
			Higher income	36	81	83
			Global	81	51	52
Fig 6-2	F2 2022	Primary to Upper Secondary	Low or low middle income	23	60	63
			Upper middle income	20	23	22
			Higher income	36	81	83
			Global	79	51	51
Fig 6-3	F3 2021 Additional professional development activities for teachers	Pre-primary	Low or low middle income	23	60	62
			Upper middle income	21	58	58
			Higher income	33	81	83
			Global	77	61	63
Fig 6-3	F3 2022 Additional professional development activities for teachers	Pre-primary	Low or low middle income	21	52	56
			Upper middle income	19	57	56
			Higher income	32	75	77
			Global	72	56	59
Fig 6-3	F3 2021 Additional professional development activities for teachers	Primary to Upper Secondary	Low or low middle income	22	53	57
			Upper middle income	25	66	66
			Higher income	34	81	83
			Global	81	60	64
Fig 6-3	F3 2022 Additional professional development activities for teachers	Primary to Upper Secondary	Low or low middle income	22	53	57
			Upper middle income	20	59	59
			Higher income	34	81	83
			Global	76	58	61
Fig 6-3	F3 2021 Purchasing new technologies for distance learning of students	Pre-primary	Low or low middle income	23	60	62
			Upper middle income	19	16	14
			Higher income	34	81	83
			Global	76	48	48
Fig 6-3	F3 2022 Purchasing new technologies for distance learning of students	Pre-primary	Low or low middle income	21	52	56
			Upper middle income	17	14	13
			Higher income	33	75	77
			Global	71	43	43

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 6-3	F3 2021 Purchasing new technologies for distance learning of students	Primary to Upper Secondary	Low or low middle income	23	60	62
			Upper middle income	22	64	65
			Higher income	36	81	83
			Global	81	63	66
Fig 6-3	F3 2022 Purchasing new technologies for distance learning of students	Primary to Upper Secondary	Low or low middle income	22	59	62
			Upper middle income	19	58	58
			Higher income	36	81	83
			Global	77	61	63
Fig 6-3	F3 2021 Purchasing new technologies for distance learning of students	Pre-primary	Low or low middle income	22	59	62
			Upper middle income	20	16	14
			Higher income	34	81	83
			Global	76	48	48
Fig 6-3	F3 2022 Purchasing new technologies for distance learning of students	Pre-primary	Low or low middle income	20	52	55
			Upper middle income	18	15	13
			Higher income	33	75	77
			Global	71	43	43
Fig 6-3	F3 2021 Purchasing new technologies for distance learning of students	Primary to Upper Secondary	Low or low middle income	22	59	62
			Upper middle income	23	64	65
			Higher income	36	81	83
			Global	81	63	66
Fig 6-3	F3 2022 Purchasing new technologies for distance learning of students	Primary to Upper Secondary	Low or low middle income	21	58	61
			Upper middle income	20	59	59
			Higher income	36	81	83
			Global	77	61	63
Fig 6-3	F3 2021 Deployment of new technological devices or investment in infrastructure	Pre-primary	Low or low middle income	23	60	62
			Upper middle income	21	16	15
			Higher income	34	81	83
			Global	78	48	48
Fig 6-3	F3 2022 Deployment of new technological devices or investment in infrastructure	Pre-primary	Low or low middle income	21	52	56
			Upper middle income	19	15	13
			Higher income	33	75	77
			Global	73	43	43
Fig 6-3	F3 2021 Deployment of new technological devices or investment in infrastructure	Primary to Upper Secondary	Low or low middle income	23	60	62
			Upper middle income	24	65	65
			Higher income	36	81	83
			Global	83	63	66
Fig 6-3	F3 2022 Deployment of new technological devices or investment in infrastructure	Primary to Upper Secondary	Low or low middle income	22	59	62
			Upper middle income	22	59	59
			Higher income	36	81	83
			Global	80	61	63

FIGURE	QUESTION	EDUCATION LEVEL	INCOME LEVEL	NUMBER OF COUNTRIES WITH VALID RESPONSES	POPULATION COVERAGE (PER CENT OF TOTAL POPULATION AGED 4–17)	ENROLMENT COVERAGE (PER CENT OF ENROLMENT)
Fig 6-3	F3 2021 Other	Pre-primary	Low or low middle income	1	1	0
			Upper middle income	2	2	2
			Higher income	6	5	5
			Global	9	2	1
Fig 6-3	F3 2022 Other	Pre-primary	Low or low middle income	1	1	0
			Upper middle income	2	2	2
			Higher income	6	5	5
			Global	9	2	1
Fig 6-3	F3 2021 Other	Primary to Upper Secondary	Low or low middle income	1	1	0
			Upper middle income	2	2	2
			Higher income	6	5	5
			Global	9	2	1
Fig 6-3	F3 2022 Other	Primary to Upper Secondary	Low or low middle income	1	1	0
			Upper middle income	2	2	2
			Higher income	6	5	5
			Global	9	2	1

FROM LEARNING RECOVERY TO EDUCATION TRANSFORMATION

Insights and Reflections from the 4th Survey on National Education Responses to COVID-19 School Closures

SEPTEMBER 2022

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