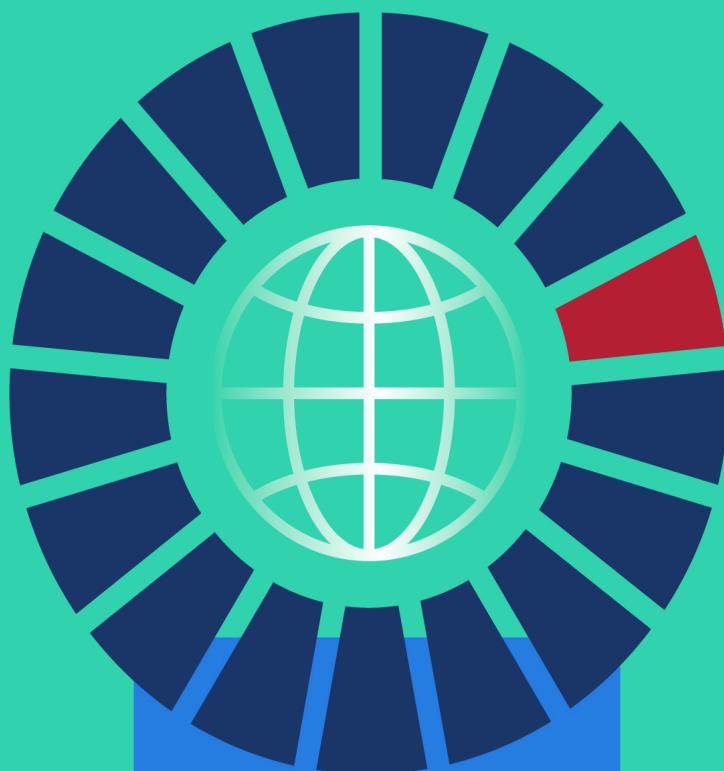




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Institute for Statistics



July 2021

Monitoring GEM Commitments Using the Joint Survey of National Education Responses to COVID-19

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Published in 2021 by:

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Ref: UIS/2021/LO/IP/69
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Monitoring GEM Commitments Using the Joint Survey of National Education Responses to COVID-19

Background

Linking global, regional and country level support for education and development is essential to harmonize policy guidance and financing following the COVID-19 pandemic. This linking requires a coherent and coordinated governance mechanism. However, the current global education landscape is characterized by a proliferation of fragmented education and development efforts. Currently, a range of international and regional players – with sometimes overlapping mandates and interventions – are tasked with the provision of support to countries through multiple platforms and processes.

This report provides a brief analysis on where we stand in our [global education meeting \(GEM\) commitments](#) based on data collected by the UNESCO Institute for Statistics (UIS) from national government websites and publications, and the Survey on National Education Responses to COVID-19 School Closures. The latter is conducted jointly by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank Group and, most recent, the Organisation for Economic Co-operation and Development (OECD). The survey has undergone three iterations thus far: 118 countries completed the first round between May and June 2020; 149 countries completed the second round between July and October 2020; and 143 country responses were received in the third round of the survey between February and May 2021. For the analysis provided in this report, the percentage of school-age population (SAP) covered by the responses is combined with the percentage of countries throughout the analysis, when applicable. The analysis is also disaggregated by country income group.

Annex I relates the questions asked in each iteration of the joint survey to the GEM commitments analyzed in this document. Although key insights can be gleaned from the Joint Survey of National Education Responses to COVID-19, there are methodological challenges that come into play when using these data to monitor GEM commitments (see **Annex II**).

GEM commitment 7.1 on financing education

"Increase or maintain the share of public expenditure on education towards the international benchmarks of at least 4-6% of Gross Domestic Product (GDP) and/or 15-20% of public expenditure"

The UIS collected government expenditure¹ on education and total government expenditure data for 2020 and 2021, mining data publicly available from national governments or any other sources available. Data presented here are based on current prices of local currencies and in constant prices by using the Inflation rate published by the World Bank Group.

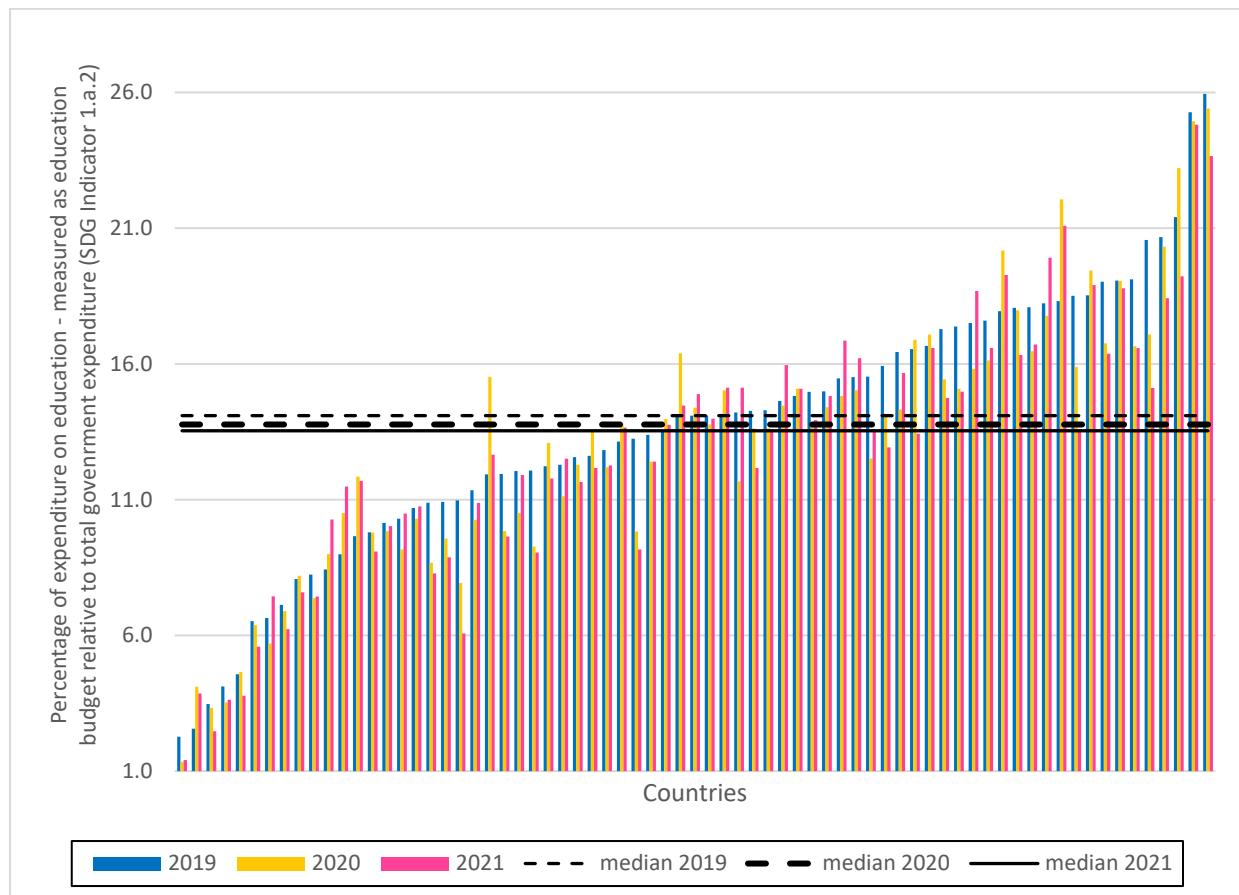
¹ Expenditure related data are disseminated as reports, (e.g., economic reports or simply economic status) were presented in table format and publicized through webpages or web portals or as PDFs. Such reports/tables include information on total Gross Domestic Product (GDP), revenue by sectors, government spending by sectors, etc. Carefully looking at such reports and information, it is possible to compile data on total government expenditure and government expenditure on education to calculate international education finance benchmark indicators. Some countries also publish total government expenditure on education on their ministry of education's website or in national education sector analysis reports.

The global SDG Indicator 1.a.2 is defined as the "*proportion of government spending on essential services (education, health and social protection)*." To extrapolate the portion for education, it was estimated with the data collected by applying the following formula:

$$\text{Government expenditure on education as a percentage of total government expenditure (SDG Indicator 1.a.2)} = \frac{\text{Government expenditure on education}}{\text{Total government expenditure}}$$

Globally, the median share of government expenditure on education (measured using the education budget) as a proportion of total government expenditure (Indicator 1.a.2) declined between 2019 and 2020 and again between 2020 and 2021 as shown in **Figure 1.**² Budget was used as a proxy for expenditure as the data on expenditure was unavailable at the time.

Figure 1:Government expenditure on education (SDG Indicator 1.a.2) across all countries, 2019–2021

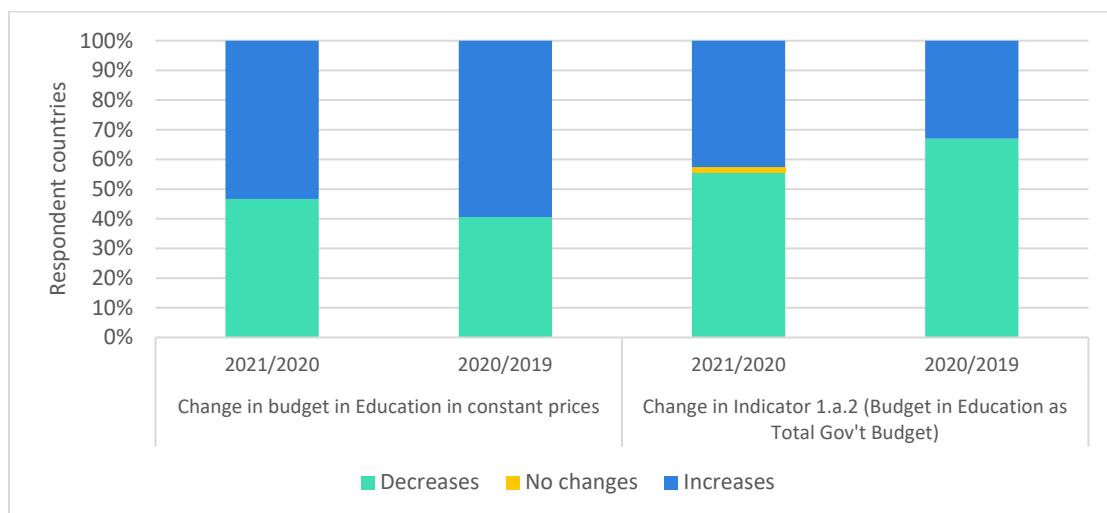


² The change in the share of government expenditure on education to total government expenditure (Indicator 1.a.2) is measured by the median of the variations. The 'median' is the middle number value separating the higher half from the lower half of a data sample.

However, from the more than 100 countries whose budgets have been mapped (and that cover around three-quarters of the school-age population), it is clear from **Figure 2** that most countries increased expenditure on education in constant prices. Thus, the decrease seen in Indicator 1.a.2 means that expenditure in other areas (such as support to economic activities, employment and health related to COVID-19) have been increasing at a faster pace.

Overall, government spending on education as a proportion of total government spending (Indicator 1.a.2) decreased in 59 countries, increased in 47 countries and remained the same in 5 countries. In other words, most governments spent less on education with respect to total government expenditure in 2021 than in 2020 though with a slight uptick with respect to the previous period (2020/2019).

Figure 2: Budget on education as a proportion of total government budget, 2019–2021



According to a recent analysis in a G20 Education working group report³, stimulus packages announced by G20 countries could provide substantial inflow of funds into education. However, the data collected by UNESCO, as of April 2021, showed that on average, 3.18% of the analyzed stimulus packages (9/10 of the global total) went to education, which is relatively low – lower than public expenditure on education as a proportion of gross domestic product (GDP), according to the mapping on total budget and budget in education. Only a handful of high-income countries spent more than the average, and there was no obvious correlation between total per capita spending and per capita spending on education.

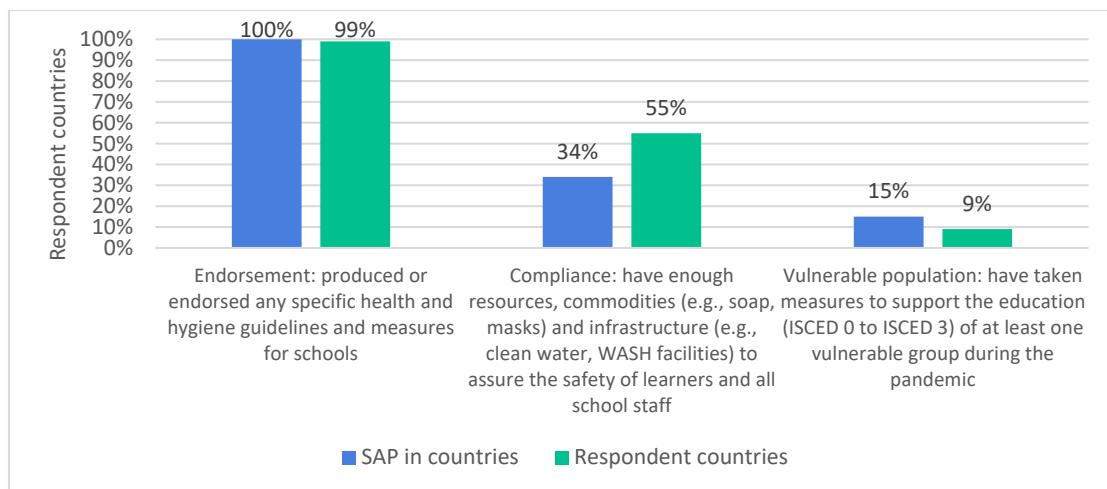
³ G20 Italian Presidency (2021), Education Working Group - Report on blended education and educational poverty G20.

GEM commitment 8.1 on safely reopening schools

"Safely reopen educational institutions based on scientific evidence and considering local contexts; These measures should be adequately funded at all levels and prepare education institutions to continue service provision when normal school opening is disrupted, strengthening and restoring access to services such as school meals, health, WASH, social protection; prioritizing the health and safety of students and educators through closer inter-sectoral collaboration; ensuring that re-opening plans are equity-oriented, gender-responsive, inclusive and targeted."

Safely reopening educational institutions requires minimizing disease transmission in schools. Related questions were included in the third and second iterations of the joint survey. In the third and latest survey iteration, almost all countries confirmed that their ministries of education endorsed specific health and hygiene guidelines and measures for schools; almost all of the school-age population in the surveyed countries was covered (**Figure 3**). However, in reality, only 55% of country respondents in the third iteration reported that they had adequate resources (e.g., soap, masks etc.) and infrastructure (e.g., clean water, WASH facilities) to assure the safety of learners and all school staff. The global average of countries with sufficient resources to ensure safety and hygiene was higher at 61% in the second iteration of the survey.

Figure 3: Endorsement of versus compliance with health measures across countries, 2019/2020 school year



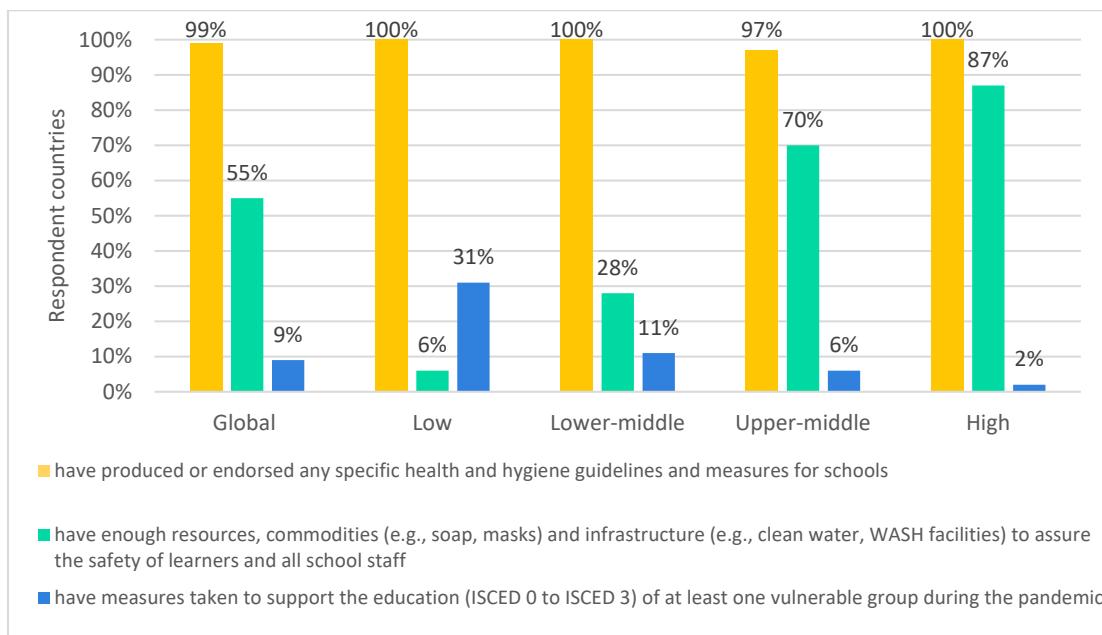
Note: 2020 for countries that follow a school calendar year

Turning to equity in education during the pandemic, the third iteration of the survey asked respondents if any measures were taken to support education from pre-primary to upper-secondary⁴ in vulnerable groups. Results showed that only 9% of countries report taking one or more measures to specifically support the education of at least one vulnerable group (i.e. girls, ethnic minorities, etc), which represents about 15% of the school-age population.

⁴ Primary to upper-secondary are defined by ISCED 0 to ISCED 3. Detailed definitions can be found in ISCED 2011: <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>

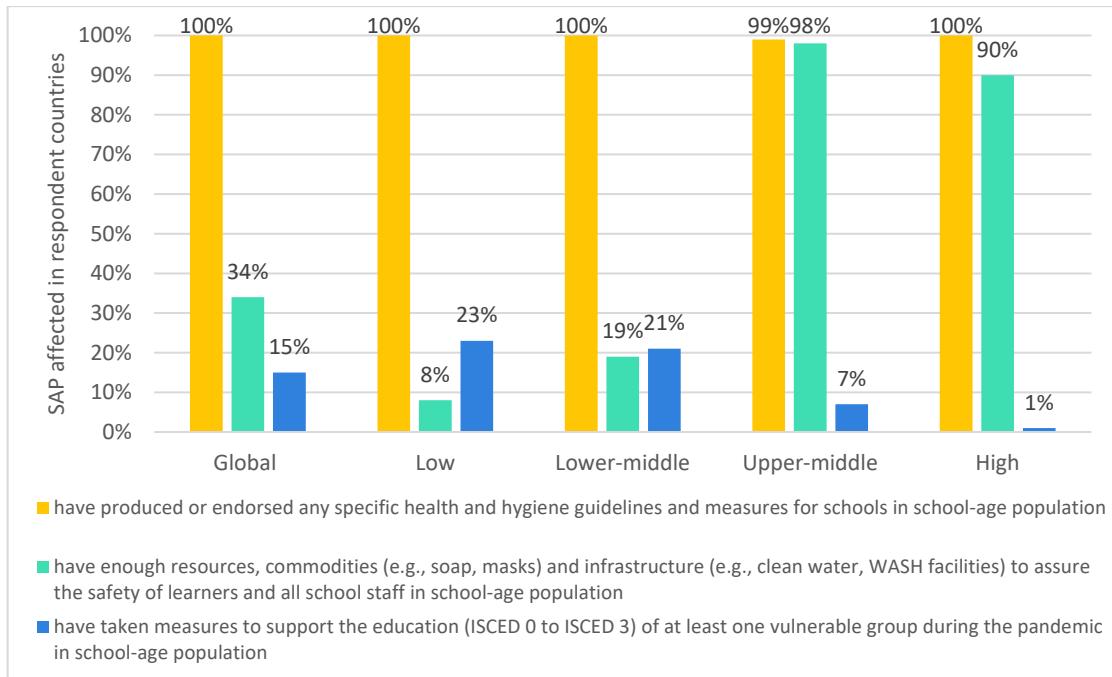
Comparing countries in different income groups, low-income countries struggle the most to implement more expensive and coordination-intensive activities as well as ensuring that even the most basic disease mitigation measures are in place (**Figure 4**). For example, while 55% of countries globally indicate that they have enough resources and infrastructure to assure the safety of learners and all school staff, only 6% of respondents from low-income countries report universal implementation. Moreover, although the promotion of health and hygiene guidelines for schools was nearly universal across countries in the third iteration of the survey, only one-third of low-income countries reported having taken measures to support the education (Primary to upper-secondary or ISCED 0 to ISCED 3) of at least one vulnerable group during the pandemic. **Figure 5** shows the endorsement versus compliance with health measures across respondent countries in school-age populations specifically. When looking at school-age populations specifically, less than a third of low-income countries reported having taken measures to support the education (ISCED 0 to ISCED 3) of at least one vulnerable group during the pandemic.

Figure 4: Endorsement of versus compliance with health measures across countries by income group, 2019/2020 school year



Note: 2020 for countries that follow a school calendar year

Figure 5: Endorsement of versus compliance with health measures across countries by income group – school-age population (SAP) affected, 2019/2020 school year



Note: 2020 for countries that follow a school calendar year

GEM commitment 8.2 on support for teachers and education personnel

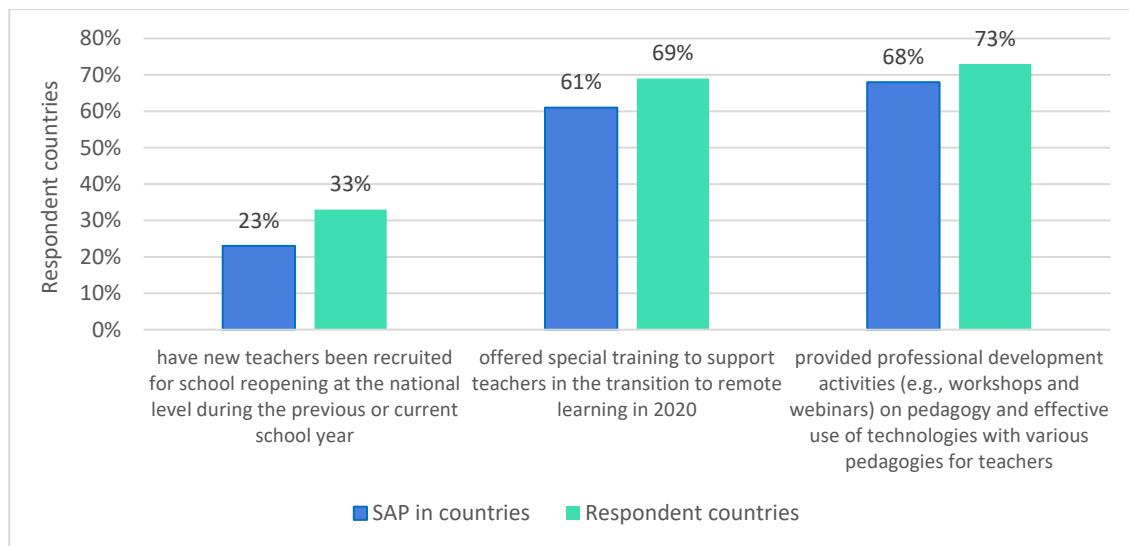
"Support all teachers and education personnel as frontline workers, consulting their representatives in decision making, and ensuring their safety, well-being and decent working conditions. Urgent attention is required to address the shortage of trained and qualified teachers aggravated by the COVID-19 crisis. Their professional development needs at all levels, including digital and pedagogical skills for learner-centered quality education, is a matter of urgency."

Teachers are essential to sustaining the learning of millions of students globally during the COVID-19 pandemic. All three iterations of the survey gathered information on the support offered by countries to teachers and education personnel as key players that infuse the resilience seen in educational systems in response to the disruption.

The proportion of additional teachers recruited after the reopening of schools increased to 33% in 2019/2020 school year (**Figure 6**) compared to the previous survey results in the 2019/2020 school year when around only 26% of countries recruited additional teachers after reopening.

In the school-age population specifically, the majority of countries offered special training to teachers on remote learning (61%) and provided professional development activities (e.g., workshops and webinars) on pedagogy and effective use of technologies with various pedagogies (68%).

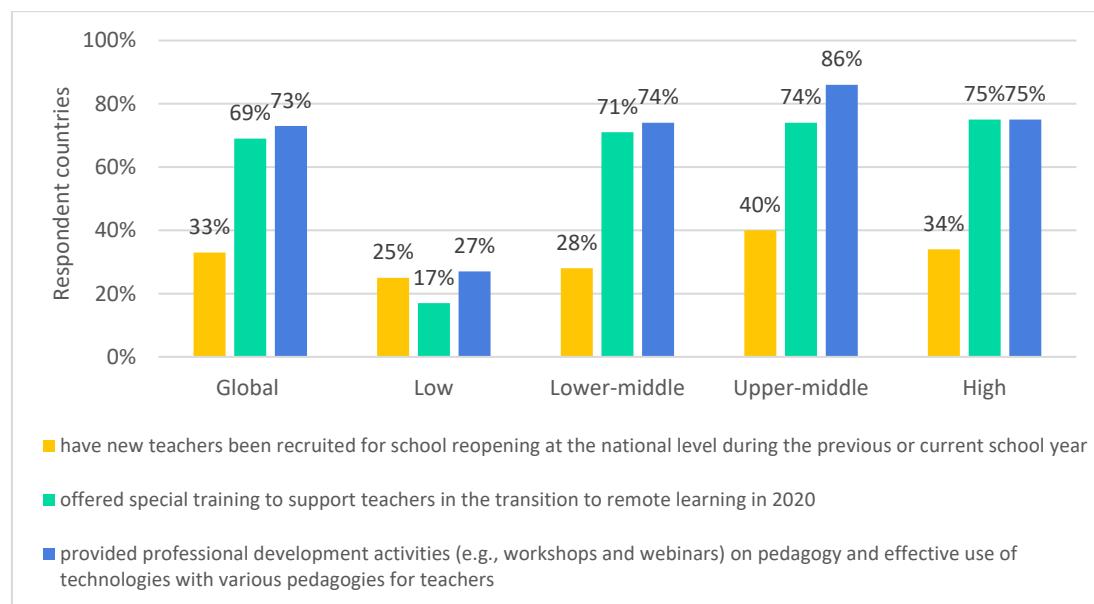
Figure 6: Support provided to teachers and education personnel across countries, 2019/2020 school year



Note: 2020 for countries that follow a school calendar year

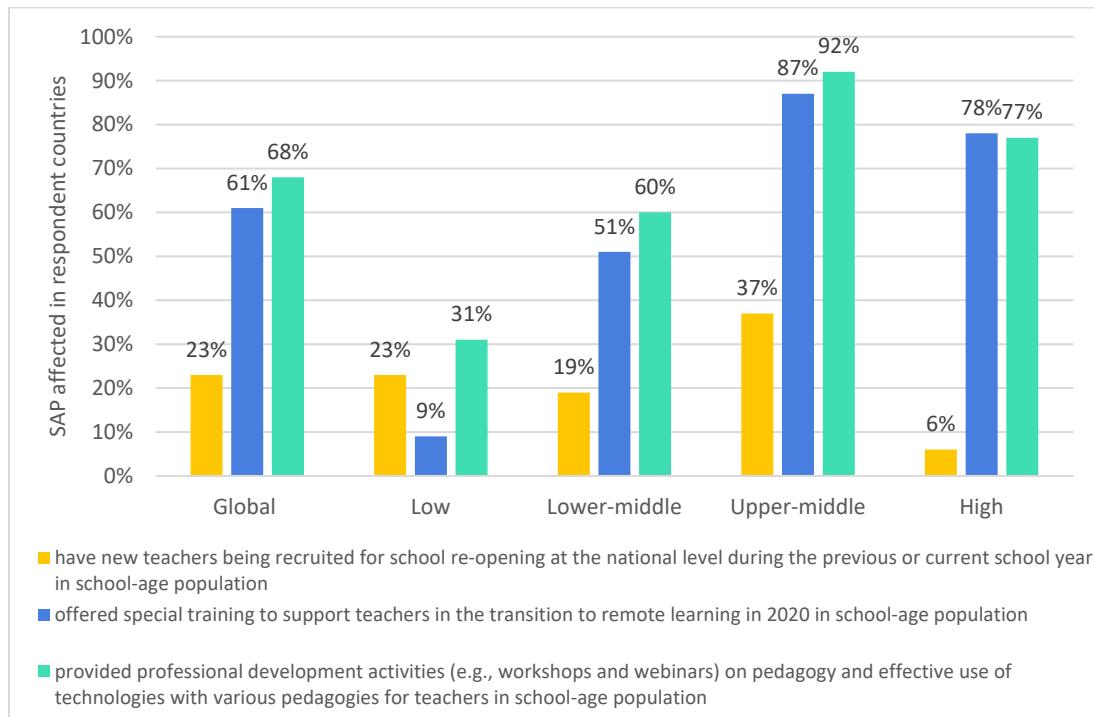
Notably, **Figure 7** shows that 40% of upper-middle income countries in 2019/2020 recruited additional teachers – more than any other income group – while just 25% were able to do so among low-income countries. Most countries also provided teachers with special training and professional development activities on pedagogy and effective use of technologies. Unfortunately, the provision of these specific essential support interventions to teachers was much less in low income countries. Provision is even less for special training to teachers (9%) in low-income countries when we look at the school-age population specifically (**Figure 8**).

Figure 7: Recruitment and support for teachers and education personnel across countries by income group, 2019/2020 school year



Note: 2020 for countries that follow a school calendar year

Figure 8: Recruitment and support for teachers and education personnel of the school-age population (SAP) across countries by income group, 2019/2020 school year



Note: 2020 for countries that follow a school calendar year

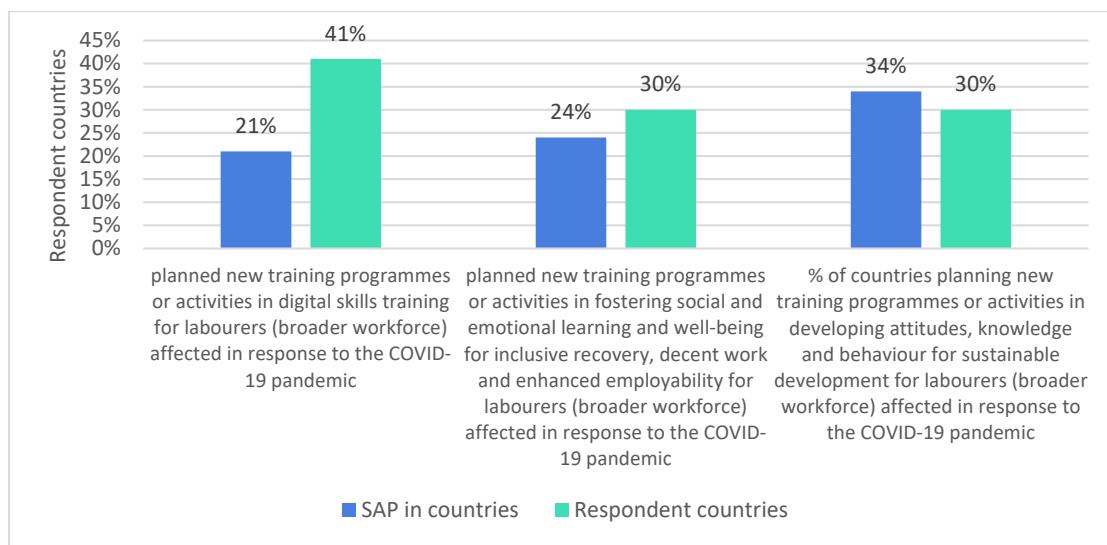
GEM commitment 8.3 on investing in workforce skills development

"Invest in skills development, including social and emotional learning and well-being, for inclusive recovery, decent work and enhanced employability, and sustainable development through reskilling and upskilling opportunities for all young people and adults who have lost or are at risk of losing their jobs."

It is crucial for young people and adults who have lost their livelihoods during the pandemic that countries provide supportive resources to help them get back on their feet. Gathering information on the provision of this support was only covered in the third iteration of the joint survey.

Globally, 41% of countries responding to the survey (excluding OECD Member States) had planned new training programmes or activities in digital skills training for its workforce. Overall, 30% of countries took measures to foster social and emotional learning and well-being, or to develop attitudes, knowledge and behavior for sustainable development for labourers (**Figure 9**).

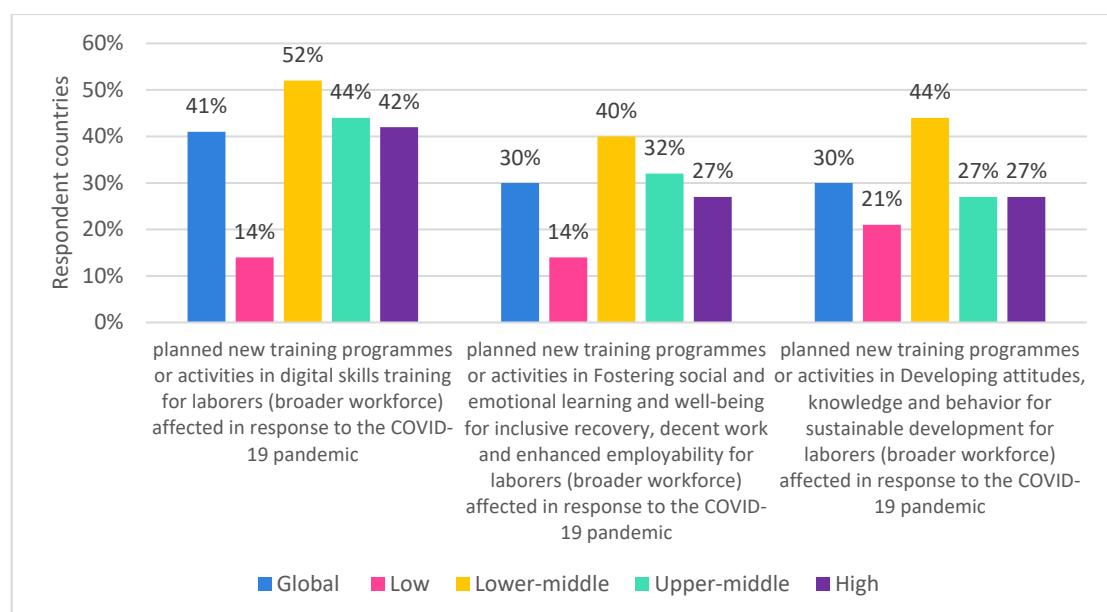
Figure 9: Provision of supportive resources to facilitate skills development for labourers during the pandemic across countries, 2020/2021 school year



Note: 2021 for countries that follow a school calendar year

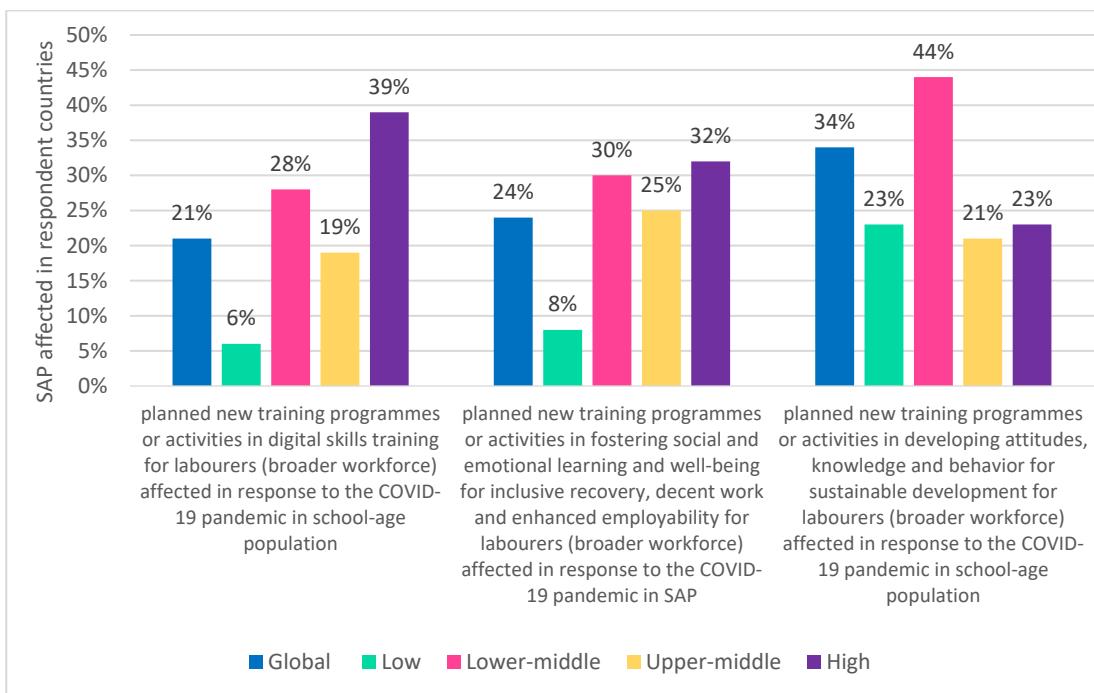
However, significant gaps exist when the provision of these interventions are compared across income groups (**Figure 10**). Among low-income countries, only 14% planned measures at the national level to facilitate skills development, decent work and enhanced employability, and sustainable development during the pandemic. This has serious implications for worsening in-country and global inequities among the labour force. Looking at the school-age population specifically, we can see that students in low-income countries are at a disadvantage as the work force serving them are not receiving adequate training (**Figure 11**).

Figure 10: Provision of supportive resources to facilitate skills development for labourers during the pandemic across countries by income group, 2020/2021 school year



Note: 2021 for countries that follow a school calendar year

Figure 11: Provision of supportive resources to facilitate skills development for labourers during the pandemic across countries by income group – school-age population (SAP) affected, 2020/2021 school year



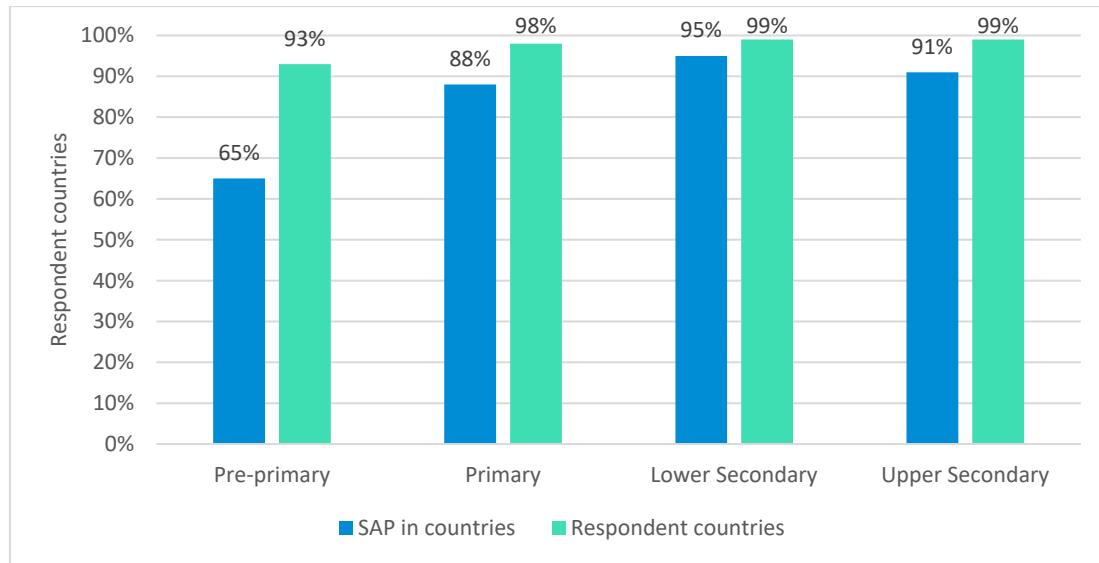
Note: 2021 for countries that follow a school calendar year

GEM commitment 8.4 on narrowing the digital divide

"Narrow the digital divide in education, develop quality open educational resources and build digital commons as a complement to face-to-face learning, with a view to enabling inclusive and equitable technology-supported learning."

Most governments around the world provided a remote learning modality for at least one education level. Overall, more than half (59%) of countries provided at least one type of distance learning solution during the pandemic in 2020/2021 at the pre-primary level. For all levels of education, over 90% of countries provided at least one type of distance learning solution (**Figure 12**).

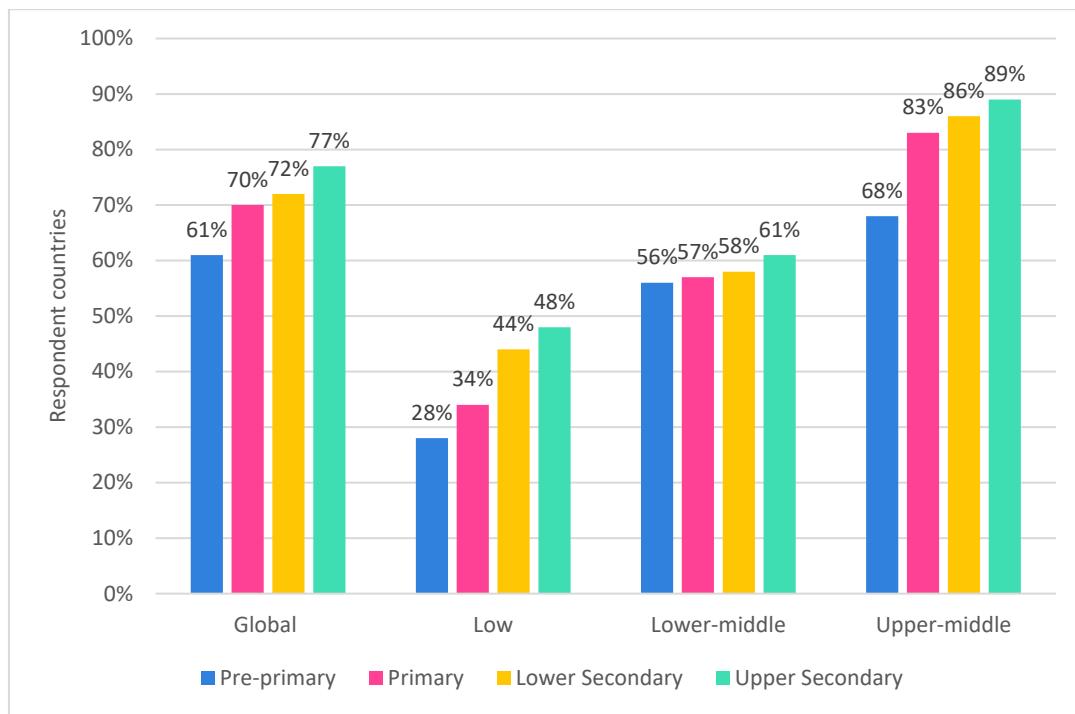
Figure 12: Provision of remote learning modalities across countries by education level, 2019/2020 school year



Note: 2020 for countries that follow a school calendar year

The provision of remote learning solutions by governments does not in itself automatically ensure usage by learners. Notably, the effective use of distance education varies across levels of education: 61% of students at the pre-primary level compared with 77% at the upper secondary level engaged in distance education during school closures in 2019/2020 (**Figure 13**).

Figure 13: Student usage of distance education across countries during school closures by income group and education level, 2019/2020 school year



Note: 2020 for countries that follow a school calendar year

Annex I: Mapping GEM indicators based on related questions in the joint survey

GEM Indicator	Description	Formulation of indicator	JSW3_Q	JSW2_Q	JSW1_Q	Percentage of countries	Percentage of SAP covered
8.1	Safely reopening educational institutions based on scientific evidence and considering local contexts; these measures should be adequately funded at all levels and prepare education institutions to continue service provision when normal school opening is disrupted.	% of countries who have produced or endorsed any specific health and hygiene guidelines and measures for schools	KQ1-Has the Ministry of Education produced or endorsed any specific health and hygiene guidelines and measures for schools?	Q5-Has the Ministry of Education produced or endorsed any specific health and hygiene guidelines and measures for schools?	N/A	100%	99%
8.1	Strengthening and restoring access to services such as school meals, health, WASH, social protection etc.; prioritizing the health and safety of students and educators through closer inter-sectoral collaboration.	% of countries who have enough resources, commodities (e.g., soap, masks) and infrastructure (e.g.. clean water, WASH facilities) to assure the safety of learners and all school staff	KQ3-Are there enough resources, commodities (e.g., soap, masks) and infrastructure (e.g., clean water, WASH facilities) to assure the safety of learners and all school staff?	Q8-Are there enough resources, commodities (e.g., soap, masks) and infrastructure (e.g., clean water, WASH facilities) to assure the safety of learners and all school staff?	N/A	34%	55%
8.1	Ensuring that reopening plans are equity-oriented,	% of countries who have taken measures to	IQ3-Which of the following measures have	N/A	N/A	15%	9%

	gender-responsive, inclusive and targeted.	support education (ISCED 0 to ISCED 3) of at least one vulnerable groups during the pandemic.	been taken to support the education (ISCED 0 to ISCED 3) of vulnerable groups during the pandemic?				
8.2	Urgent attention is required to address the shortage of trained and qualified teachers aggravated by the COVID-19 crisis.	% of countries who have new teachers being recruited for school reopening at the national level during the previous or current school year?	EQ3-Are/were new teachers recruited for the reopening?	Q23-Are/were new teachers recruited for the reopening?	Q2-Are/were new teachers recruited for the reopening?	23%	33%
8.2	Their professional development needs at all levels, including digital and pedagogical skills for learner-centred quality education, is a matter of urgency.	% of countries who Offered special training to support teachers in the transition to remote learning in 2020	EQ4-How and at what scale were teachers (in pre-primary to upper secondary levels combined) supported in the transition to remote learning in 2020?	Q20-How were teachers (in pre-primary to upper secondary levels combined) supported in the transition to remote learning in 2020?	15. Have teachers been provided with any additional support in the specific context of Covid-19 to help them with the transition to remote learning?	61%	69%
8.2		% of countries who provided professional development	EQ4-How and at what scale were teachers (in pre-primary to upper	Q20-How were teachers (in pre-primary to upper secondary levels	15. Have teachers been provided with any additional	68%	73%

		activities (e.g., workshops and webinars) on pedagogy and effective use of technologies with various pedagogies for teachers.	secondary levels combined) supported in the transition to remote learning in 2020?	combined) supported in the transition to remote learning in 2020?	support in the specific context of Covid-19 to help them with the transition to remote learning?		
8.3	Invest in skills development, including social and emotional learning and well-being, for inclusive recovery, decent work and enhanced employability, and sustainable development through reskilling and upskilling opportunities for all young people and adults who have lost or are at risk of losing their jobs.	% of countries who planned new training programmes or activities in digital skills training for laborers (broader workforce) affected in response to the COVID-19 pandemic	LQ5-Has your country planned any new training programmes or activities in response to the COVID-19 pandemic? (select all that apply)	N/A	N/A	21%	41%
8.3		% of countries who planned new training programmes or activities in Fostering social and emotional learning and well-being for inclusive recovery, decent work	LQ5-as your country planned any new training programmes or activities in response to the COVID-19 pandemic? (select all that apply)	N/A	N/A	24%	30%

		and enhanced employability for laborers (broader workforce) affected in response to the COVID-19 pandemic					
8.3		% of countries who planned new training programmes or activities in developing attitudes, knowledge and behavior for sustainable development for laborers (broader workforce) affected in response to the COVID-19 pandemic	LQ5-as your country planned any new training programmes or activities in response to the COVID-19 pandemic? (select all that apply)	N/A	N/A	34%	30%
8.4	Narrow the digital divide in education, develop quality open educational resources and	% of countries who provided at least one type of distance learning solutions	DQ1. Which distance learning solutions are being offered in your country? (select all that apply)	N/A	6. Types of delivery systems: Which of the following education delivery	Pre-primary: 65% Primary: 88% Lower-secondary: 95%	Pre-primary: 93% Primary: 98% Lower-secondary: 99%

		during the pandemic in 2020 and/or 2021, by ISCED level			systems have been deployed as part of the national (or subnational) distance education strategy for different levels of education?	Upper-secondary: 91%	Upper-secondary: 99%
8.4	Build digital commons as a complement to face-to-face learning, with a view to enabling inclusive and equitable technology-supported learning.	% of students (at each level of education), approximately, followed distance education during school closures in 2020?	DQ2. What percentage of students (at each level of education), approximately, followed distance education during school closures in 2020?	N/A	N/A	Pre-primary: 61% Primary: 70% Lower-secondary: 72% Upper-secondary: 77%	

Annex II: Methodological Limitations

Though the joint survey provides key insights on school closures and responses with respect to understanding and mitigating the impact of learning losses, it should be noted that there are broader limitations at play when using the survey results to monitor GEM commitments.

First, the joint survey gathered information at the country-level. It was designed to inform government officials responsible for education to capture *de jure* policy responses and perceptions on their effectiveness. Many of the GEM commitments, however, are related to regional/subregional, or even at school-level, considerations. The formulation of related indicators using data from the joint survey are thus conditional on the assumption that there is a uniform implementation across regions or schools within each country. To the extent that departures from this assumption occur in practice, there would be some degree of measurement error in the indicators currently constructed.

Second, there were structural changes to what and how questions were asked across the three iterations of the joint survey, making it difficult to gain a systematic understanding and to compare the same indicator over time. See Annex I for a breakdown of questions asked in each survey iteration that relates to the GEM indicator reported in this document.

Third, the latest iteration of the survey, conducted in the first half of 2021, contained many questions which were framed retrospectively to capture the overall situation in 2020. Therefore, indicators generated from the third iteration, by definition, might represent the overall situation from the beginning of the pandemic in 2020 to the point when the respondents were asked in the first half of 2021, while the previous two iterations constitute a particular snapshot of the impact of the pandemic on education in 2020.

Finally, it should be noted that the joint survey provides an unbalanced panel of countries. In particular, the total number of countries responding to each iteration of the survey varies, and the distribution of countries in terms of income groups and regions could be very different across the three iterations. It goes without saying that some degree of caution is advised when comparing indicators across the three iterations.