TCG-7/W/3

POSITION PAPER ON THE UIS SURVEY OF FORMAL EDUCATION AND THE COVID-19 PANDEMIC

Introduction

The 2030 Agenda for Sustainable Development has incited an unprecedented series of plans and actions for the improvement of countries' statistical capacity (UNESCO Institute for Statistics, 2017, 2019). However, many of these processes were abruptly interrupted by the COVID-19 pandemic. International organisations and national governments had to focus on efforts to deal with the consequences of the pandemic, putting many of these developments on a halt.

Regular data collections on education were directly affected by this disruption, due not only to the extra burden on planning and statistical units but mostly to the school closures and their impact on the functioning of the whole educational system.

As the custodian of the SDG4 data and the leading agency providing internationally comparable and quality educational data, the UNESCO Institute for Statistics (UIS) offers in this document an assessment of the potential impact of the COVID-19 pandemic on the regular UIS educational data collections. In addition, considering this new context, this paper contains some recommendations regarding the next rounds of the UIS Survey of Formal Education.

The UIS educational data collections

Every year, the UIS administers six instruments of data collection in education. Four of them are related to the Survey of Formal Education:

- **A:** Questionnaire on Students and Teachers from ISCED level 0 to ISCED level 4;
- **B:** Questionnaire on Educational Expenditure (for all levels);
- **C:** Questionnaire on Students and Teachers from ISCED level 5 to ISCD level 8; and
- **ISC11**: Instrument about the National Education Systems

This data collection is coordinated with the Organisation for Economic Co-operation and Development (OECD) and the European Statistical Office (Eurostat). Countries that are members or partners of these two organisations may choose to provide the data related to these four instruments directly to them.

Global Framework for Educational Statistics Post-COVID-19

The UIS has already put forward an effort to generate a framework for educational statistics post-COVID-19 (UNESCO Institute for Statistics, 2020). The immediate concern of this framework is to make sure that statistical systems will be able to provide a basis for policy actions directed towards the return to school and the consequences of the pandemic. The document identifies the following challenges for statistical systems (UIS, 2020, p. 3)

Addressing the needs of emergency planning and return to schools;

Maintaining data collection systems and statistical operations in the context of COVID-19;

Ensuring the monitoring of regional and global agendas;

Putting in place educational information systems that inform post-COVID-19 education systems;

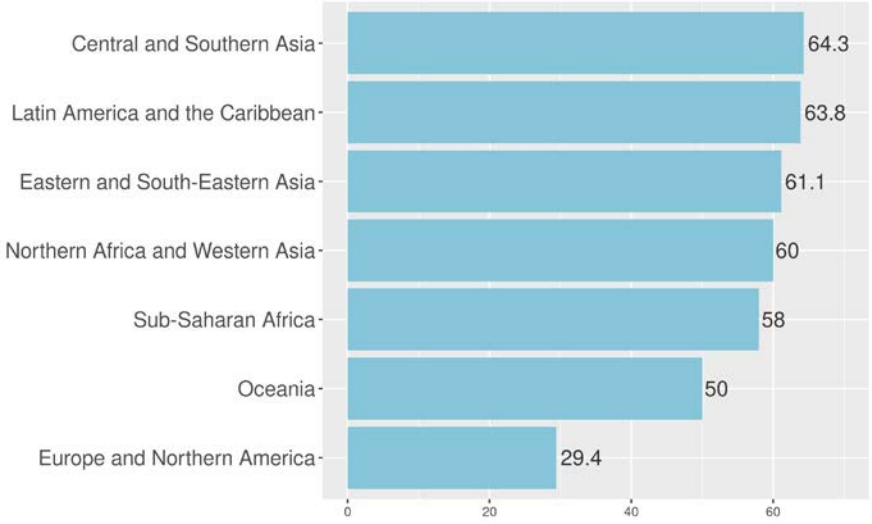
Ensure regular monitoring; Anticipate and ensure readiness for new emergencies (resilience);

Link with information on nutrition, health and social protection;

Focus on the most vulnerable population groups

A recent survey conducted by the UIS maps the current situation of national statistical systems in education and assess to what extent countries are succeeding in dealing with these challenges. The Survey of COVID-19 Pandemic Impacts on National Education Planning Units was launched in July and had the participation of 120 countries from all the regions of the world. The highest participation rates were found in "Central and Southern Asia" (64%) and "Latin America and the Caribbean (LAC)" (64%). The lowest participation rate was found in "Europe and Northern America" (29%).

Figure 1. Proportion of countries participating in the UIS Planning Units Survey



Apart from the disruption in the educational system, the survey shows that many statistical systems were also affected. Sixty-one percent of the participating planning units had their offices open at the time of the data collection, but 38% were closed to all staff or to non-essential staff. Twenty-five percent of the planning units responded that their data collection was postponed to later in 2020 or 2021 and, among those, 34% are located in LAC and 34% in Sub-Saharan Africa (SSA).

Among those planning units that maintained their data collection during the pandemic, web surveys (31%) was the main method to collect education data, followed by telephone surveys (12%). Although only 19% of planning units in low income countries reported using web surveys, this proportion was 36% in middle income countries and 30% among high income countries.

A similar pattern is observed in relation to the perception of planning units about the impact of the pandemic on their ability to meet reporting requirements. Low and Lower middle income countries expect a higher impact on global, regional and national reporting compared to high income and upper middle income.

A relevant finding is that 43% of planning units in low income countries indicate that the pandemic will severely affect their ability to report nationally, and only 11% indicate that it will not affect global reporting.

Figure 2. Is the pandemic affecting the ability to meet requirements for Global reporting?

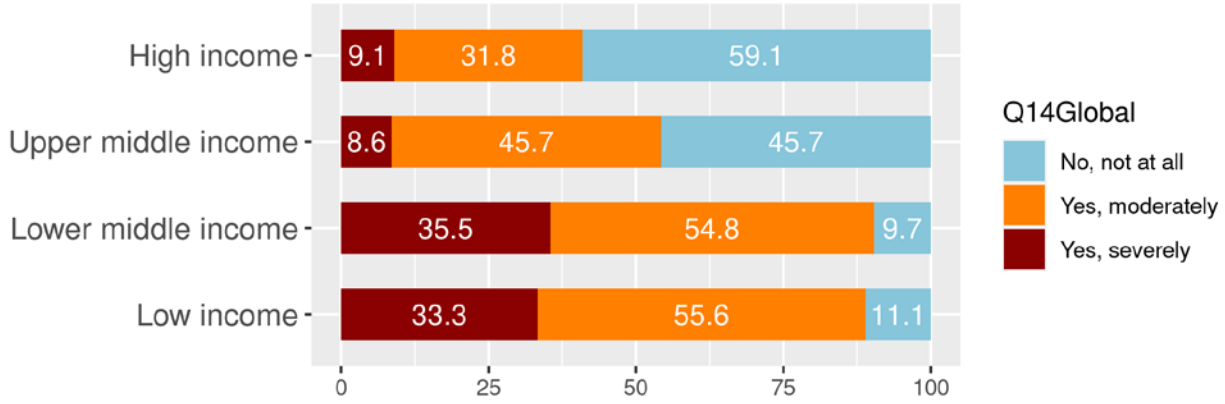
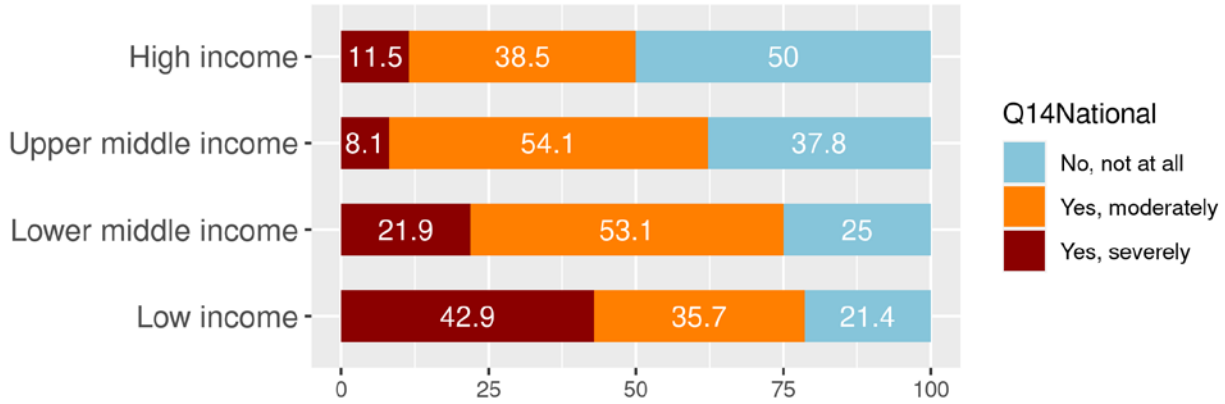


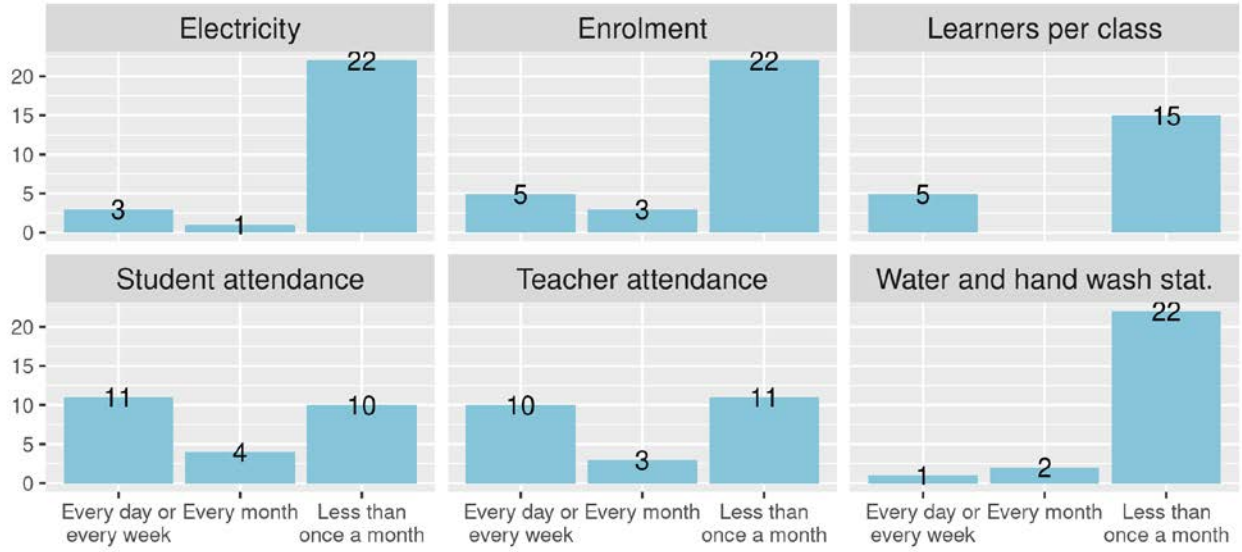
Figure 3. Is the pandemic affecting the ability to meet requirements for National reporting?



Sixty-eight percent of participating planning units informed that they monitored educational variables (enrolment, attending, infrastructure, etc.) during the Covid-19 pandemic. Among those PU's that kept monitoring during the pandemic, 90% are monitoring their education variables across all schools, and only 10% are resorting to a sample of schools or households.

About a quarter of all PUs (27%) have reported that they are collecting some data more frequently during the pandemic. This proportion varies from 33% in high income countries to 12% in low income countries. The chart below shows the frequency in which these variables are being collected:

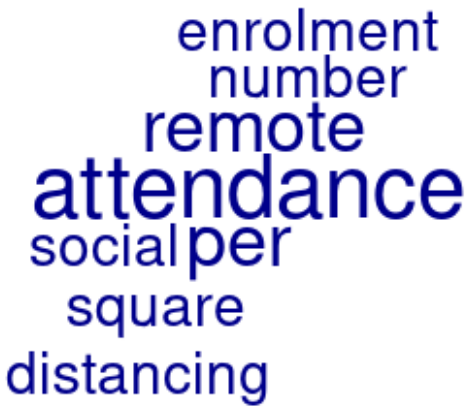
Figure 4. Variables collected more frequently during COVID-19



The survey also explored the changes implemented to education variables or new variables added to current data collections. The question was open-ended and respondents to the survey could list up to eight different variables. The most frequent terms for the first variable and for all variables combined are shown in the *wordcloud* below.

Figure 5. New or adapted education variables collected during COVID-19

First variable reported



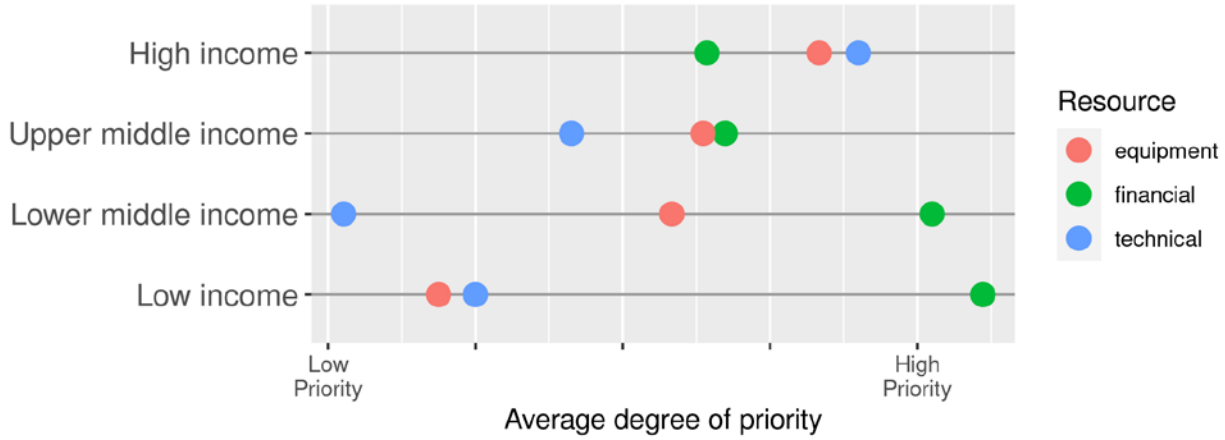
All variables reported

The responses to the first variable show the emphasis on monitoring attendance and remote learning. In addition, the most frequent terms suggest that the size of the classroom (in square meters) was also included in data collections to support policies for social distancing. Finally the *wordcloud* for all variables indicate that the students were the focus of adaptations in the data collection, followed by school and staff.

Finally, 71% of the planning units reported that they would need external support to face the challenges posed by the COVID-19 pandemic. This percentage varied from 48% among high income countries to 86% among lower middle income countries. The regional disparity is also clear with 90% of PUs in Sub-Saharan African countries reporting a need for external support whereas only 33% reported the same among European countries.

When asked in which areas this external support was most needed, most planning units reported "Financial" as the type of support with the highest degree of priority, followed by "Equipment (computers, tablets, servers etc.)" and "Technical assistance / capacity development". Although for most of the countries surveyed these were the top priorities, their order varies across income groups. Planning units in low income countries perceive financial support as the highest priority and high income countries report

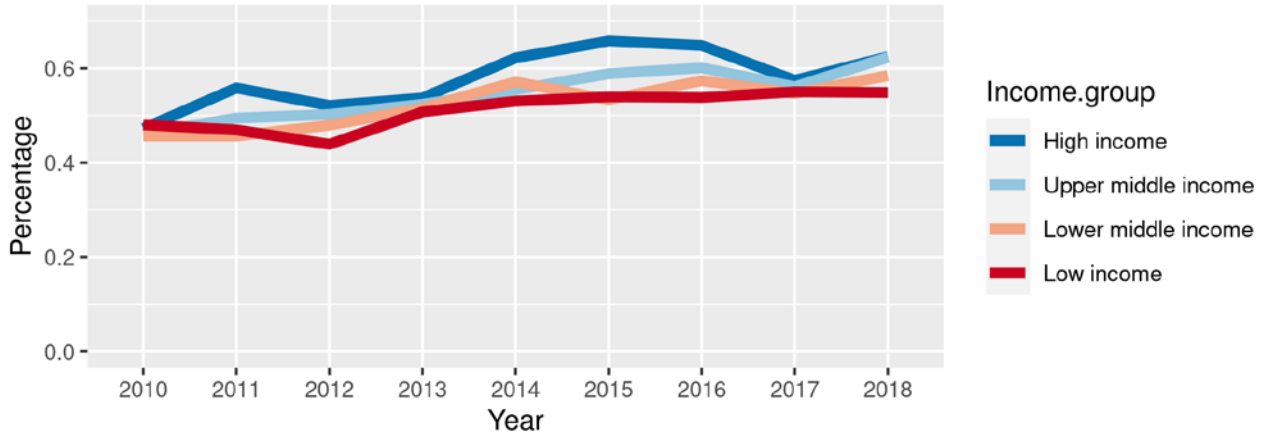
Figure 6. What type of support do Planning Units need? By Income group



COVID-19 and Countries' data availability

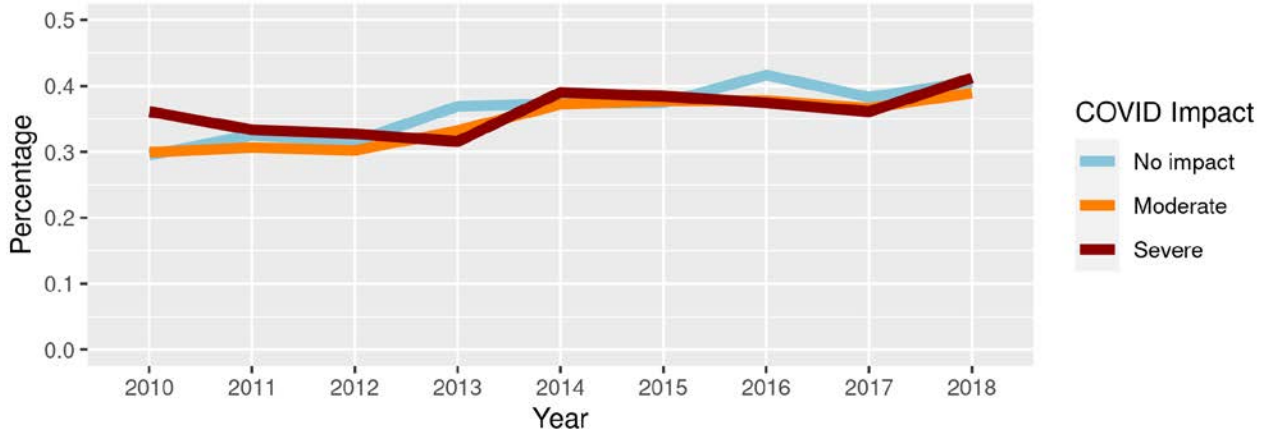
The PU Survey results indicate that the impact of the pandemic on statistical systems will be considerably more severe on low income countries. This is particularly relevant as it threatens a movement of increasing data availability for the SDG4 indicators that is observed among countries from all income groups over the past decade.

Figure 7. Average percentage of countries reporting data for each SDG4 Indicator by income group



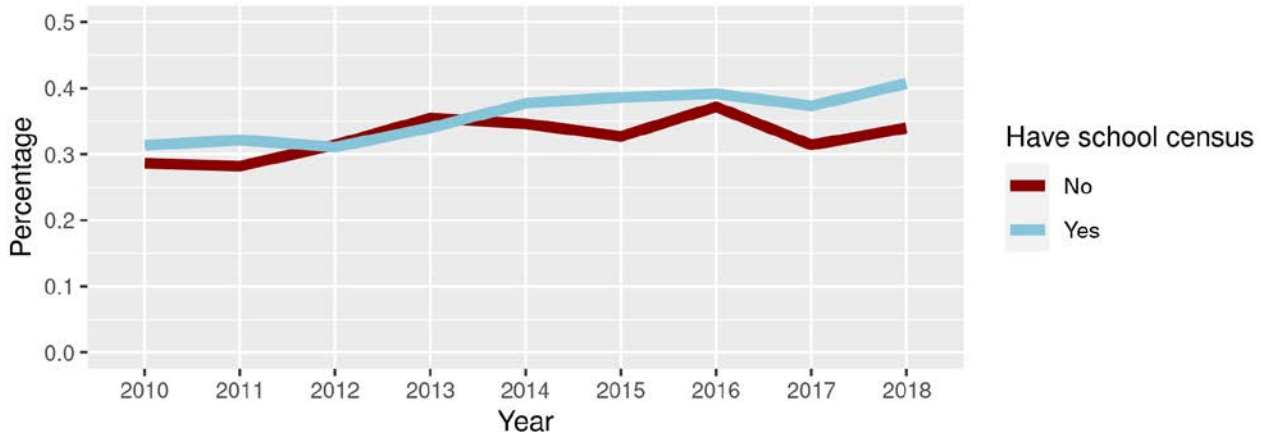
The comparison between the results of the Planning Units survey and the data reported by countries for the SDG4 suggests that there are no significant differences in terms of data availability among countries expecting high or no impact of the pandemic on the ability for Global reporting.

Figure 8. Average percentage of countries reporting data for each SDG4 Indicator by country groups of COVID-19 impact on data availability



On the other hand, one of the aspects that will probably compromise the ability of countries meeting the requirements for both global and national reporting is the disruption in school census and administrative data collection. Countries that rely on those data sources, according to the PU Survey, are responsible for a considerable part of the increase in coverage of the SDG4 indicators.

Figure 9. Average percentage of countries reporting data for each SDG4 Indicator by administration of a school census.



Data collection adjustments

The PU Survey shows that the COVID-19 pandemic has created new circumstances for the production of international comparable educational data. In this context, the following factors are poised to affect the development of the next UIS data collections:

- ***Extra burden on planning units and statistical offices*** to produce data for educational emergencies created by the pandemic. School closures and the re-organisation of many educational systems will require additional efforts that will strike the capacity of those offices to maintain their regular statistical processes;
- ***The suspension/postponement of population censuses and household surveys*** will have an immediate impact on the production of population-based educational statistics but also generate a cascade effect on statistical processes that depend on those data;
- ***The redesign of education systems*** with adjusted calendars, new grade organisations, new labour arrangements for teachers and implementation of new modes of teaching will also require a transformation of national instruments of data collection.

Despite these potentially negative effects, before the pandemic, most countries have developed substantially their capacity to produce educational data and these developments will mitigate the impact of the pandemic and support the process of recovery.

Considering these factors, the UIS will discuss with Member-States adjustments in the UIS instruments to address the main challenges in the short term. The strategic revision of the data collection will be guided by the following actions:

- Prioritise the collection of the data required for the global indicators or parameters for their estimation;

- Initiate the collection of metadata required to document the potential changes in the historical data series (e.g. date and scope of school closures and reopening, changes in the school calendar, changes in the ISCED structure)
- Reduce the amount of information requested in the UIS questionnaires. This will be achieved by focusing on data produced by statistical processes that were least likely to be disrupted by the pandemic based on school census and administrative data.
- Attention to new data needs and how to articulate different stakeholders considering the urgency to inform policy makers.

The TCG working groups on "Administrative Data and EMIS", "Educational Expenditure Data", and "Teachers' Personal Data" will assess the current instruments and indicate the feasibility of each form considering the challenges that planning units and statistical offices have been facing this year. In addition, the TCG working groups on "Household Surveys" and "Learning Outcomes", "Education in Emergency", and "Indicator Development" will assess the potential impact of the disruption in other data sources to the Global and Thematic indicators.

Futures of education and educational statistics

Apart from one-off adjustments to address short term consequences of the pandemic, this is also an opportunity to reflect on the future of the internationally comparable statistics on education. The acceleration of several social, economic and environmental processes will transform formal and non-formal education systems rapidly in the following decades. In this context, UNESCO has launched the initiative "Futures of Education" (UNESCO, 2019) to reflect on these transformations and organise the debate on actions.

Statistical processes related to the production of education data will not only be directly affected by these transformations but have the potential to shape them. In this sense, the TCG is the appropriate forum to commence and promote a global conversation on the future of internationally comparable education statistics.

Innovation in the areas of digital communication, biotechnology, and artificial intelligence are creating new structures of learning in formal and non-formal education. In addition, the current structures of educational systems are experiencing considerable transformations with the increase of distance learning, homeschooling, ungraded schools and others.

These changes will have direct consequences to the way educational statistics are designed today. At the same time, if statistical systems fail to adapt rapidly, it will miss the opportunity to define the pace and direction of these transformations.

Pondering on the futures of education, Sobe (2020) argues for the construction of an infrastructure for global solidarity and action in education, as opposed to an "international architecture in education", a rigid structure created to "stabilise and organise". Although statistical systems tend to function in favour of the former, it also has the potential to generate infrastructures that facilitate connections and participation of different agents in education. Examples of that can be seen from the expansion of citizen

generated data and the UIS articulation of civil society organisations with national and international organisations to conduct statistical operations and disseminate data.

Recommendations

Considering both the current context and future needs, the UIS data collections should be swiftly re-assessed to guarantee the minimum required for global monitoring and to support policy responses to the COVID-19 disruptions. The revision of UIS data collections can be guided by the answer to the following key questions:

1. **Reducing UIS/ED:** Is it necessary to change or reduce the current UIS data collection instruments with the objective to alleviate the burden over national statistical offices and planning units? If so, would it be possible to establish different levels of priority to each table/form?
2. **Aggregate UIS/ED + COVID-19:** Is it possible to maintain the current data collection with fewer disaggregations associated with a new data collection addressing issues required for the COVID-19 policy response?
3. **UIS/ED + COVID-19:** Is it be possible to maintain the current UIS Data Collection unaltered and implement an associated data collection related to COVID-19?
4. **UIS/ED + COVID-19 by school year:** Should these data collections be split according to school year when sent to countries?

Irrespective of the strategy adopted, the design of the UIS instruments will have to provide support for the policy responses to the challenges associated with the COVID-19 pandemic as described by the Global Partnership for Education (2020). In this sense, the data collections will generate the sufficient data to calculate the following minimal indicators:

Questionnaire	Indicator	Disaggregation
Students	Number of enrolled students (Head-count)	Sex Pre-Pandemic/Now
		Private/Public
		By Region/State/Province
	Enrolled by delivery mode (face to face, distance, blended)	
	Enrolled on remedial/accelerated classes	
Teachers	Number of teachers working (Head-count)	Sex Pre-Pandemic/Now

Questionnaire	Indicator	Disaggregation
	Head-count by delivery mode (face to face, distance, blended)	
	Received training in distance education	
	Received training in remedial /accelerated education	
	Head-count by type of contract	Sex Pre-Pandemic/Now
School environment	SDG Global Indicator 4.a.1	
	Number of schools that changed organisation/structure to address social distancing	
School cycle	Number of days of schooling per school year (2019, 2020, 2021)	
	Number of days of school closures (2020)	
Assessment	Suspension or cancellation of national/local learning assessments	
	National/local assessments implemented after school closures	

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