

Global Framework for Educational Statistics post COVID-19

1. Background and objective

The COVID-19 crisis has affected the education sector hard. The closing of schools has interrupted the normal function of the system, reducing student learning, and restricting the amount of administrative and student assessment data available to education authorities, parents, and decision makers. However, as the crisis wane, many important decisions need to be made now to anticipate the reopening of schools and the restoration of normality in the education system and in the life of students and their families.

The medium and long-term effects of the COVID-19 pandemic are still uncertain, but the need to continue educating children and the need to restore the learning losses brought in by the crisis, require short-term actions by the Ministry of Education and other Government authorities. To that end, there is an urgent need for essential information at the school level that can be used to guide decisions on policies, financial support, the assignment of personnel, and the implementation of educational platforms for delivering education in person and remotely.

UNESCO, the World Bank Group and UNICEF, have launched the [Framework for Reopening Schools](#), a flexible tool for policy makers and planners highlighting all the factors that will make this experience a successful one for students, teachers, principals, parents and the wider community.

Although there is plenty of conceptual and practical advice coming from many sources, Educational Planning Units or/and the National Statistical Offices (NSOs) have yet to define their scope of work during the crisis, and to reformulate its role as repository of education data after the crisis. Because the availability of data will also be impacted by the COVID crisis, there is a need to document in detail how the pandemic affects the ability of countries to report on standard education indicators and to assess the quality of data reported to help correctly interpret the data reported in 2020 and 2021.

Within this context, governments have put increased attention to the development of nationally centralized databases to follow up on COVID-19 responses. However, these countries have generated a strong demand for technical guidance, and information of technical tools and good practices.

The objective of this document is to build a preliminary statistical framework for COVID-19 and provide a checklist of good practices. The framework will guide the data collection and indicators framework that would allow governments in low- and middle-income countries to have a clearer picture of the conditions in the field, and help them flesh out specific issues related to the reopening of schools under critical conditions.

2. COVID-19 education policy responses: identify the data needs

The objective of this section is a practical one: to offer a preliminary checklist to educational Planning Unit for the quick collection of essential school data that is needed by decision makers for the reopening of schools. These data would allow governments in low- and middle-income countries to have a clearer picture of the conditions in the field, and help them flesh out specific issues related to the reopening of schools under critical conditions.

The key element in the checklist is the concept of minimum standards that need to be in place to start /resume the school year. Developing minimum standards—in any country—requires a contextual analysis of the situation, which allows for a country-specific strategy and response. Although minimum standards

can be explicitly framed by human rights, their implementation has to be based on incremental improvements to the situation on the ground. That is why measure and report quick data to allow for the development of a realistic approach to education after the crisis is fundamental.

To that end, any strategy for reopening schools has to include:¹

- *Ensuring that the school infrastructure is operational²¹*. Equity in access and in educational quality is paramount for the recovery of enrolment and of learning losses. That means that schools must be able to provide drinking water and clean bathrooms, along with *personal safety* to all students, including those in disadvantaged areas or areas of extreme poverty. Implicit in this statement is the need for *emergency programs* to target those areas and focus resources and effort to ensure a functioning school infrastructure under conditions that would reduce the resurgence of a pandemic. For that to happen, tackling deficiencies in school infrastructure has to be considered as an emergency task by the central government and by the ministries of education. If they are not considered as emergency tasks and left to the normal pace of the educational bureaucracy, then a large portion of students will not come back to school. *This issue cannot be emphasized enough.*
- *Parent and Community participation in the design and monitoring of actions*. This is important because during, and immediately after, the COVID -19 crisis, government institutions are likely to be weak because of the disruptions in their operations, their budgets, and their personnel. Some of the operational vacuum left by these disruptions, such as monitoring teacher attendance; helping out with logistics, with school feeding, and with monitoring student health and personal security, as well as budget management, may have to rely on parent and/or community participation. The one caveat is in extremely poor areas, where parents may already be overwhelmed by the economic impact of the crisis, which may mean that school reopening programs may have to consider employing parents and community members to perform functions that are often provided voluntarily.
- *Timely and accurate provision of essential data*. Decision makers will need timely and accurate information on essential inputs and outcomes to make good decisions. NSOs have to focus on this objective and use it as their overarching principle for measuring and reporting educational data.
- *Student assessment needs to be redefined*. High stakes tests could/should be replaced by more frequent low stake tests intended to measure student learning. The objective of more frequent testing would be to assess:
 - Progress in learning the curriculum

¹ Global Education Coalition. <https://en.unesco.org/covid19/educationresponse/globalcoalition>; World Bank, 2020. The COVID-19 Pandemic: Shocks to Education and Policy Responses. Washington DC: World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/33696/148198.pdf?sequence=4&isAllowed=y> ; Giannini, Stefania, Robert Jenkins, and Jaime Saavedra, 2020. "Reopening Schools: When, where, and how?" Education for Global Development Blogspot. <https://blogs.worldbank.org/education/reopening-schools-when-where-and-how>; Montoya, Silvia, and Gustavo Arcia, 2020. "Collecting essential education during the COVID-19 crisis." UNESCO World Education Blog. <https://gemreportunesco.wordpress.com/2020/05/14/collecting-essential-education-data-during-the-covid-19-crisis/>

²² The COVID crisis may force some traditional school infrastructures to invest on basic and vital equipment that would reduce the resurgence of the pandemic. Currently, some countries opening exam classes are managing this issue.

- Assess effectiveness of remedial programs
- Make corrections to pedagogical approaches
- Identify learning gaps
- • *Blended learning mechanism and distance learning strategies*: types and combination of distance education delivery systems (on-line, TV, radio): coverage/reach; access to infrastructure; availability of curriculum-based learning content; nature of support to teachers, students and parents/caregivers; management of learning assessment, examinations and accreditation of learning. These strategies should be part of a medium to long term approach because they affect household participation, as well as the capacity of the telecommunication sector. Both require a holistic approach that is not possible to be effective prior to reopening of schools.

3. Statistical needs to support monitoring

The statistical framework to understand the COVID-19 needs a holistic approach that include the assessment of the emergency and its impact but also include the statistical information used for assessing some of the dimensions and population that could be affected under risks, and statistics to monitor policy responses. The framework also provides some guidance about a variety of source of data on the population and society that could serve to understand the impact of the crisis.

This statistical framework pertains strictly to measurement only, and tries to identify the data requested to follow up on impact and as well as identify opportunities to utilize existing data sources. Further, the availability of data will also be impacted by the COVID crisis while new sources of the information will have to be considered. As part of this effort, it will be necessary to document in detail how the pandemic affects the ability of countries to report on standard education indicators and to assess the quality of data reported to help correctly interpret the data reported in 2020 and 2021.

The Data production systems have been challenged to respond to emerging demand and critical functions of which: A few challenges for the Data Systems has been identified:

- 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

4. A statistical framework for COVID-19

Within this context of a globally agreed policy framework and global indicators monitoring systems that comprises the use of existing data both official and non-official data. Components of the basic range of statistics are shown in the table below and represents a useful way of broadly organizing the basic range of COVID-19 -related statistics.

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The framework collapse the three main types of indicators: structural, COVID-related and the ones link to planning units needs. as clarified below they serve to different objectives and utilize different sources of information. The framework includes three areas the structural/impact indicators, the COVID-19 related and the ones related to statistical unit needs.

Table 1: Summary of Framework Proposed

	Structural Indicators	COVID-19 indicators	Planning Unit Needs
How they serve	To identify gaps and population at risk and identify impact Risk Assessment/Vulnerability Pre and post Crisis Trend Analysis	Monitoring policy response and continuity Emergency responses Planning Needs Coping Capacity	Identify resources challenges and reporting needs
Sources	Already identified pre-crisis No additional Survey but choice on indicators	Survey on responses that are administered as part of the Global Education Coalition and to be repeated every two months Suggested school survey	Survey administered by the UIS
Other Data Sources		Additional sources such as big data on usage of learning platforms	

4.1. Suggested structural Indicators to assess preparedness and Impact

This section proposes a set of indicators to assess the impact of COVID-19 on the functioning of the education sector, acknowledging that the pandemic will have effects on several aspects of the economic and social lives of individuals (examples of those possible impacts are included in the annex of this note). Indicators in italics are currently produced or disseminated by the UIS.

- **Priority indicators to measure the impact of COVID-19 on education systems:**
 - *Enrolment (number) and enrolment rates*: to observe if short- and long-term trends of school access have been affected. The definition of “enrolment” must be reviewed; children learning from home should not be counted as out-of-school children.
 - *Out-of-school rate and number (short-term impact)*: The definition of “out of school” must be reviewed; children learning from home should not be counted as out-of-school children.)
 - *Learning outcomes* (short- and long-term impact): These indicators can be used to assess to what extent learning has been affected by the disruption and the capacity of the distance education modality to deliver on the learning objectives³.

³ Learning assessments should cover only the material used during period of distance teaching-learning, and focus only on participating students. Learning can then be complemented with remedial actions to cover the gap not covered by distance education during the school year.

- *Human resources*: number of teachers by type of contracts and sector
- *Financial resources*: government expenditure on education, household expenditure on education.
- *School infrastructure*: access to electricity, sanitation and internet, availability of computers for pedagogical purposes
- **Equity: disaggregation for impact indicators:**
 - Level of education
 - Sex
 - Type of institution

4.2. Suggested indicators by the UNESCO-UNICEF-WBG data coalition to monitor impact of COVID

Access:

- Number of children (and % of children in the relevant age-group) in the program area supported with distance/homebased learning/tutoring programs
- Proportion of enrolled students who were asked to stay home (measured at national, regional and global level). Measures the immediate short-term impact of school closures.
- Proportion of students in each country that benefitted from online learning resources during school shutdown due to the COVID-19 crisis. This will allow to assess the capacity of education systems to provide distance education and necessary investment to improve that capacity.)
- Number (and %) of children who return to school once the school system is reopened
- Number of radio stations/TV programs/ online platforms broadcasting emergency distance learning programs⁴.

Protection & wellbeing:

- Number of children (and % of children across the 67 countries) provided access to programs and sensitization campaigns that aim at minimizing the negative impacts of school closure like psychological impacts, gender-based violence, and issues related to unequal social norms.
- Students not receiving meals through school feeding programmes (monitored by World Food Programme)

Teachers:

- Number of teachers trained in using distance learning methods and/or provided materials to support distance learning
- *After school reopening*: number of teachers trained to provide accelerated programs to mitigate loss of learning during school closure

Learning:

⁴ Geographic coverage is very important, as the focus is to reach learners everywhere. Access to channels should be free and should not require a subscription to a specific service provider. As much as possible, free access to the internet for students should be explored also.

- Number (and % of children) of children whose learning was assessed to evaluate loss of learning during school closure
- Percentage of children assessed during school closure who meet relevant minimum learning standards
- Number of countries, where parents and caregivers reached through mechanisms to inform parents and community leaders of distance learning content and teaching methods

Gender equality:

- Number of girls, youth groups and community groups including women's rights organizations reached and supported to strengthen education response efforts

Annex 1- Survey on Policy responses

Annex 2- Survey on Statistical Units

Annex 3 - Survey to Schools