



United Nations
Educational, Scientific and
Cultural Organization



UNESCO
INSTITUTE
FOR
STATISTICS



TECHNICAL
COOPERATION
GROUP



Global Coalition for Education Data Concept Note

TCG6/REF/9



EXECUTIVE SUMMARY

This document describes a new way of organizing the work of the Technical Cooperation Group (TCG) of the Indicators for Sustainable Development Goals-Education (SDG4), to set the stage for the launching a Global Coalition for Education Data aligned with the [multilateral partner's commitment](#) signed in July 2019.

There is a realisation that important aspects of the education systems are still not measured and many people are still not being counted and. Recent review of progress in SDG4 demonstrate the urgent need to improve data and its quality. There is a commitment already made at the highest political level by global leaders, national decision makers and society to address the inequalities in access to quality assured, disaggregated data and information. The monitoring of the SDGs provides an opportunity to take this forward and to consider Education in a much more integrated manner.

Current data collection systems in education aggregate different types of data—administrative, socio-demographic and other household surveys, learning assessments, and special surveys that often do not fit within a coherent strategy. As complex as this aggregation is, it does not include other related types of data, such as “big data” (often found under the notion of “data revolution for development”) and citizen-sourced data. This set of demands has generated a complex data ecosystem that is constantly looking for order without achieving it and thus often results in non-compliance or chaotic and untimely compliance in the production and reporting of education data of good quality.

The Global Education Data Coalition will strengthen national and sub national systems for integrated monitoring of Education programmes and performance. By helping all stakeholders to collect, analyse and use timely and accurate data, the Education Data Coalition will contribute to the goal of data driven performance and accountability.

The Education Data Coalition will address the challenge of fragmented sources of Education data, duplication of effort which, in part, leads to the current inadequacy of data for reliable decision making.

The primary strategies of the Education Data Coalition will be to enhance country statistical capacity and stewardship and for partners to align their technical and financial commitments around strong nationally owned Education information systems and a common monitoring and evaluation plan and to establish a one stop-shop for data sharing and will be geared to contribute to countries Education information systems.

The outcome of the Education Data Coalition is a more efficient investment in information systems. The timely, accurate and comparable data arising from the national information system can be used to understand the Education challenges, to design and monitor effective interventions and to evidence outcomes and impact at national and global level (SDGs). Further efficiencies will be achieved by sharing experience and learning from countries and other data initiatives.

1. MAPPING INFORMATION SOURCES FOR THE PRODUCTION OF SDG4 DATA

With the adoption of the Sustainable Development Goals (SDGs), the UNESCO Institute for Statistics (UIS) has been recognized as the official source of cross-nationally comparable data on education. The UIS carries out its annual education data collection through the UIS education survey, which covers 165 countries that respond through three data collection instruments (questionnaires). However, becoming the official source of SDG 4 data and indicators implies undertaking a new set of tasks and obligations that are substantially different from the normal custodian tasks of UIS. To comply with the SDG 4 agenda, UIS needs to consultatively map out in detail the sources of education data and information in various countries, requiring consultations at the country level to determine the characteristics of education data sources in some detail. Such mapping is essential for complying with the quality and quantity requirements for the production of SDG 4 indicators.

An initial step in this consultation is to have a country-specific (for prioritized countries) mapping of data for the current indicator framework, which would allow for a determination of the components that would have to be improved in each country. In addition, there is a need to have an integrated approach to the production of SDG 4 indicators that should be used by all countries. This integrated approach would interconnect the differences sources of information that would be used for the production of SDG 4 indicators, with the goal of helping countries maximize their use of their education data.

The purpose of the mapping is to:

- highlight the links between different data components
- help identify capacity gaps by looking at the entire range of education data needs
- provide a structure for key strategic decisions on data capacity needs and a basis for a national strategy for the development of education statistics

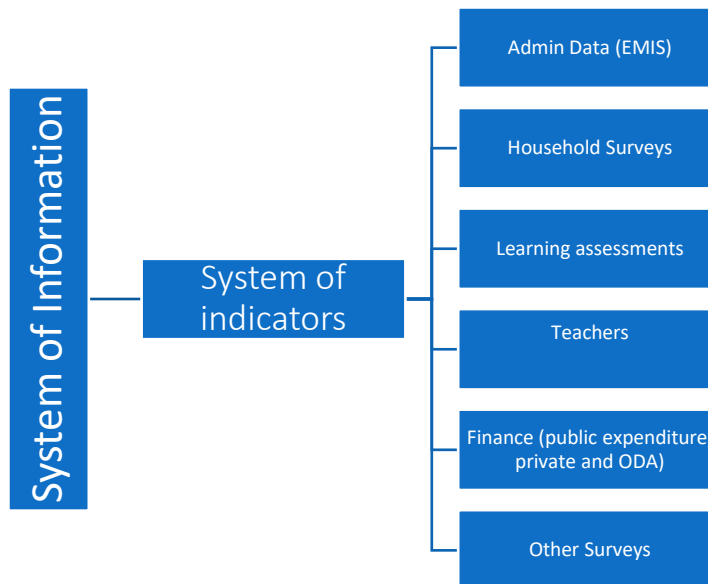
The table in Annex I gives a first approximation of the different data sources that can be used to produce different SDG 4 indicators. It shows that, at the country level, education information needed for the production of indicators can be obtained from: education system data, school censuses, other administrative data (e.g., personnel and finance), multipurpose surveys, labor force surveys, school-level surveys, learning assessments, and special surveys. This sources of data in this detailed taxonomy are an improvement over typical existing listings, where countries typically focus only on administrative data (and even more narrowly, typically, just EMIS data) to generate their responses to the UIS data collection questionnaires.

2. MAPPING A COUNTRY'S EDUCATION INFORMATION SYSTEM

The mapping of the SDG4 data sources should lead to the identification of data gaps, data quality such as gaps on quality and learning, finance, personnel, as well as the provisions, financial gaps, and the identification of capacity building needs for the production and process of source data, as required for the production of a country's SDG4 indicators. This second line of work, discussed in the Executive Summary, calls for a clear understanding of the capacity of a country to report on these indicators. To that end, the framework below (Fig.1) can be used for providing an integrated view of all the data sources into one system for SDG4 indicators. The framework could be embedded in a National Strategy for the Development of Education Statistics (NSDES). The advantage of using this framework is that it:

- clarifies the links between different data sources,
- helps determine statistical capacity in terms of the supply/production and the demand/use of data,
- helps identify capacity gaps by looking at the entire range of education data needs, and
- provides a structure for key strategic decisions on data capacity needs and a basis for a national strategy for the development of education statistics.

Figure 1. A Framework for Integrating Data Sources for SDG4-Education



Using this framework will allow one to:

- a. Provide an annual work programme that is consistent from year to year, using standard concepts and definitions as a technical base;
- b. Focus on a set of valuable indicators, eliminating the duplication of efforts and maximizing data efficiency,
- c. Take into account the additional data sources that need to be included in the overall framework, such as household surveys and learning assessments.

3. ASSESSING COUNTRIES' ECOSYSTEMS AND CAPACITY NEEDS

Custodian agencies, such as UIS, rely on individual countries to generate the baseline data and the SDG4 indicators themselves. However, UIS experience shows that there are significant disparities in how low- and some middle-income countries produce and share data for the SDG4 indicators. Countries decide on the data they collect, and on the data and metadata they share with custodian agencies. Furthermore, their interest/capacity to generate and share SDG 4 data tends to be related to their own level of social and economic development and policy priorities.



To relate a country's capacity needs to its prospective funding requirements, one has to address two issues: how much support is provided, and how it is provided. As noted already, the current set-up of SDG4 data production is a fairly disorganized ecosystem where actors do not have or systematically share full information on needs, capabilities, and objectives. Support to statistical capacity building has been supply-driven and piecemeal, with little emphasis placed on partner countries' demand for data, which in many cases is focused on external stakeholder needs. Therefore, a first task is to bring order to the ecosystem for data, using information sharing, networking, and coordination of support by both donors and recipients of aid for education statistics, to better mobilize existing funds. Ensuring and maximizing the effectiveness of financing for capacity development is essential for the success of the SDG4 agenda. As custodian of SDG 4, UIS is in the unique position of coordinator, or honest broker, guiding donors on the best places and thematic areas to invest their resources, and guiding countries on the best areas to improve production capacity by improving the allocation of their resources.

The implementing strategy would include:

- a. Assessment of countries' demands for capacity development and implementation that would provide a good understanding of the needs and priorities for SDG 4 policies, their capacity for implementation, and monitoring. This assessment can be done through a dedicated survey;
- b. Assessment and sharing of individual donors' policies and existing tools to support countries. Donors need a better understanding of the links between their own policies and countries' needs, to define areas of collaboration, along with the possibility of including the private sector with in-kind donations and partnerships;
- c. Improved dissemination of information about the data ecosystem, with efforts that would include:
 - i. guidelines for investment with alternatives in cost, funding and options;
 - ii. clearinghouse for technical guidelines for implementation;
 - iii. dashboard for countries and donors, on data production and sharing, including key indicators/modules for each SDG indicator; and
 - iv. foster local demand and political will.

4. DRIVING CHANGE THROUGH A GLOBAL COALITION FOR EDUCATION DATA (GDC-ED)

The creation of a Global Coalition for Education data, coordinated by UNESCO's statistical agency, is a solution that will align all resources —financial and technical —around a common approach for measurement and accountability. The goal of this coalition would be to mobilize and align all resources, domestic or international, behind a common approach, and activate public-private partnerships for data production and sharing in a strategic and coordinated way at reasonable costs.

While coordination initiatives are always voluntary, strongly-led coalitions to facilitate data collection and sharing as well as donors coordination have been proven to be effective, as in the cases of [GAVI](#), and the [Global Health Data Collaborative](#) in the health sector; [CGIAR](#) in agriculture, and [GPE](#) in education. The standardization in a common platforms for facilitating stakeholders' use has been widely used and of benefit for the health sector through the [Global Health Observatory](#), the network of countries for

[statistics in agriculture](#) that facilitated the reporting and use of data while improving national and global evidence-based decision making.

The creation of a formal Coalition, with clear leadership and a secretariat, would give it enough managerial and technical authority to provide greater coordination and accountability, both of which are necessary to bring order to the education data ecosystem.

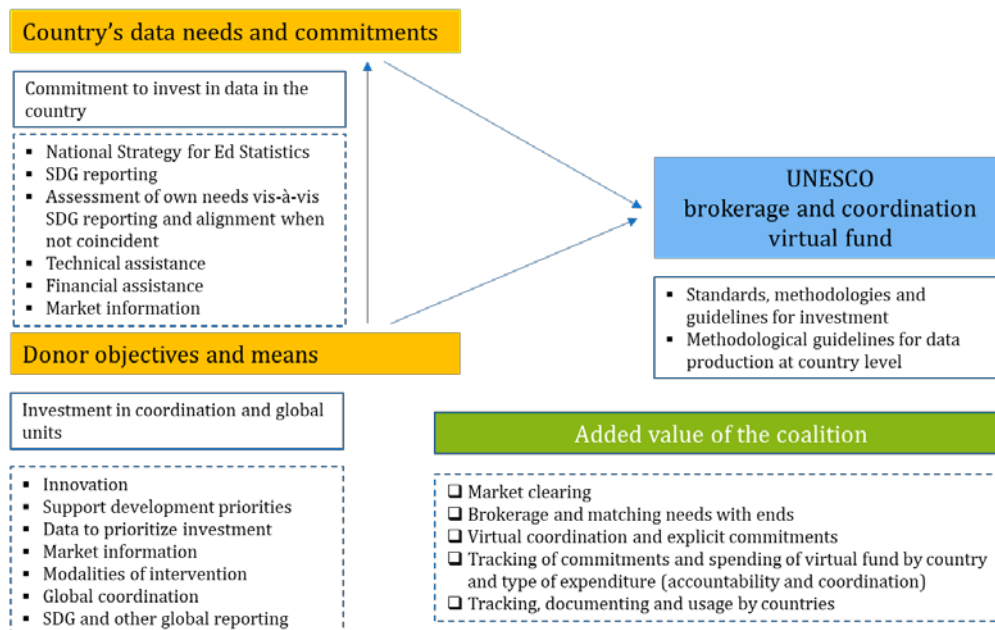
In summary, the Coalition would provide:

- a. a more effective system for gathering funding from donors,
- b. a better system for distributing funding to countries
- c. a better mechanism for sharing information, and for serving as a broker between users, innovators, suppliers, and funders, and
- d. to create a mechanism for better accountability.

It is expected that funders would continue to provide support, and recipients continue to receive support, but in a more efficient, increased, intentional, and coordinated manner. Thus, *the Global Coalition for Education Data would function as a virtual fund*, where funding pledges and disbursements, as well as technical pledges are brokered, coordinated, and tracked so that there is accountability. This would be in line with UN Member States acknowledgement at the recent meeting of the UN Statistical Commission of the UIS role as a broker for development efforts related to education statistics.

The following figure illustrates the overall proposal while a summary of the project is provided in Annex 2.

Figure 2. Summary of the Global Coalition for Education Data (GDC-ED)



Members of the coalition would incrementally draw down their own funding and increase partner country funding, resulting in a sustainable transition to the partner governments over a period of years.

Features would include

- All partners who want to be in the Coalition align behind this approach for SDG 4 monitoring and ensure that all the initiatives they support are consistent with it.
- Countries that receive support dedicate own-source budget and resources to data.
- Alignment of data-specific projects, data aspects of existing and new broader education strategies, loans, projects, technical assistance, training and funding to complement the investment in data collection for SDG 4 monitoring, taking a comprehensive capacity development approach that includes institutional strengthening for data analysis and data literacy to support evidence-based decisions.
- To ensure the necessary funding of methodological development and innovation, timely, centralized, and brokered information on innovations would be provided.

5. GDC-ED WORKSTREAMS

The GCD-ED will define a strategy to work with existing platforms and inter agency working groups as appropriate; to engage with specific sectors/communities (refugees for instance) as needed; to address specific technical issues and topics; to harmonize tools where necessary; to work with other agencies to fill technical gaps, and to ensure broad buy-in for future dissemination and use. Specific terms of reference will be developed to create the necessary working groups for different themes, and for guiding the work of the working groups.

Technical work on the main thematic areas depicted in Fig.1 would be led by working groups in the following thematic areas:

- Administrative data collection systems.* The majority of education management information systems have focused on the use of a regular census of education institutions as the main source of data on the progress of the education system. Often, this data source loses its relevance because of its lack of timeliness, or for not including information on key variables related to new education policies. Countries experiencing these issues need to develop the capacity to produce better administrative data to generate more useful information and, by implication, to increase the demand for education data.
- Household surveys.* There are at least three important reasons for household surveys to be considered an essential part of education statistical systems. First, the school census cannot usually show disparities in access, participation, completion and learning by student characteristics, let alone for those individuals who have left or do not enter the system. Therefore, household surveys are necessary to monitor equity, which is a focus of the SDG agenda. Second, administrative data does not capture well important features of many types of education provision that are highly decentralized and fragmented. This applies to early childhood, but it especially applies to adult education *opportunities* and *skills*. Tracking providers can be costly and incomplete; therefore, tracking recipients through household surveys would be more cost efficient and necessary to monitor *lifelong learning*, which is a centrepiece of SDG4. Third,

administrative data cannot discover motivations and needs of citizens, as one moves beyond the task of providing universal access to basic education.

- c. *Learning assessments.* There is already a group working under [GAML](#). The Coalition would bring value added to the GAML technical efforts by focusing on increasing funding opportunities, improve coordination and overall increased coverage, quality and alignment of reporting.
- d. *Personnel data on teachers* (deployment, careers, working conditions, qualifications and professional development of teachers). There are several reasons for data gaps. In some cases, data simply do not exist, such as in the case of countries with a large private education sector or large number of contract teachers. More commonly, data exist but relevant databases are not linked and coordinated. Countries need support to integrate teacher information in their education data systems through a combination of administrative and survey data sources.
- e. *Education expenditure.* Discussions on education finance have focused on government expenditure and, in the case of poorer countries, external assistance. Two issues remain underdeveloped. First, the level of detail on public expenditure is low (e.g. subnational expenditure is sometimes a complete mystery in federal or decentralised countries), which does not permit analyses of equity and efficiency. Second, a comprehensive and consistent approach needs to also take the contribution of households into account. The work of the Coalition would focus on equity and efficiency in education finance.
- f. *Special focus on specific groups or areas, such as refugees and conflict countries.* There is a need for some groups to have special treatment because they tend to be excluded from the regular functioning of SDG4 data collection processes.

6. GDC-ED CORE TEAM

In order to be able to respond to country and global needs in an iterative way, an annual work-plan will be prepared by an SDG4 dedicated team that will form the basis for reviewed progress and performance. The size and composition of the team will vary with the workload. The GDC-ED the core team, led by the UIS will be formed by various mechanisms such as secondment, by lateral transfers from collaborating agencies, and by direct recruitment.

The GDC-ED core team would work in coordination with partner agencies, so as to cover the key functions of coordinating and aggregating the data for SDG4, including a communications plan with key information and links to working groups, guidance and tools. To be effective, it is expected that the team would have a leader responsible for its management and operations, and technical staff in charge of implementing the functions outlined in the previous section.

The key deliverables for first year include process, country and global-level deliverables, as summarized in section 7.

The budget is estimated in on average of USD 3.5 million the first five years that include the costs of the core team, activities and to fund streams of work including the virtual fund. A tentative budget is included below. The bilateral and multilateral grants to countries will continue to operate.

Table 1. Budget - Global Coalition for Education Data (GDC-ED), in mln. USD

Activity	2019	2020	2021	2022	2023
Communication	0.2	0.15	0.15	0.15	0.15
Technical Groups	1	1	1	1	1
Global repository of tools	0.5	0.35	0.35	0.35	0.35
Global Platform of databases, distributive hubs and analytics, global report on the country educational information systems	1	0.7	0.7	0.7	0.7
		0.4		0.4	
Core team (management, Communication, administration)	0.8	0.8	0.8	0.8	0.8
Total Budget	3.5	3.4	3.0	3.4	3.0
Program Support Costs (9%)	0.3	0.3	0.3	0.3	0.3
Grand Total	3.8	3.7	3.3	3.7	3.3

7. DELIVERABLES

All streams of work in point 5 will produce some specific outputs but will as well be consolidated and integrated in a Global Observatory for Education Data and Tools that will expand on previous efforts in other areas to included not only data but technical standards and tools for all stakeholders (such as health with the Global Observatory of Data) to include deliverables as follows:

- a. **Global repository /knowledge hub of education information standards established to share technical tools, standards, innovations and best practices for countries and regions, based on joint learning and implementation.**
 - i. *Technical Packages:* A technical package of tools and guidance to support countries' self-diagnostic needs (or with occasional outside help). This includes best practices for countries and regions, based on joint learning and implementation..
 - ii. *Country profile.* Each country will have a technical and institutional profile that would be used by donors/funders as a guide for framing their funding agreement with a country. The profile would cover all components included in Section 5.
 - iii. *Donor/Funder package.* The GDC-ED team will work with a donor/funder on the development of an agreement with a country, focusing on the capacity needs of a country, a technical diagnosis on its capacity for producing and disseminating SDG4 indicators, and guidance on finance needs and data quality.
- b. **Global platform of education data**
 - i. Global repository of SDG4 education data with distributed data hubs and analytics:
 - ii. A global report on the state of the country education information systems.

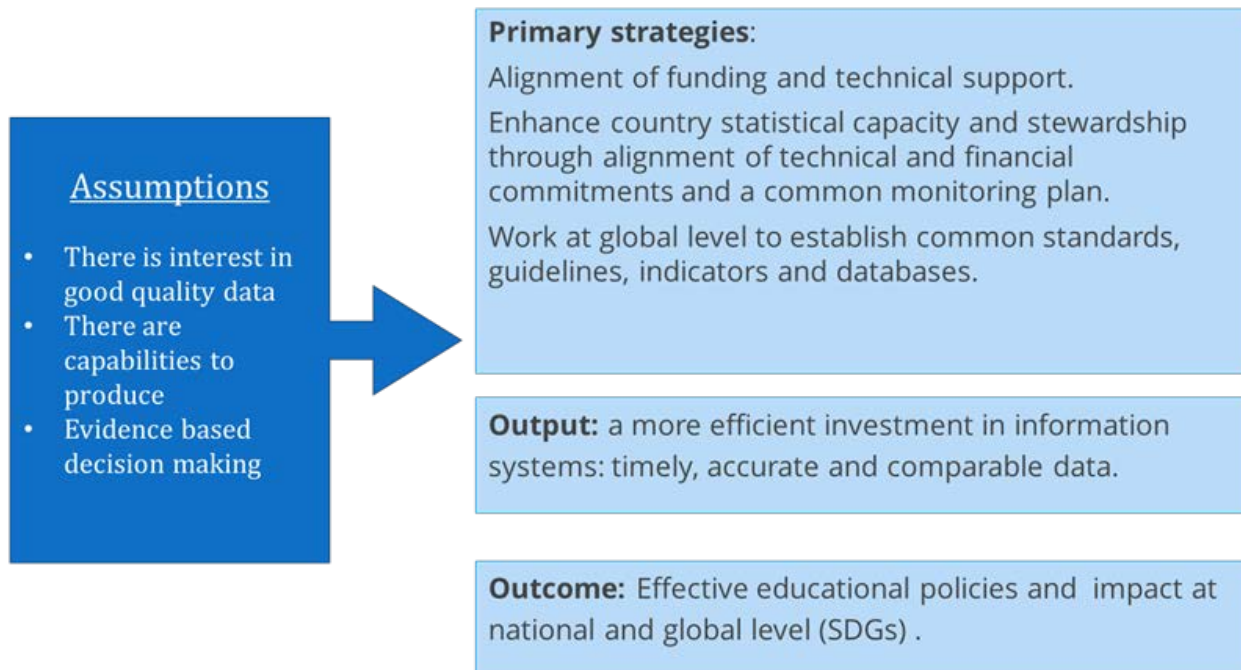
8. NEXT STEPS

1. Finalize the countries' information systems mapping
2. Finalize an Agenda that fleshes out donor/funder interest in specific countries or topics
3. Prepare a detailed work plan
4. Form the Working groups with partners for the further development of each of the topics outlined in Section 5.

9. TIMELINE

Date	Action
2019 – last quarter	Engagement and initial working streams
2020 – first quarter	Launch, endorsement and consensus
2020- third quarter	Global Education Data Summit
2020 – third quarter	Operational plan and log frame endorsed

Figure 3. GDC-ED Theory of Change





Indicator	System data	Household survey					Learning assessment	Special source
		School census/ Administrative data	Multi-purpose survey, e.g. DHS, MICS	Labor force survey	Literacy survey	School survey		
4.4.3	Youth/adult educational attainment rates by age group, economic activity status, levels of education and program orientation		X	X	X			
Target 4.5								
4.5.1	Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated	X	X	X	X		X	X
4.5.2	Percentage of students in primary education whose first or home language is the language of instruction	X	X				X	
4.5.3	Extent to which explicit formula-based policies reallocate education resources to disadvantaged populations	X						
4.5.4	Education expenditure per student by level of education and source of funding	(X)		(X)				(X)
4.5.5	Percentage of total aid to education allocated to least developed countries							X
Target 4.6								
4.6.1	Percentage of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex		X		X			
4.6.2	Youth/adult literacy rate	X						
4.6.3	Participation rate of illiterate youth/adults in literacy programs	X			X			
Target 4.7								
4.7.1	Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment	X						X
4.7.2	Percentage of schools that provide life skills-based HIV and sexuality education		X					
4.7.3	Extent to which the framework on the World Programme on Human Rights Education is implemented nationally (as per the UNGA Resolution 59/113)	X						X
4.7.4	Percentage of students by age group (or education level) showing adequate understanding of issues relating to global citizenship and sustainability						X	
4.7.5	Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience						X	
Target 4.a								
4.a.1	Proportion of schools with access to: (a) electricity; (b) Internet for pedagogical purposes; (c) computers for pedagogical purposes (d) adapted infrastructure and materials for students with disabilities (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions)		X				X	



Indicator	System data	Household survey					
		School census/ Administrative data	Multi-purpose survey, e.g. DHS, MICS	Labor force survey	Literacy survey	School survey	Learning assessment
4.a.2	Percentage of students experiencing bullying, corporal punishment, harassment, violence, sexual discrimination and abuse					X	
4.a.3	Number of attacks on students, personnel and institutions						X
Target 4.b							
4.b.1	Volume of official development assistance flows for scholarships by sector and type of study	X					X
4.b.2	Number of higher education scholarships awarded by beneficiary country						X
Target 4.c							
4.c.1	Proportion of teachers in: (a) pre-primary education; (b) primary education; (c) lower secondary education; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g., pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country, by sex	X					
4.c.2	Pupil-trained teacher ratio by education level	X					
4.c.3	Proportion of teachers qualified according to national standards by education level and type of institution	X					
4.c.4	Pupil-qualified teacher ratio by education level	X					
4.c.5	Average teacher salary relative to other professions requiring a comparable level of qualification	X		X			
4.c.6	Teacher attrition rate by education level	X					
4.c.7	Percentage of teachers who received in-service training in the last 12 months by type of training	X				X	

Source: SDG-Education 2030 Steering Committee - Review, Monitoring and Reporting Working Group -



ANNEX 2. GLOBAL COALITION FOR EDUCATION DATA: PROJECT SUMMARY

1. Description	UNESCO data coordination on the UIS that is the statistical agency and has the global and thematic mandate on data.
2. Objective	To mobilize and align all resources, either domestic or international, behind a common agenda, and activate public-private partnerships for data production in a strategic and more cost-effective way
3. Any solution should	<ul style="list-style-type: none"> a) Must deliver the goods (institutional and technical quality). b) Must be sustainable (institutionally, technically and financially).
4. Hypotheses as to barriers for data reporting	<p>Countries will tend to under-report as long as:</p> <ul style="list-style-type: none"> a) Investments in data are inadequate, fragmented and poorly coordinated b) Major international programs and donors not engaged in a coordinated way c) There is insufficient support for countries to understand and use global reporting standards. d) Ministries of education and National Statistical Offices receive insufficient support e) Reporting has a high cost in terms of usage of scarce skills, because it may require estimation and imputation of key data in cases where the SDG indicators go beyond sectoral administrative data. f) The responsibilities to report, internally in the Ministry, are either not clear and are not enforced, and the higher levels of Ministries under-fund the data function. g) Data, even good quality and available, is not used by local communities
5. Assumptions	<ul style="list-style-type: none"> a) There is interest in good quality data b) There are capabilities to produce data c) Evidence based decision making
6. How to channel partners commitments	<p>Collective action will re-direct funding from its existing individual approach to a coordinated collective action that is designed to build sustainable data within the SDG context, along the following lines:</p> <ul style="list-style-type: none"> a) All partners who want to be in the Coalition align behind this agenda for SDG 4 monitoring and ensure that all the initiatives they support are consistent with it. b) Countries that receive support dedicate own-source budget and resources to data. c) Align existing and new education strategies, loans, projects, technical assistance, training and funding to complement the investment in data collection for SDG 4 monitoring, taking a comprehensive capacity development approach that includes institutional strengthening for data analysis and data literacy to support evidence-based decisions. d) To ensure the necessary funding of methodological development and innovation, timely, centralized, and brokered information on innovations would be provided.
Work stream - Global Action	Key actions



<p><i>Strengthen countries' ability to monitor and act on their response to the targets and measure of national priorities and the education related SDGs</i></p>	<ul style="list-style-type: none"> a) Work at global level to establish common standards, indicators and databases will contribute to countries education information systems. b) Better map countries' own needs to assess the degree to which reporting can be made a by-product of their own needs. Generalize from a sample (or universalize after the sample has pilot tested the assessment). c) Develop a joint technical package of tools and standards for strengthening country education measurement and accountability d) Promote and facilitate open data access e) Agree on a country-prioritization approach for funding (build on what exists, e.g., the GPE funding formula).
<p>Work stream 2 - Country <i>Improve efficiency and alignment of investments in education data systems through collective action</i></p>	<p>Key actions</p> <ul style="list-style-type: none"> a) Strengthen policy and institutional environment, including a strong national monitoring and evaluation plan for the education sector with aligned disease specific plans. b) Advocate for - and support the development and use of -a common investment framework for country data systems, based on a resource mapping of domestic and partner investments. c) Identify gaps and opportunities for innovative solutions, reduce fragmentation d) Raise the profile of the education related SDGs and the global effort in strengthening country-led effort and accountability among government senior officials, partners and other stakeholders. e) Identify the priority needs and capacity enhancements that should be considered f) Enhance country capacity to conduct cross-program analysis and country level decision-making and reporting to SDG
<p>7. Output</p>	<p>More efficient investment in information systems through more timely, accurate and comparable data</p>
<p>8. Outcome</p>	<p>Effective policies and impact at national and global level (SDGs)</p>
<p>9. Budget per year</p>	<p>Core Team - 1.5 million USD if only staff and basic activities/ 5/7 million USD for setting global public goods such as databases</p>
<p>10. Deliverables</p>	<p>Country deliverables</p> <ul style="list-style-type: none"> a) Technical package with tools and guidance b) Country profile c) Donor/Funder package <p>Global deliverables</p> <ul style="list-style-type: none"> a) Global repository /knowledge hub of education information standards b) Global repository of education data with distributed data hubs and analytics c) A global report on the state of the country education information systems.