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Technical Advisory Group Proposal: Thematic Indicators to Monitor the Post-2015 Education Agenda



Members of the Technical Advisory Group



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Technical Advisory Group Proposal: Thematic Indicators to Monitor the Post-2015 Education Agenda

This document was prepared by the Technical Advisory Group (TAG) and is a reference document for ongoing discussions on indicators. It does not represent a WEF proposal for either agreement or adoption. The TAG was established by UNESCO to provide feedback on the proposed post-2015 education targets, develop recommendations for indicators and help guide the establishment of a measurement agenda, thus informing and supporting the work of the Education for All Steering Committee. It is chaired by the UNESCO Institute for Statistics and includes experts from the EFA Global Monitoring Report, the OECD, UNESCO, UNICEF

1. Introduction

The TAG was given the mandate by UNESCO to review and recommend indicators that can be used to track global progress in the implementation of the post-2015 education agenda. This paper proposes thematic indicators to measure global progress towards the achievement of the 7+3 education targets that have been proposed by UN Member States for the Sustainable Development Goals (SDGs) and the Education Framework for Action (hereafter referred to as *Education 2030*).

The selection of indicators for tracking the *Education 2030* targets must meet specific demands. First, the proposed set must be small and focused on the targets, thus requiring prioritisation. Second, in keeping with its mandate, the TAG has concentrated on indicators which provide comparable information across countries. The TAG envisions global tracking as one part of a broader and more contextually-sensitive monitoring system that will be designed by countries and regions as part of their implementation of *Education 2030*. It is not possible to fully measure the breadth and vision behind the proposed goal and targets with available indicators. Therefore, the TAG has proposed an initial set of indicators based on their relevance and feasibility as an intermediate step towards a comprehensive data and measurement agenda for education, which will require coordination, technical capacity and extensive investment to achieve.

2. Rationale for the TAG's proposed indicators

As noted in the UN Secretary-General's synthesis report and the report of the Sustainable Development Solutions Network (SDSN) on post-2015 indicators, there will be four levels of SDG monitoring:

- Global: Approximately 100-120 indicators will be endorsed by the UN Statistical Commission (UNSC) and used to monitor the 17 goals and 169 targets of the SDGs, which implies a small number of indicators for the education goal.
- Thematic: These globally-comparable indicators will be proposed by the education community to track the education targets more comprehensively – and will include the global indicators.
- Regional: Additional indicators may be developed to monitor specific regional targets.
- National: Countries are encouraged to develop indicators that correspond to their education systems, plans and policy agendas.

The global indicators are intended to serve as the primary foundation to track progress of all countries towards the education targets on an internationally-comparable basis. The thematic set includes a larger number of indicators to provide greater alignment with the proposed targets, some of which will require further development and decision-making on the extent to which globally-comparable data are attainable

or desirable. The TAG understands that the small set of global indicators will be reflected in the thematic, regional and national levels as relevant and appropriate.

Although this paper does not offer recommendations on indicators to be included at the regional and national sets, monitoring at these levels is essential. First, more frequent and locally-relevant data can be collected through national systems; and second, for some constructs, the standards required for global tracking may not be met or be feasible for proposed targets, but they may be tracked at the national level.

The TAG's recommendations can be considered as the framework for global and thematic indicators that countries can use as a starting point for their national monitoring, which can then be supplemented with national or regional data. National or regional data may be more relevant than those currently available at the global level. The proposed framework is important for consistent and reliable tracking of global progress towards education targets.

In line with the above:

- The TAG is proposing a set of 42 **thematic indicators**.
- Of these, 20 indicators were proposed by the TST for consideration as **global indicators** for education. A subset of 16 indicators has since been included in the UNSC's preliminary list of global indicators. It is expected that about 6-10 indicators will be eventually selected.

Criteria for selection and prioritisation of indicators by the TAG

Indicators for global tracking should ideally meet a range of standards that ensure technical strength, feasibility, frequency of reporting, cross-national comparability and availability of data over time. For simplicity, the TAG focused on four criteria, notably:

- **Relevance:** While it is difficult for indicators alone to fully capture the vision behind the proposed targets, indicators should ideally reflect the most critical policy themes in the targets. Across all proposed targets, emphasis has been placed on measuring learning outcomes and equity.
- **Alignment:** The construct to be measured must be valid and reliable relative to the targets, such that the indicator has the same meaning and significance in all settings, ideally measured by a similar question or item. Measuring constructs that vary across settings pose challenges for global tracking. It may be possible to measure some elements globally, while others may be best measured at the national or regional level, with flexibility to adapt constructs to local contexts.
- **Feasibility:** Global tracking is most effective when the data are collected on a regular basis (though not necessarily annually) and all or nearly all countries routinely collect the data in a similar manner. Infrequent or low coverage of data constrains the ability to track changes over time. It must be feasible and cost-effective to collect data over time.
- **Communicability:** The indicators selected must be easily understood and lend themselves to the development of a clear narrative regarding progress towards the goal and targets. The indicator framework for education should facilitate clear and transparent reporting and effective communication about the objectives and achievements of each stage of implementation.

Focus on learning outcomes and equity

The post-2015 global education agenda requires the international community to address two critical challenges: i) measurement of learning outcomes; and ii) improved measurement of equity in education. In both cases, the challenges are to be addressed through a universal agenda with indicators that are relevant to all countries. To achieve this goal, it will be essential to: strengthen data from administrative and

household sources; agree on common definitions and standards; and create stronger partnerships between organizations focused on measurement.

Learning outcomes

Five of the seven education targets focus on learning outcomes (i.e. the effect of education on individual children, young people and adults). This is a shift from previous global education targets, such as those in the Millennium Development Goals (MDGs), which solely focused on ensuring access, participation and completion in formal primary education and on gender equality in primary, secondary and tertiary education. The post-2015 education targets highlight that enrolment and participation (e.g. in early childhood development programmes, formal schooling or adult education opportunities) are the means to attain results and learning outcomes at every stage (e.g. school readiness for young children; academic competencies for children in primary and secondary education; functional literacy and numeracy skills; and skills for work, global citizenship and sustainable development for youth and adults). Indicators for global monitoring must emphasise this renewed focus on outcome measures. The TAG proposes indicators that enable the measurement and comparison of learning outcomes at all levels of education.

Equity

The SDG agenda calls for an explicit focus on equity, including equity-specific goals (Goal 5 on gender equity and Goal 10 on reductions in inequalities). In response, education indicators should aim to capture not just national averages but also the variation across different population subgroups defined by group and individual characteristics, such as sex, wealth, location, ethnicity, language or disability (and combinations of these characteristics).

Global monitoring of inequalities in education and other sectors has so far mainly captured differences by sex. This reflects the focus on gender inequalities in the MDGs, which was also driven by the availability of data for most countries. However, to look systematically at the potential dimensions of disadvantage in education will require disaggregated data on individuals from a variety of sources, including administrative sources and household or school-based surveys. The TAG proposes indicators that enable the tracking of progress in reducing inequalities in all focus areas of the education targets.

3. Proposed thematic indicator framework

Table 1 presents the proposed indicators by target. The following information is provided for each indicator:

- Column 1 indicates the concept of each target to which an indicator corresponds. For example, in the case of Target 4.1, indicators are classified in four groups: learning outcomes, completion of each level, participation in each level and provision of education.
- As part of the focus on equity, Columns 4-7 indicate whether only the national average or aggregate value of an indicator can be tracked or whether, as in the majority of cases, the indicator can be disaggregated by particular individual characteristics (sex, location or wealth).
- Column 8 indicates whether an indicator is currently available and, if not, how long it might take for an indicator to be developed. If an indicator is currently available, Column 9 indicates the current extent of country coverage.
- Column 10 identifies those indicators that were proposed by the UN Technical Support Team (TST) to the UNSC as potential global indicators – as well as those indicators that were eventually included in the UNSC preliminary list of indicators in March 2015.
- Finally, Column 11 offers some initial thoughts on outstanding, indicator-specific issues, which have been taken into account and need to be addressed.

Table 1. Proposed thematic indicator framework

Goal: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

1	2	3	4	5	6	7	8	9	10	11
Concept	No.	Indicator	Equity	Sex	Location	Wealth	Available	Coverage	Recommended by *	Comments
Targets 4.1-4.7										
4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes										
Learning	1.	Percentage of children who achieve minimum proficiency standards in reading/mathematics at end of: (i) primary and (ii) lower secondary school	Yes	X	X	X	3-5 years		TST UNSC	The indicator requires the development of a global metric for each subject as a reference point to which different assessments (national, regional and international) can be anchored. Assessments at other levels (e.g. Grade 2) could be considered.
	2.	Percentage of countries that have organized a nationally-representative learning assessment at the end of (i) primary and (ii) lower secondary school during the last 3 years	No				1-3 years			Standards will need to be developed.
Completion	3.	Gross intake ratio to the last grade (primary, lower secondary)	Yes	X			Yes	c150	TST	
	4.	Completion rate (primary, lower secondary, upper secondary)	Yes	X	X	X	Yes	c100	TST UNSC	This indicator is currently available but work is required to finalise a common methodology and increase the number of surveys available to calculate it.
Participation	5.	Out-of-school rate (primary, lower secondary)	Yes	X			Yes	c160	TST	This indicator will also be used to monitor children and adolescents in refugee and displaced populations in line with efforts to improve coverage.
	6.	Percentage of children over-age for grade (primary, lower secondary)	Yes	X	X	X	Yes	c100		This indicator is currently available but some work is required for a methodology on age adjustment
Provision	7.	Number of years of (i) free and (ii) compulsory primary and secondary education guaranteed in legal frameworks	No				Yes	All		
4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education										
Readiness	8.	Percentage of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being	Yes	X	X	X	3-5 years		TST UNSC	This indicator is currently tracked via the Early Childhood Development Index available from MICS but work is needed over the next 3-5 years to examine other alternatives, reach consensus and develop a set of questions for use across surveys.
	9.	Percentage of children under 5 years of age experiencing responsive and stimulating parenting	Yes	X	X	X	Yes	c30		This indicator is currently available through MICS but work is needed over the next 3-5 years to examine other alternatives, reach consensus and develop a set of questions for use across surveys..
Participation	10.	Participation rate in organized learning (from 24 months to official primary school entry age)	Yes	X	X	X	3-5 years		TST UNSC	It is necessary to harmonise this indicator across surveys in two areas: (i) age group of reference (e.g. MICS asks question about 3- to 4-year-olds) and (ii) description of programmes (e.g. many surveys may not capture the concept of organized learning).
	11.	Gross pre-primary enrolment ratio	Yes	X			Yes	c165		
Provision	12.	Number of years of (i) free and (ii) compulsory pre-primary education guaranteed in legal frameworks	No				Yes	All		
4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university										

Participation	13.	Gross enrolment ratio for tertiary education	Yes X	Yes c145	TST UNSC	
	14.	Participation rate in technical-vocational education programmes (15- to 24-year-olds)	Yes X	3-5 years	TST UNSC	Currently data are available on technical-vocational enrolment in upper secondary, post-secondary non-tertiary and short-cycle tertiary education. There are difficulties in collecting data by age and TVET in settings other than formal schools/universities.
	15.	Participation rate of adults in formal and non-formal education and training	Yes X X X	Yes c30	TST UNSC	Currently data are only available on adult education in European Union countries. Considerable work is required to develop a set of questions to be applied in labour force or other surveys globally.
4.4 By 2030, increase by x per cent the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship						
Skills	16.	Percentage of youth/adults with ICT skills by type of skills	Yes X X X	1-3 years ...	TST UNSC	Few surveys (e.g. ICILS) attempt to measure such skills. Major efforts are required to develop global data collection.
4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations						
Equity cross-targets	...	We recommend the <u>parity index</u> (female/male, rural/ urban, bottom/top wealth quintile) for all indicators on this list that can be disaggregated (as identified in Column 5)			TST UNSC	Alternative ideas instead of the parity index may be: (i) odds ratio; (ii) concentration index; or (iii) least advantaged group (e.g. poorest rural girls) relative to the mean. In addition, education indicators for people with disabilities will be monitored in line with efforts to improve coverage.
Policy	17.	Percentage of students in primary education whose mother tongue is the language of instruction	Yes X X X	3-5 years		Major efforts will be required to develop a global measurement tool.
	18.	Percentage of countries which have an explicit formula-based policy reallocating education resources to disadvantaged populations	No	3-5 years		A reporting process is required for countries to describe their policies and a methodology will need to be developed to assess these policies.
	19.	Percentage of total education expenditure borne by households	No	Yes c35		Currently data are only available for more developed countries. Considerable work is needed to develop national education accounts in less developed countries.
	20.	Percentage of total aid to education allocated to low-income countries	No	Yes c60		
4.6 By 2030, ensure that all youth and at least x per cent of adults, both men and women, achieve literacy and numeracy						
Skills	21.	Percentage of youth/adults proficient in literacy skills	Yes X X X	3-5 years	TST UNSC	While a number of middle-income (STEP) and high-income (PIAAC) countries have assessed literacy skills of adults, a cost-effective tool needs to be inserted in other surveys for use across countries.
	22.	Percentage of youth/adults proficient in numeracy skills	Yes X X X	3-5 years		While some middle-income (STEP) and high-income (PIAAC) countries have assessed adult numeracy skills, a cost-effective tool is needed to be integrated in other surveys for use across countries.
	23.	Youth / adult literacy rate	Yes X	Yes c160	TST UNSC	
Provision	24.	Participation rate of illiterate adults in literacy programmes	Yes X X X	3-5 years		Currently data are only available on adult education in European Union countries. Tools should be developed in conjunction with indicator 15.
4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development						
Knowledge	25.	Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience	Yes X X X	Yes c55	TST UNSC	Only one survey (PISA 2006) attempts to measure such knowledge. Major efforts will be required to develop a global measurement tool.
Attitudes	26.	Percentage of 13-year-old students endorsing values and attitudes promoting equality, trust and participation in governance	Yes X X X	Yes c40	TST UNSC	Only one survey (ICCS 2009) attempts to measure such attitudes. Major efforts will be required to develop a global measurement tool.
Participation	27.	Percentage of teaching hours dedicated to education for sustainable development/global citizenship education	No	3-5 years		Major preparatory work is required to develop a consensus on what elements of curricula across countries correspond to

						these concepts.
	28.	Percentage of schools that provide life skills-based HIV and sexuality education	No	3-5 years		An overhaul of the way countries report on this indicator will be required to ensure estimates are better linked to the reality at the school level.
	29.	Countries implementing the framework on the World Programme on Human Rights Education (as per UNGA resolution 59/113)	No	Yes All		

Means of implementation 4.a-4.c

4.a By 2030, build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

Resources	30.	Percentage of schools providing (i) basic drinking water; (ii) adequate sanitation; and (iii) adequate hygiene services	Yes X	1-3 years	TST UNSC	Considerable work is required to extend the coverage of current data collection efforts to all countries.
	31.	Pupil-to-computer ratio by level	Yes X	Yes c60		
	32.	Percentage of schools with (i) electricity and (ii) Internet access for pedagogical purposes	Yes X	Yes c70		
	33.	Percentage of schools with adapted infrastructure and materials for people with disabilities	Yes X	3-5 years		Major preparatory work is required to develop an approach on assessing school conditions for people with disabilities across countries.
Environment	34.	Percentage of students experiencing bullying, corporal punishment, harassment, violence, sexual discrimination and abuse	Yes X X X	Yes 80		The indicator is available through the Global School-based Student Health Survey. See http://www.who.int/chp/gshs/datasets/en/
	35.	Number of attacks on students, personnel and institutions	No	3-5 years		Considerable work is needed to establish an organized data collection to measure this target.

4.b By 2020, expand by x per cent globally the number of scholarships available to developing countries, in particular least developed countries, small island developing states and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries

Number	36.	Number of higher education scholarships awarded by beneficiary country	No	1-3 years		Considerable work is needed to establish an organized data collection to measure this target.
	37.	Volume of official development assistance (ODA) flows for higher education scholarships by beneficiary country	No	Yes All	TST UNSC	This indicator only measures some sources of scholarships.

4.c By 2030, increase by x per cent the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing

Qualified	38.	Percentage of teachers qualified according to national standards (by level)	No	1-3 years	TST	Following preparatory work, countries will begin reporting on this indicator for the first time from the academic year 2014 onwards.
Trained	39.	Percentage of teachers trained according to national standards (by level)	No	Yes	TST UNSC	Major efforts will be required to agree on common standards.
Motivated	40.	Average teacher salary relative to other professionals	No	1-3 years		Major efforts will be required to develop a methodology based on labour force data.
	41.	Teacher attrition rate	No	1-3 years		Considerable work is required to extend the coverage of current data collections to all countries.
Supported	42.	Percentage of teachers receiving in-service training	No	3-5 years		Major efforts will be required to develop a tool that assesses the incidence, duration and content of training.

Note: Indicators in Column 10 were proposed by the UN Technical Support Team (TST) for Goal 4 (Education) of which a subset was included in the preliminary list of the UN Statistical Commission (UNSC) in March 2015.

4. Key considerations resulting from the public consultation

The TAG organized a public consultation on indicators for global tracking from 17 November 2014 to 30 January 2015. The consultation was based on the TAG paper, “Towards indicators for a post-2015 education framework”, which was released in November 2014. The consultation posed specific questions on the proposed indicators and offered respondents the opportunity to comment on broader themes related to education measurement for the post-2015 agenda.

Comments were solicited online and 195 contributions were received, including several substantial pieces of feedback from representatives of civil society, academia, development partners and other international organizations. In addition, meetings brought together diverse groups of stakeholders at national and international levels, for example in London, New Delhi and Washington, DC.

In general, respondents indicated support for the TAG proposal, with several suggestions for improvement. A number of constructive suggestions have been used to improve the recommendations which are contained in this paper. This section outlines particular cases where contributions had a direct influence on the proposal. In general, these contributions helped the TAG to identify indicators that were not fit for purpose or those that should be added or adjusted. This section also discusses contributions that were considered by the TAG with explanations of why they were not addressed in the current proposal.

Recommendations incorporated in the proposal

The current proposal reflects several contributions that were made during the consultation process. Through the feedback, indicators were added to the original list while others were identified as not adequately meeting the criteria outlined by the TAG. Furthermore, a number of additions and adjustments were made to the proposal, including the following:

- Greater emphasis was given to input and process indicators which were added to measuring outcomes. This is in response to comments expressing the need for indicators that are critical to understanding progress towards outcomes.
- Three new indicators of equity were added to better capture inequalities not only in education results but also in education systems (e.g. related to language of instruction, targeting of resources to disadvantaged populations, and the share of education expenditure borne by households).
- The indicators on the existence of legal guarantees related to free and compulsory pre-primary, primary and secondary education were enhanced.
- The proposed indicator on whether young children are developmentally on track was broadened until consensus is reached on how it should be measured.
- The age group on young children’s participation in organized learning programmes was extended.
- Adult participation in formal and non-formal education and training was extended to all adults regardless of age.
- Three new indicators were added to capture the curricular focus on education for sustainable development: global citizenship education, HIV and sexuality education, and human rights education.
- The terminology of the Water, Sanitation and Hygiene (WASH) community was adopted for the relevant indicator on water and sanitation facilities in schools.
- Two new indicators were added to capture the availability of information and communication technology infrastructure in schools.
- A new indicator was added on the availability of infrastructure and materials for people with disabilities in schools. In addition, the need to monitor the educational experience of people with disabilities was recognised.
- A new indicator was added on the incidence of bullying, corporal punishment, harassment, violence, sexual discrimination and abuse.

- A new indicator was added on the number of attacks on students, personnel and institutions. In addition, the need to monitor the educational participation of children and adolescents in conflict situations, in particular among refugee and displaced populations, was recognised.
- A new indicator was added to capture not only the volume of higher education scholarships funded by aid programmes but also the total number of scholarships awarded.
- A new indicator on teacher attrition was added to strengthen monitoring of teacher motivation.

The proposal also approximates the time it would take for indicators that are not currently available to be developed and piloted. This is in response to requests for the proposal to provide a realistic assessment of the feasibility of new indicators.

Other issues considered

Several **cross-cutting** points were made by respondents to strengthen the TAG proposal. For example:

- A number of participants identified the need to better define key concepts. At earlier stages, and in the run-up to the Muscat Global EFA Meeting in May 2014, the TAG had made suggestions to the EFA Steering Committee to improve the language of the targets in order to ease the task of selecting indicators. However, given that the targets were formulated as part of the intergovernmental negotiations taking place in the Open Working Group process, it is necessary to recognise that recommendations to change the language of the targets was outside of its mandate.
- A number of contributors identified the need to address implementation issues in following up this measurement agenda, especially at the national level. It is true that issues, such as capacity building, reporting and accountability, are not addressed explicitly in this proposal, as the mandate of the TAG was not meant to cover these issues in detail.
- A few participants suggested that the TAG should have taken a stronger inter-sectoral perspective by proposing more indicators that are on the boundaries between education and other sectors. The TAG did in fact take into account indicator proposals made under other SDGs, which already include stunting (Goal 3), early marriage (Goal 5), child labour (Goal 8), and violence (Goal 16).

There was strong support from consultation participants that measurement of **equity** should be a key focus of the post-2015 measurement agenda. In that context, the following challenges were highlighted:

- The education community should consider the use of inequality indicators to capture differences between population groups (e.g. an absolute gap measure, a relative parity index, etc.). A number of options are identified in Table 1. Their application should be based on an examination of the relative merits of different inequality indicators.
- The TAG advocates for disaggregation of every indicator where possible by at least three individual characteristics that allow scope for global comparisons (i.e., sex, location and wealth). This point may not have been communicated clearly given several comments. A presentation of inequality indicators is made difficult by the fact that a reference to disaggregation by sex, location and wealth for almost each indicator would have lengthened the document. To reiterate, the proposal calls for essentially all indicators to draw on data sources that will allow them to be disaggregated, with exceptions for those indicators that refer to countries and not individuals.
- The TAG proposal is guided by the potential for global comparability. It does not involve an evaluation of what individual/group characteristics should be tracked because this is assumed to vary based on context. Instead, it is based on two considerations.
 - i) Does a group characteristic carry the same meaning across countries? For example, consultation responses noted the need for indicators to be disaggregated according to groups defined by language. However, in some countries such minorities may be marginalised while in others they may be privileged. Within the context of an individual country, tracking these differences is vital; but comparing linguistic minorities from different countries makes little sense for the purposes of a global monitoring framework. Nevertheless, as language is a key driver of inequality, the TAG has proposed an approach based on a system-related indicator.

- ii) How much information is available on specific disadvantaged groups? Two cases emerged in the consultation. First, recent efforts to promote better measurement related to persons with disabilities are likely to advance the tracking of their educational progress. Second, information on refugee and displaced populations has improved in recent years. While few concrete data on educational status are available, it is possible to envisage short-term progress.
- The consultation reinforced the need for more indicators about equity in terms of outcomes, as well as the inputs and processes related to education systems.

Likewise, the consultation participants strongly supported the prioritisation of the measurement of **learning outcomes** in basic education. At the same time, respondents debated the following issues:

- Some felt that the focus on two subjects (reading and mathematics) was justified, whereas others argued that it risked reducing the scope of education. With reference to the selection criteria, measures of reading and mathematics are more available with greater evidence of comparability at this time. The TAG acknowledges the importance of other areas of education and embraces efforts to develop measures in other subjects.
- There were different views on the use of national or international standards to measure learning. The TAG believes that, in order to monitor the success of the post-2015 agenda, it is necessary to develop a shared understanding of what competencies children and adolescents need to possess at the end of each education level using an international standard.
- There were requests for more emphasis on assessment in early grades and not only at the end of the cycle. This approach has been valuable in a number of countries but the lack of comparability across countries constrains recommendations to assess learning at this level globally.
- A few contributors questioned whether the source of information on learning outcomes should be an assessment of the entire *population* of students. However, the recommendation is clear that only a *sample*-based national assessment process tracking system-wide trends should be the preferred source of evidence to avoid high stakes.
- Finally, some emphasised that the learning outcome indicator should cover all children of primary or lower secondary school age, whether in school or not. The TAG agrees with the fundamental importance of this approach and acknowledges that a number of citizen-based assessments have shown a way forward. However, the costs of collecting such information from out-of-school populations are too high at this stage to justify inclusion in the proposed thematic indicators.

Finally, **education for sustainable development (ESD)** and **global citizenship education (GCED)** are new territory for comparable indicators and many of the contributions to the consultation revealed that there are differences in approach. For example:

- At the level of measuring *inputs*, there were differences in opinion. There were calls for a measure of the extent to which elements of ESD/GCED are found in curricula. However, some argued that it would be a mistake to treat ESD/GCED as subjects when in practice they are approaches to learning. More generally, insufficient efforts based on such measures are likely to be contentious.
- At the level of measuring *knowledge*, there is consensus that progress in the acquisition of knowledge and skills related to sustainable development and global citizenship needs to be monitored, even if it is not linked to changes in attitudes and behaviours. There was some criticism of the focus on a specific age group (e.g. 13-year-olds). The TAG acknowledges this weakness, but the instruments currently used to monitor this area are designed specifically for this age cohort.
- At the level of measuring *attitudes* and *values*, some contributors proposed relying on the World Values Survey and suggested other questions from that instrument (e.g. attitudes to women's education, tolerance and respect, etc.). However, others pointed to the fact that these are often 'loaded questions' and responses may not be reliable.

5. Next steps: Key actions needed on data

The proposed indicator framework is ambitious. The international community is not ready to begin implementing this framework without making considerable efforts and mobilising the necessary resources. The education sector faces many issues in respect of data, some of which were identified in the report of the Independent Expert Advisory Group on a Data Revolution for Sustainable Development, including the need for documented standards in several areas, improved technical capacity and stronger coordination at national and international levels. Some priorities are identified below to highlight the scale and types of challenges ahead in education monitoring:

- The growing evidence on the importance of **early childhood** development has produced a number of research-based measures and one measure is collected through UNICEF's MICS survey, but there is no field-tested consensus on an indicator that can be collected in a cost-effective way and compared across different countries, especially across low- and high-income countries.
- The agenda highlights the need to measure **learning** outcomes at different ages or grades. Despite growing participation in national and cross-national learning assessments, learning outcomes are not yet tracked over time and across countries in a systematic way. Efforts are underway to develop an approach to equate and link national definitions of key learning outcomes in order to compare assessment results across countries.
- The proposed indicator framework prioritises the measurement of **literacy** and **numeracy** by level of proficiency, which marks an important improvement to current measures. However, it will be critical to build on lessons learned from recent efforts (e.g. PIAAC, STEP, LAMP) to assess these skills in order to promote cost-effective approaches that can be used by countries with limited resources.
- Attention to **equity** is critical to the new agenda. This calls for a clear shift in the use of surveys and population censuses – whether of households or schools, children or adults – and efforts to extend the background information available through administrative sources. This process requires the following:
 - The establishment of *inter-agency groups* to harmonise methodologies and play a role in setting standards for survey-based indicators, building on the lessons from similar exercises in child mortality and nutrition.
 - A coordination mechanism within and across countries to promote existing UN recommendations and new sets of questions to be used across surveys and population censuses (e.g. in the case of early childhood organized learning programmes).
 - Better use of disaggregated administrative and survey-based data by national authorities for policymaking, which may entail improved coordination between relevant education stakeholders and national statistical offices.
- In the area of education for **global citizenship** and **sustainable development**, the current proposal is provisional. The international community needs to discuss the essential behaviours and the type of education that lead to desired outcomes. The process of reaching a consensus and using the findings to influence the design of education systems to better serve these objectives will be in itself a ground-breaking result of implementing the post-2015 agenda.
- Work needs to continue to improve coverage, accuracy and timeliness of **finance** data. It would be useful to consider developing or strengthening existing national education accounts to accurately reflect the respective shares of governments, donors and households in total education financing.

6. Next steps for reaching consensus on global and thematic indicators

Drawing on a revised proposal submitted to the EFA Steering Committee meeting in February 2015 and upon request of the co-facilitators of the Post-2015 Intergovernmental Negotiations, UNESCO and UNICEF, as education co-leads in the UN Technical Support Team (TST), recommended a subset of thematic indicators for consideration as global indicators. Based on the TST submission covering all 17 SDGs, the United Nations Statistical Commission (UNSC), in turn, identified a preliminary list of global indicators (of which 16 are education-related) and submitted them to national statistical agencies for review. A technical report by the Bureau of the UNSC, submitted in March 2015, includes the results of this review and is the basis for further discussions, starting from the first meeting of the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) in June 2015.¹ The group will be comprised of representatives of National Statistical Offices from a geographically diverse set of Member States. Members of international and regional organizations and specialised agencies will be observers to the group.

Between June and December 2015, the group will develop a proposal ideally consisting of no more than 100-120 indicators for the monitoring of the proposed 17 goals and 169 targets. The proposal will be considered by the UNSC at its next session in March 2016. The indicator framework will then, most likely, be submitted to ECOSOC for final adoption in July 2016. The TAG will continue to track this UN Member States led process to refine the global SDG monitoring framework.

It is expected that the high-level global indicator framework will include 6-10 indicators for the monitoring of the education goal. These indicators will also be included in the larger indicator set for the thematic monitoring of the education targets. If any changes are made to the global indicators as they are finalized through the process coordinated by the UNSC, the thematic indicators endorsed in November 2015 will be subsequently revised and aligned.

It is proposed that the thematic indicators will be further developed through a consultative process with Member States and partners before the *Education 2030* high-level meeting in November 2015. The proposed process and steps to refine the education thematic indicators to support and feed into the final SDG framework are outlined in the Framework for Action. The thematic indicators will be subsequently revised and aligned according to any changes in the global indicators as a result of the UNSD-led process.

¹ [https://sustainabledevelopment.un.org/content/documents/6754Technical%20report%20of%20the%20UNSC%20Bureau%20\(final\).pdf](https://sustainabledevelopment.un.org/content/documents/6754Technical%20report%20of%20the%20UNSC%20Bureau%20(final).pdf)