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# SDG 4 Reporting: Options for 4.1.1 reporting

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GAML4/6





The UNESCO Institute for Statistics (UIS), through its Global Alliance to Monitor Learning (GAML), is working on an approach to monitoring learning outcomes for Indicator 4.1.1 of the UN's Sustainable Development Goal 4 (SDG 4): Quality Education:

Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics. (Inter-Agency and Expert Group on SDG Indicators, 2016)

Monitoring progress against Indicator 4.1.1 will require the reporting of student outcomes at several different stages of learning in a broadly consistent way across education systems, to enable meaningful international dialogue about learning progress and how it may be supported.

Learning and how it is measured varies widely across local contexts. Education systems make independent interpretations and decisions about what learning means, how it is described in curriculum, and how it is assessed and reported. This short summary describes the data alignment and reporting process.

At the highest level, systems that collect and disseminate official statistics serve a range of uses, including:

- Knowledge generation, a process of understanding causal relationships and effect sizes
- Program policy and planning, the development of public responses to identified problems
- Monitoring, a process that tracks progress against established goals and identifies the need for adjustment
- Evaluation, a formal process that analyses the efficiency and effectiveness of specific policy and program measures
- Administration, the process of making decisions about specific individuals or organizational units

The need for estimates of the level and distribution of skill is met through having results reported on a valid, reliably and comparably measured and interpretable international scale.

## Strategies to reporting

There are three strategies that vary in

- a. **Degree of comparability between countries** at the global level in conceptual, methodological and reporting framework including benchmarking
- b. **Coverage** in terms of both regions and countries
- c. **Quality of the data** reporting: defined by each organization
- d. **Time frame**: some of the options are not at disposal right now.
- e. **Advantages**: available and in most cases well established
- f. **Limitations/restrictions**: in general only in school assessments. In some regions no assessment and the cost.
- g. **Reporting?** 2017 on
- h. **Cost**: additional costs for methodological development involved

## 1. Reporting Cross National Assessment only as of today

*Strategy assumes/implies*

- a) **Comparability:** possible but limited to the countries/states that have joined Cross National Assessment
- b) **Coverage:** is limited to the regions that have Cross National Assessments if countries have only participated in Regional initiatives and to the countries who has done the same but with international assessment if they could report according to parameters.
- c) **Quality of data:** according to own parameters in general complying with good international standards.
- d) **Timeframe:** available according to each international organization cycle
- e) **Advantages:** available and result of countries' willingness to join.
- f) **Limitations/ requirements:** implementation is technically, operationally and financially demanding that translates into risk of catastrophic implementation errors that render results un-useable.
- g) **Reporting by:** the option has been utilized in 2015, 2016 and 2017.
- h) **Costs:** no additional costs

## 2. Report all available information: Cross National, National and potentially Non Official Assessment, footnoting

*Strategy assumes/implies*

- a) **Comparability:** is limited to the countries/states that have joined Cross National Assessment. National assessments will not be comparable. Not immediately resolved.
- b) **Coverage:** is limited to the regions that have Cross National or National Assessments if countries have only participated in Regional initiatives and to the countries who has done the same but with international assessment if they could report according to parameters.
- c) **Quality of data:** according to own parameters in general complying with known and agreed international standards in cross national assessment. Countries more unknown. Needs footnoting.
- d) **Timeframe:** available according to each organization/country wave's assessment
- e) **Advantages:** maximizes availability for data reporting
- f) **Limitations/ requirements:** lack of comparability includes between different assessments and between countries. Needs footnoting
- g) **Reporting by:** the option could be used in 2018
- h) **Costs:** no additional costs

### 3. Reporting on a similar scale or somewhat comparable scales

#### 3.1. Linking Cross National Assessments through Concordance

*Strategy assumes/implies*

- a. **Comparability:** is limited to the countries/states that have joined Cross National Assessment or have done linking of their own assessments with a Cross-National assessment. It is more rigorous than the immediately above, but provides less coverage. Note: it is compatible with the above: one can do both conceptual/social moderation for countries that cannot do more formal equating.
- b. **Coverage:** is limited to the regions that have Cross National Assessments if countries have only participated in Regional initiatives and to countries who have equated formally with international assessments or a common reporting scale.
- c. **Quality of data:** according to own parameters in general complying with good international standards.
- d. **Timeframe:** depends on waves of Regional assessment and IEA's
- e. **Advantages:** easy to understand and explain. To some extent intuitive
- f. **Limitations/ requirements:**
  - subject to funding and the agreement on "ring" countries per region agreeing to participate and take two tests serving as links
  - agreement on regional assessments
  - does not provide solution to the countries that do not participate in neither assessment if only restricted to Cross National Participation.
- g. **Reporting by:** 2020
- h. **Costs:** "Ring" countries to cover the costs

#### 3.2. Social moderation

*Strategy assumes/implies*

- a. **Comparability:** could be extended to all the assessments (either Cross National or National) that could be linked to a global conceptual framework or reporting scale.
- b. **Coverage:** maximizes the use of all sources
- c. **Quality of data:** according to own parameters in general complying with good international standards. Needs footing.
- d. **Timeframe:** need a conceptual moderation process.
- e. **Advantages:** easy to understand on the political point of view.
- f. **Limitations/ requirements:** assessment vary in strand and levels of difficulties among other and it is not addressed.
- g. **Reporting by:** the option could be utilized in 2019.
- h. **Costs:** development and conceptual linking. Estimated at 300/400 thousand



### 3.3. Psychometric linking RS

Strategy assumes following the conceptual alignment

- a) **Comparability:** it will be the best possible scenario
- b) **Coverage:** to the assessment and countries who undergo the alignment process
- c) **Quality of data:** informed and aligned to standards
- d) **Timeframe:** available according to each organizations/country wave's assessment
- e) **Advantages:** more accurate linking
- f) **Limitations/ requirements:** needs sharing items
- g) **Reporting by:** 3-5 years
- h) **Costs:** implies costs from 3 Million and above.