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GLOBAL ALLIANCE TO MONITOR LEARNING

2024 CONFERENCE ON EDUCATION DATA AND STATISTICS

Measuring and monitoring learning outcomes and skills: what are the challenges going forward?

December 2023

Outline

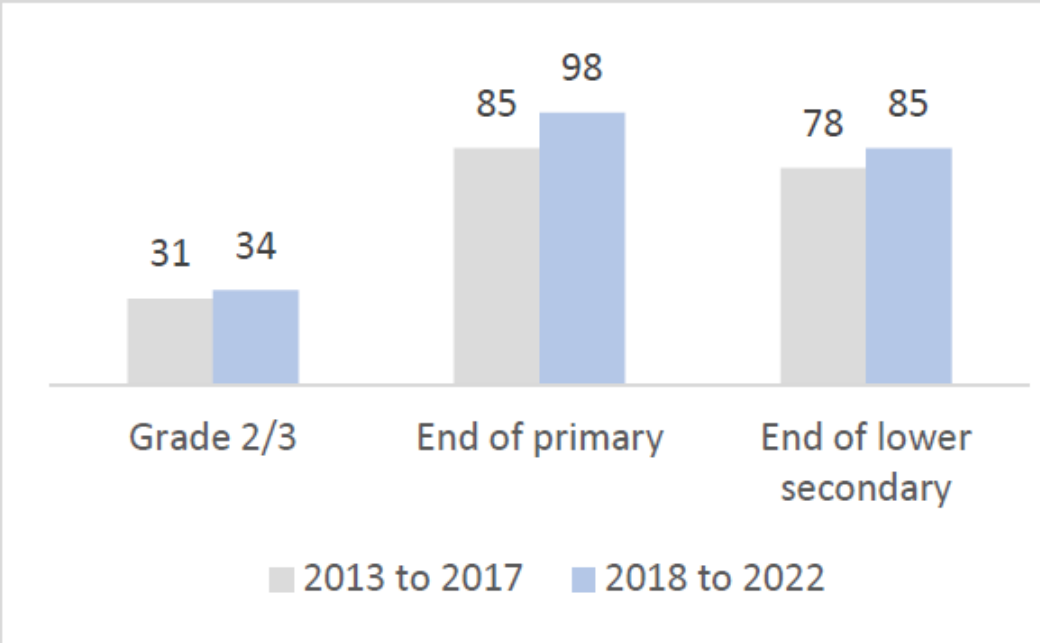
- What indicators can be produced from Learning Assessments?
- What is the coverage of produced indicators?
- Questionnaires and data collected in CNAs
- Methodological challenges when reporting on SDG 4.1.1 and potential solutions
- Menu of alternatives for country reporting
- Agenda forward to work with Member States
- 2025 SDG Indicator framework revision

3 What indicators can be produced from Learning Assessments?

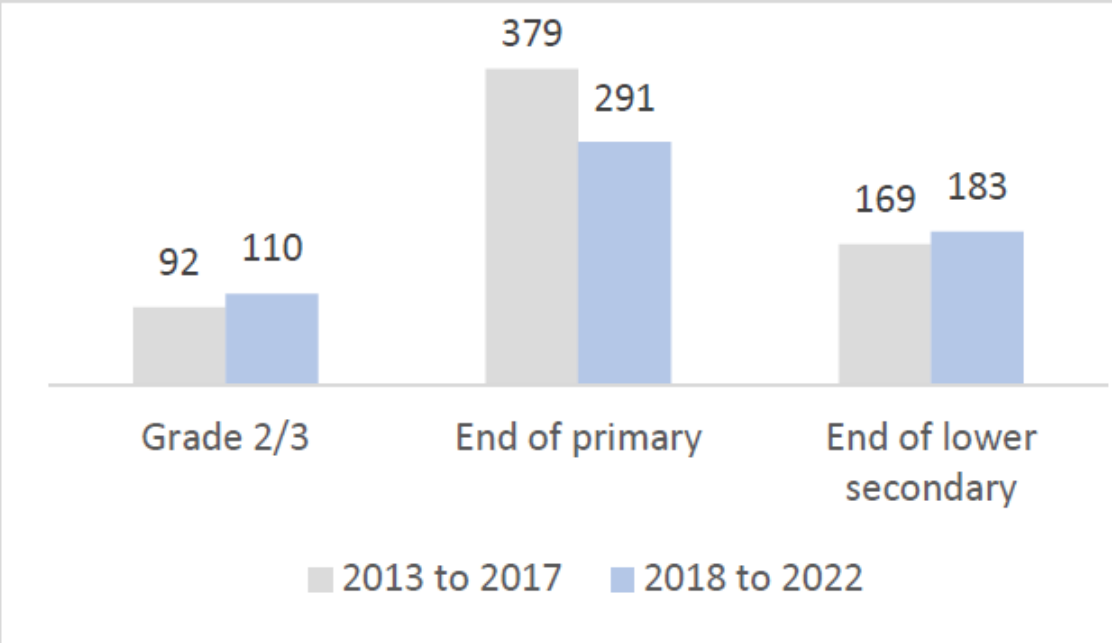
Indicator		Domain	Required definitions
4.1.1	**Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex**	**Reading and mathematics**	**Reading and mathematics (content)** **Minimum proficiency level**
4.4.2	Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills	Digital literacy skills	Digital literacy skills (content) Minimum level of proficiency
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**	**Literacy and numeracy**	**Functional numeracy and literacy (content)** **Fixed level**
4.7.4	Percentage of students by age group (or education level) showing adequate understanding of issues relating to global citizenship and sustainability	Global citizenship and sustainability	Global citizenship and sustainability (content) Adequate understanding
4.7.5	Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience	Environmental science and geoscience	Environmental science and geoscience (content) Proficiency in knowledge

4 What is the coverage of indicator 4.1.1?

a. Number of countries



b. School-age population in millions



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What is the coverage of other indicators?

Indicators	Methodological framework	Tools to measure (data source)	Coverage countries	Coverage population (%)
4.4.2	Yes	Skills' assessment surveys of the adult population (PIAAC)	5	2
4.6.1	Yes		7	3
4.7.4	Yes	ICCS	23	10
4.7.5	Yes	TIMSS, PISA	38	16

Questionnaires and data collected in CNAs serve to report non-cognitive indicators

Cognitive test	Test items (questions) for measuring learning outcomes
Student questionnaire	▪ Basic demographic information (sex, age) ▪ Household and socio-economic background ▪ School-related experiences (including exposure to bullying) ▪ Learning-related experiences (classroom activities) ▪ Self-perceptions, interests and aspirations related to different subjects ▪ Use and proficiency of ICT
Teacher questionnaire	▪ Demographic and background information (sex, age, years teaching, subjects taught) ▪ Qualifications and training ▪ Types of teaching practices used and challenges faced
School director questionnaire	▪ Demographic and background information (sex, age, years of experience) ▪ Qualifications and education ▪ School characteristics ▪ Opinions about availability and adequacy of resources ▪ Management and governance ▪ Interaction with parents and school communities ▪ Challenges faced in teaching

7 Methodological challenges when reporting on SDG 4.1.1 and potential solutions

Challenges

- Comparability of grades and education levels, comparability between countries, and comparability over time
- Procedural quality is heterogenous among program assessments specially at the national level
- Low coverage of CNAs (specially in LIC and LMIC)
- Financial costs of assessments for countries
- Reporting comparable data on foundational learning

Solutions developed

1. Global Standards & harmonization tools

- Minimum Proficiency Level (MPL)
- Global Proficiency framework (GPF)
- Linking assessment programmes to the MPL:
  - *Assessments for Minimum Proficiency Levels (AMPL) that could be used along National or Regional assessments*
- Concordance between assessment programs:
  - *Rosetta Stone: between international (TIMS/PIRLS) and regional (PASEC and ERCE) assessments*

2. Menu of alternatives for country reporting

3. Capacity development tools

- Policy Linking
- Learning Toolkit

8 Agenda forward to work with Member States

Assessment Harmonization.

- Standardised blueprint is needed for evaluating assessments suitable for harmonization efforts. The proposed "Blueprint for Evaluating Assessments" provides a model.
- Context questionnaires enable disaggregation of data by student background to analyse inequalities. Systematic harmonisation of these questionnaires is an important next step.
- Data availability on learning outcomes remains uneven, especially for developing countries. Expanding quality assessment data globally is critical for SDG 4 monitoring.

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9 Agenda forward to work with Member States

Developing Innovative Methodologies on indicators with low coverage

- in the context of SDGs 4.7.4 and 4.7.5, the exploration of an AMPL approach rooted in existing assessments, such as the IEA International Civic and Citizenship Study (ICCS), could present a viable avenue for consideration.
- advances in artificial intelligence present new opportunities to assess adult literacy and numeracy at scale by automating the analysis of available text and data sources.

Strengthening Stakeholder Collaboration and policy use

- Collaboration between international agencies, donors, academics and country teams is essential to strengthen measurement approaches while building national capacity.
- Beyond measurement, findings must inform policy and practice reforms that improve access to quality education and promote lifelong learning for all..

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SDG Indicator framework

▶ 2015 Inter-Agency and Expert Group on Sustainable Development Goal Indicators (**IAEG**) established at 46th session of the Statistical Commission (UNSC)

▶ 2015 UN General Assembly Resolution 70/1 mandated the **global indicator framework**, to be developed by the IAEG-SDG and agreed by UNSC by March 2016 foresee 2 revisions to be approved in March UNSC meeting in 2020 and 2025

▶ 2017 UNSC Decision 47/101 agreed draft global indicator framework as practical starting point subject to future technical refinement

▶ 2017 Workplan for examining list of possible additional indicators and revision framework was approved in ToRs of the IAEG-SDG

▶ 2017 UN General Assembly Resolution 71/313 adopted global indicator framework

SDG Indicator framework - Timeline for 2020 and 2025 revisions

2015-2019

Framework and methodological developments

Indicators in Tier I, II, III

2020-2024

Coverage expansion

Indicators in Tier I and II

2025-2029

Full agenda monitoring

Indicators in Tier I

Process 2019-20	
July-August	Consultation and evaluation
October	IAEG-SDG meeting to review agenda and decide status
November	UNSC submission
March (following year)	Adoption

▶ **2025 revision**

Will follow the same calendar

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SDG 4 indicator framework: Up to 2020

- Tier I: 3 indicators (4.2.2, 4.b.1, 4.c.1)
- Tier II: 4 indicators (4.2.1, 4.3.1, 4.4.1, 4.6.1)
- **Tier III: 2 indicators (4.1.1, 4.7.1)**
- Combination: 2 indicators (4.5.1 –Tiers 1/II/III, 4.a.1 –Tiers I/II)

3rd Meeting IEAG-SDG
Apr/2016

4th Meeting IEAG-SDG
Nov/2016

4.2.1 downgraded to Tier III
4.2.2 downgraded to Tier II
4.a.1 downgraded to Tier II

4.1.1 b and c upgraded to Tier II

5th Meeting IEAG-SDG
Mar/2017

6th Meeting IEAG-SDG
Nov/2017

4.c.1 downgraded to Tier II

4.1.1.a Updated from Tier III to Tier II

8th Meeting IEAG-SDG
Nov/2018

9th meeting IEAG-SDG
May/2018

4.2.1 Multi-tier indicator (Tier II/III), with the Tier II portion of the indicator referring to children 24-59 months of age

- 4.1.1 upgraded from Tier II to Tier I

- 4.5.1 Tier III removed (Tiers I/II stay)
- 4.7.1 upgraded from Tier III to Tier II

WebEx Meeting IEAG-SDG
Nov-Dec/2019

51st UNSC
Mar/2020

- 4.1.2 (Completion rate) as global indicator for SDG Target 4.1
- Refinements: 4.2.1, 4.7.1, 4.a.1, 4.c.1

Refinement: 4.7.1, 4.c.1

Final approval expected during UNSC 52nd session

Apr/2020

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SDG Indicator framework (2025 revision)

- All indicators in Tier II to be evaluated based on (i) information provided so far and (ii) judgement about their feasibility; potentially consulted in late June/early July
- Data plan to address coverage is required (although not clear how much this matters); indicator 4.1.1a might be downgraded
- Decision based on objective criteria that is coverage (no Tier III indicator are in this phase)
- Replacement will be proposed if the deleted indicator is the only indicator monitoring the corresponding target (e.g., 4.6.1)

Thank you

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SDG 4 indicator framework (4.1.1)

- September 2018 **MPL adopted,** and proficiency level of each assessment identified; with respect to FLM/PAL/EGRA, the meeting concluded that:
  - Some tools were misaligned with MPL in content and coverage
  - Basic documentation was not available (blueprint, microdata, technical reports)
  - Sampling frame and post-sampling treatment were not adequate/nor informed

- Since then:
  - Virtual meeting to identify alignment of ICAN policy linking (early 2020)
  - Bilateral meetings with ACER (UIS technical partner) on UNICEF AMPL-based 4.1.1b tool

- Up to 2022 Reporting is based on an **interim** period to adapt the tools

- Since 2022 Reporting is based on **aligned tools**
  - Content alignment
  - Procedural alignment
  - Representative sample
  - **Government approval**

Aligning and reporting on indicator 4.1.1: UIS annotated workflow

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