



2024 CONFERENCE ON
**EDUCATION DATA
AND STATISTICS**

Preparatory meeting for the UNESCO Conference on Education Data and Statistics

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

October - November 2023



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Institute for Statistics

Outline

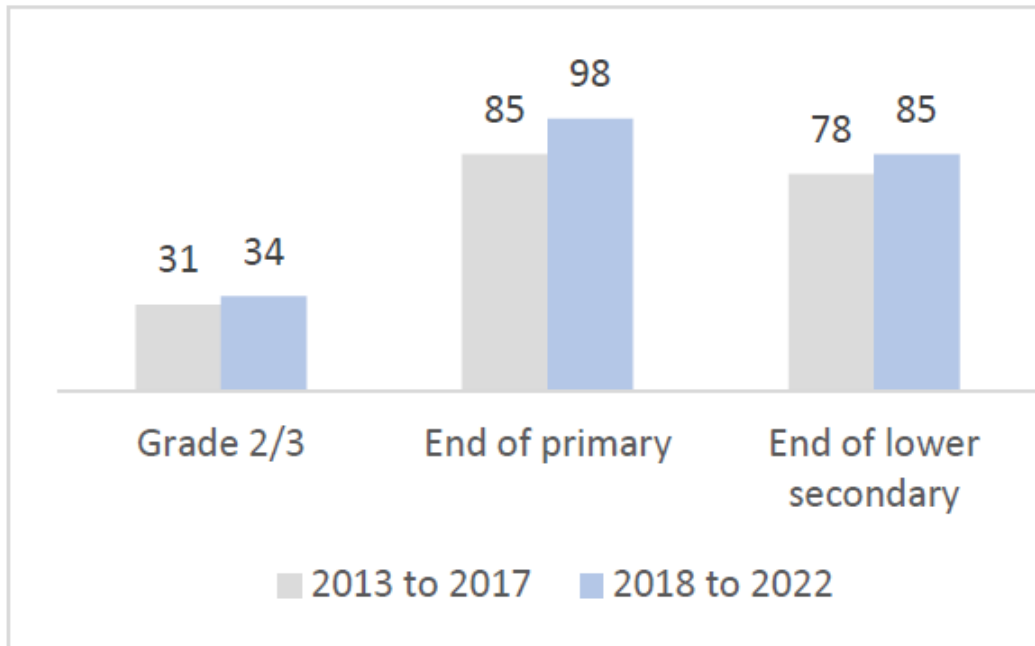
- What indicators can be produced from Learning Assessments?
- What is the coverage of produced indicators?
- Questionnaires and data collected in CNAs
- Methodological challenges when reporting on SDG 4.1.1 and potential solutions
- Menu of alternatives for country reporting
- Agenda forward to work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

What indicators can be produced from Learning Assessments?

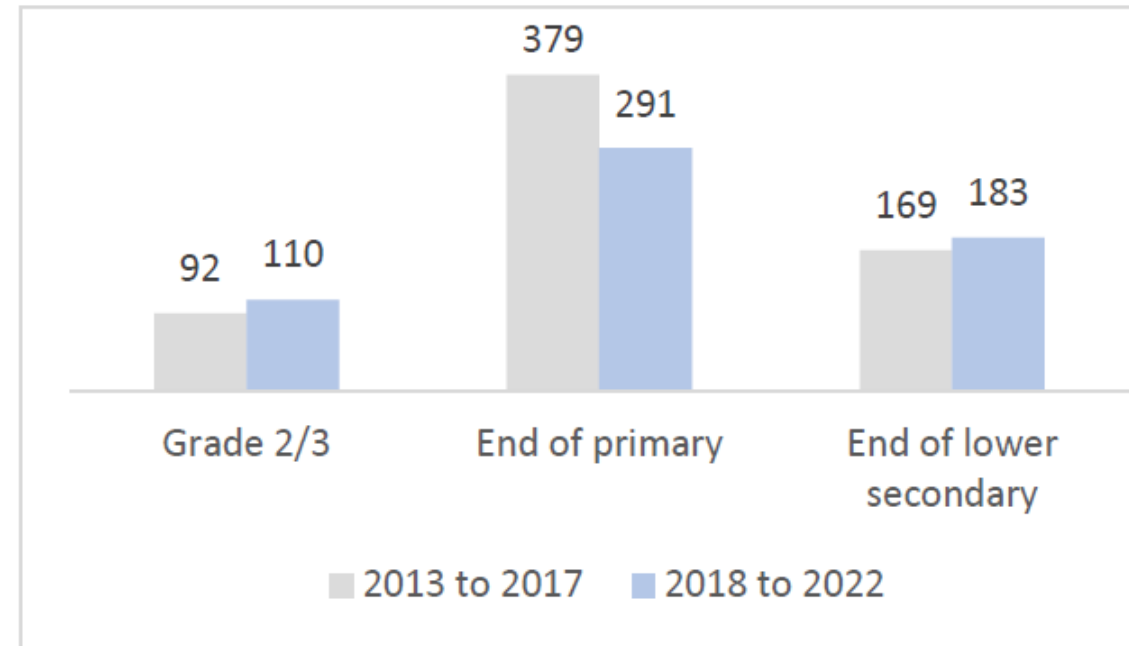
Indicator	Domain	Required definitions	
4.1.1	Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	Reading and mathematics	Minimum proficiency level. Procedural quality minimum
4.2.1	Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex	Learning, socio-emotional health	What is developmentally on track
4.4.2	Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills	Digital literacy skills	Relevant skills for employment
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	Fixed level of functional literacy and numeracy
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	Adequate understanding and what constitutes global citizenship and sustainability
4.7.5	Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience	Environmental science and geoscience	The definition of proficiency

What is the coverage of indicator 4.1.1?

a. Number of countries



b. School-age population in millions



What is the coverage of other indicators?

Indicators	Methodological framework	Tools to measure (data source)	Coverage countries	Coverage population (%)
4.4.2	<u>Yes</u>		5	2
4.6.1	<u>Yes</u>	Skills' assessment surveys of the adult population (PIAAC)	7	3
4.7.4	<u>Yes</u>	ICCS	23	10
4.7.5	<u>Yes</u>	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	<ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ▪ Demographic and background information (sex, age, years teaching, subjects taught) ▪ Qualifications and training ▪ Types of teaching practices used and challenges faced
School director questionnaire	<ul style="list-style-type: none"> ▪ 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

Methodological challenges when reporting on SDG 4.1.1 and potential solutions

Challenges

- Comparability of grades and education levels and comparability between countries and over time
- Procedural quality is heterogenous among program assessment 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

Menu of alternatives for country reporting

	4.1.1.a	4.1.1.b	4.1.1.c	Coverage
Strengthen national assessments with statistical linking				
AMPL	•	•		
PISA module			•	
Participate in a Cross-National assessment				
PILNA		•		Pacific islands
PASEC	•	•	•	Mainly Africa (Francophone)
SEACMEQ		•		Africa (Southern and Eastern)
SEA-PLM		•		Southeast Asia
LLECE	•	•		Latin America
TIMSS	•	•	•	Global
PIRLS	•	•		Global
PISA			•	Global

Agenda forward to work with Member States

Harmonize quality and increase reporting

- Blueprint to guide country reporting and ensure quality and alignment – 4.1.1.

Harmonize context questionnaires

- Creation and maintenance of a harmonized dataset of international large-scale assessments in education.

Explore expansion of coverage on indicators with low coverage

- Consideration of alternatives to replace PIAAC indicator, such as literacy rate.
- Utilization of artificial intelligence for producing indicators for adult population.

Thank you

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