# SDG 4 – Education 2030 Indicators Webinar Series

## Part 2. Towards a workable strategy to measure learning

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# Webinar series

Part 1: Global and thematic education indicators – what next?

**Part 2: Towards a workable strategy to measure learning**

Part 3: The importance of early interventions: How to measure child development?

Part 4: Equity in learning: Leaving no one behind in the SDG 4 monitoring agenda





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# Part 2: Towards a workable strategy to measure learning

1. *What areas of learning are considered globally relevant under the SDGs?*
2. *To what extent are countries already measuring these areas?*
3. *What are some of the technical and political challenges with the new SDG requirements?*
4. *What are some of the proposed strategies for addressing these challenges?*

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# GOAL 4

## ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

**SUSTAINABLE DEVELOPMENT GOALS**

More at sustainabledevelopment.un.org/sdgsproposal

# *What areas of learning are considered globally relevant under the SDGs?*


**Goal 4**

- Ensure inclusive and equitable quality education and promote life-long learning opportunities for all

**Target 4.1**

- By 2030, ensure all girls and boys complete free, equitable, quality primary and secondary education leading to relevant and effective learning outcomes

**Indicator 4.1.1**

- Proportion of children and young people: (a) in grades 2/3; (b) at end of primary; and (c) at end of lower secondary achieving at least minimum proficiency level in (i) reading and (ii) math, by sex

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# *To what extent are countries already measuring these areas?*

Proportion of learning outcomes data to report on SDG 4.1.1

| Reading | Grade 2 or 3 | End of primary education | End of lower secondary education |
|---|---|---|---|
| Asia and the Pacific | 47 | 50 | 42 |
| Arab States | 47 | 65 | 65 |
| Latin America and the Caribbean | 81 | 69 | 62 |
| Sub-Saharan Africa | 80 | 68 | 33 |
| All regions | 65 | 62 | 46 |
| **Mathematics** | **Grade 2 or 3** | **End of primary education** | **End of lower secondary education** |
| Asia and the Pacific | 42 | 58 | 47 |
| Arab States | 41 | 71 | 65 |
| Latin America and the Caribbean | 77 | 81 | 62 |
| Sub-Saharan Africa | 65 | 68 | 43 |
| All regions | 57 | 68 | 51 |

*Source: UIS regional assessments of system readiness to monitor SDG 4, 2016*

*Data availability (%) by global indicator*

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# *What are some of the technical and political challenges with the new SDG requirements?*

- ✓ How report data from different assessments at global level?
- ✓ How define “minimum proficiency”?
- ✓ What should progress look like?
- ✓ What about countries that don’t have (strong) assessments?

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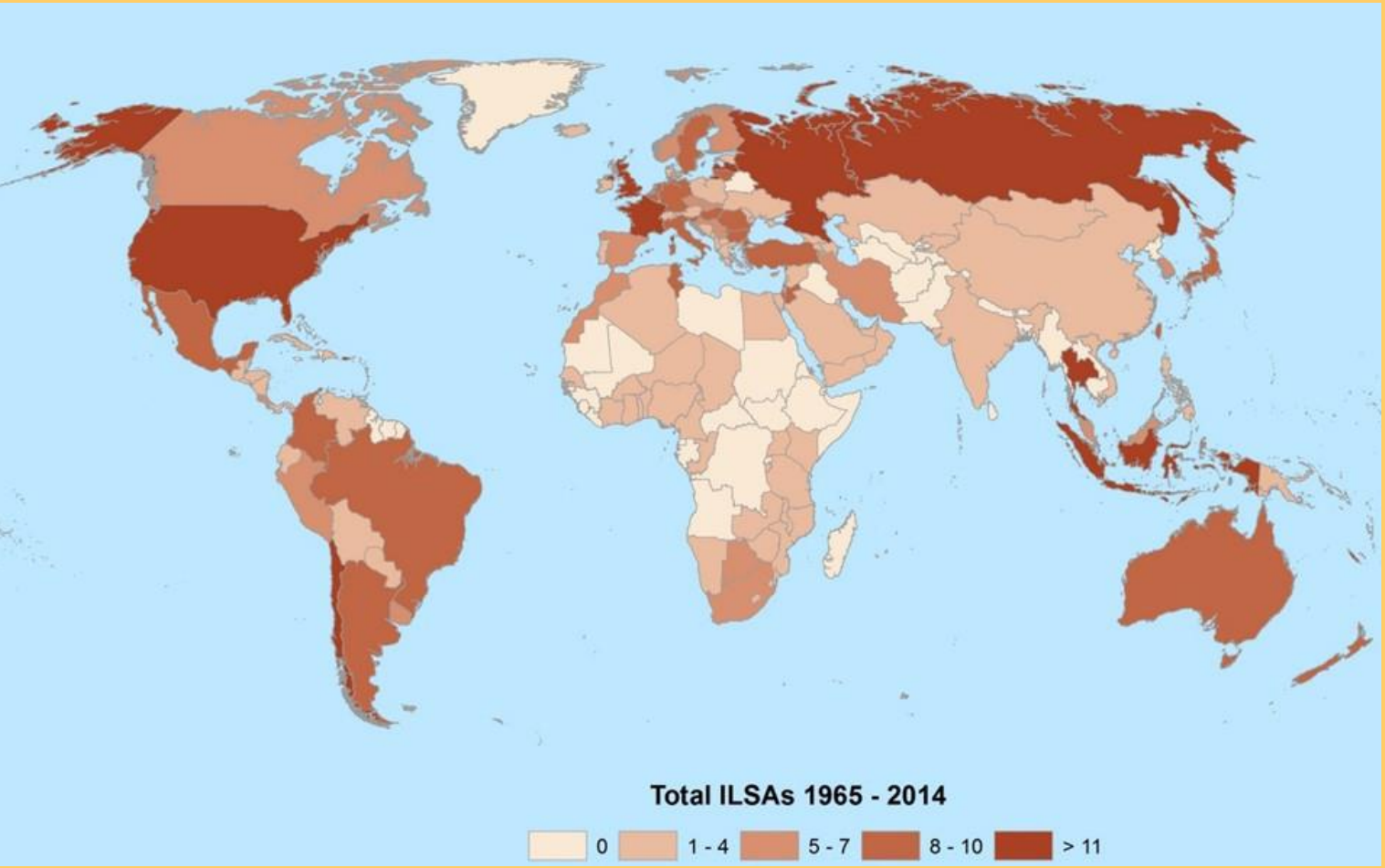
# ✓ *How report data from different assessments at global level?*

Country participation in international and regional assessments




*Source: Lockheed et al. (2015).*

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# …assessments differ in coverage

| | Countries | Target Population | Frequency |
|---|---|---|---|
| **PISA** | 70 | 15 year olds | 3-year cycle (6) |
| **TIMSS** | 77 | Grades 4, 8 | 4-year cycle (6) |
| **PIRLS** | 49 | Grade 4 | 5-year cycle (3) |
| **LLECE** | 15 | Grades 3, 6 | No fixed cycle (3) |
| **SACMEQ** | 15 | Grade 6 | No fixed cycle (4) |
| **PASEC** | 10 | Grades 2, 6 | No fixed cycle (4/5) |

*Source: Adapted from Cresswell et al. (2015).*

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# *…assessments differ in content and format*

| | Curriculum -based | Reading or Math | Computer or Paper | MCQ or CRQ |
|---|---|---|---|---|
| **PISA** | No | Both | Both | Both |
| **TIMSS** | Yes | Math | Paper | Both |
| **PIRLS** | Yes | Reading | Paper | Both |
| **LLECE** | Yes | Both | Paper | Both |
| **SACMEQ** | Yes | Both | Paper | MCQ |
| **PASEC** | Yes | Both | Paper/Oral | MCQ |

*Source: Adapted from Cresswell et al. (2015).*

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# …assessments differ in analysis and reporting

| | Analytical approach | Proficiency levels | Background data on learning, language, home | Comparable across systems, trends |
|---|---|---|---|---|
| **PISA** | IRT (1) | 6 | Yes | Both |
| **TIMSS** | IRT (3) | 4 | Yes | Both |
| **PIRLS** | IRT (3) | 4 | Yes | Both |
| **LLECE** | IRT (R) | 4 | Yes | Partially |
| **SACMEQ** | IRT (R) | 8 | Yes | Both |
| **PASEC** | IRT (2014 onwards) | 4 to 5 (2014 onwards) | Yes | 2014 onwards |

*Source: Adapted from Cresswell et al. (2015).*

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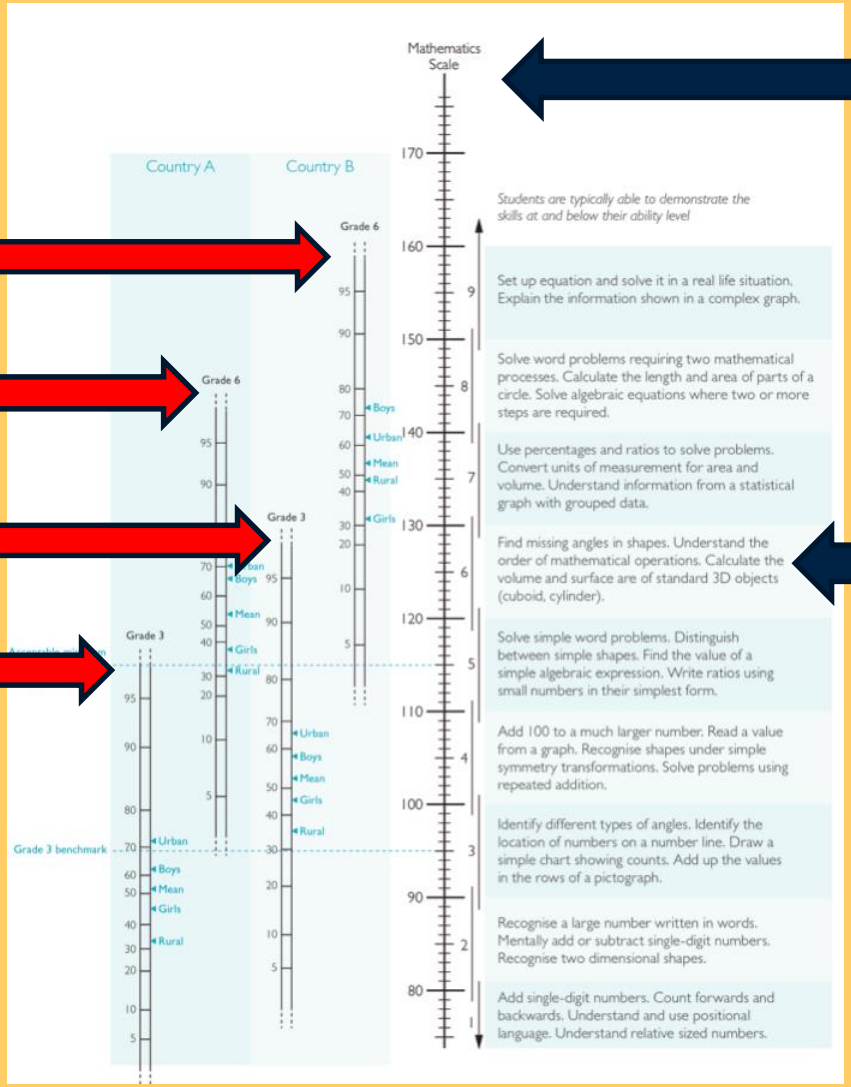
# *"Universal" scale as the answer?*

**Test D**

**Test C**

**Test B**

**Test A**




**"Universal" scale**

**Descriptions of what students know and can do at different levels of the scale**

*Source: http://www.uis.unesco.org/Education/Documents/learning-metrics-partnership.pdf*

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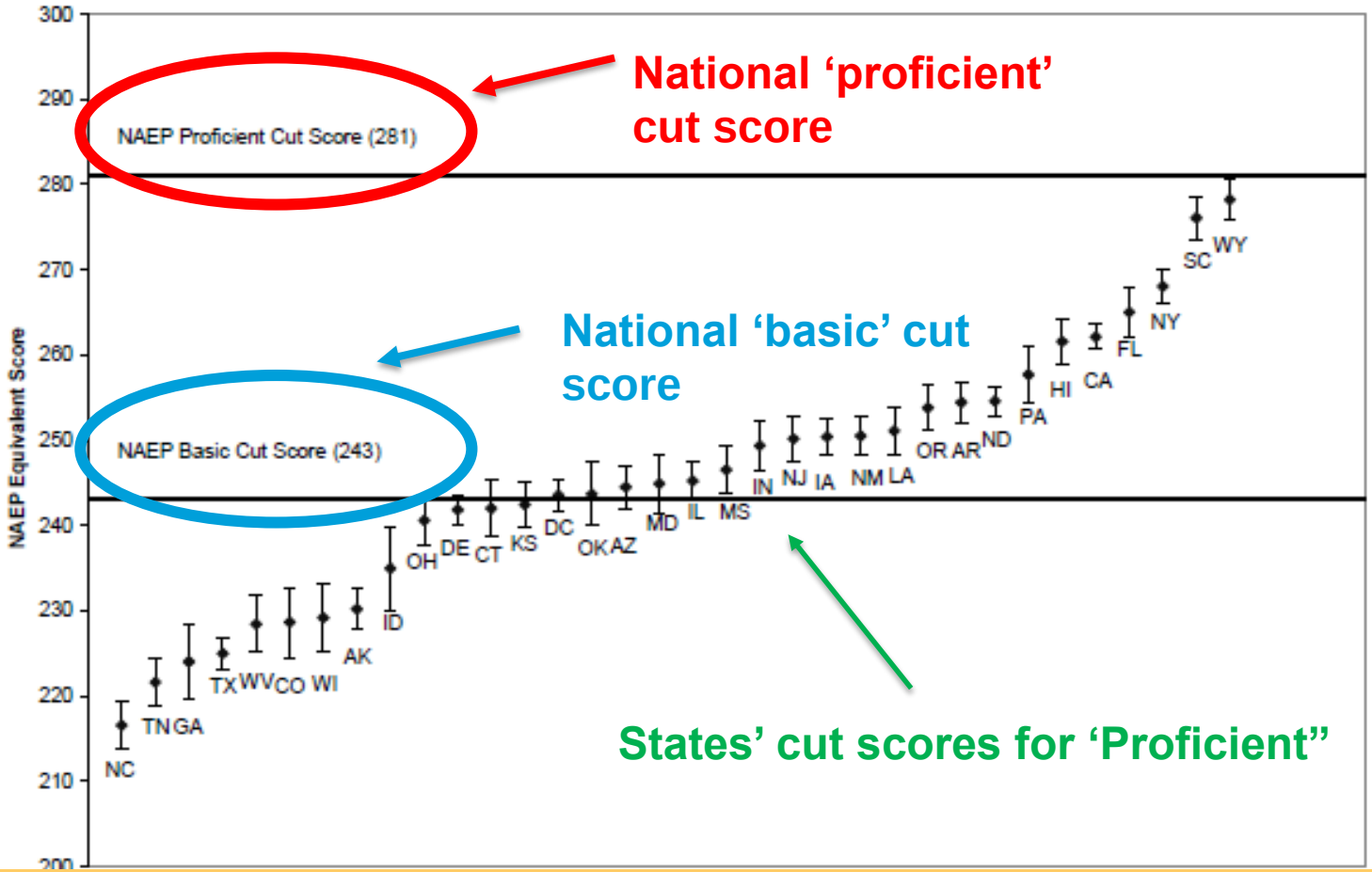
# ✓ How define "minimum proficiency"?

Figure 3. NAEP score equivalents of states' proficiency standards for reading, grade 8: 2005

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# ✓ *What should progress look like?*

Trends in average scores and % reaching minimum proficiency on TIMSS (1995-2011), PIRLS (2001-11), PISA (2000-12) show:

1. Countries more likely to see significant improvements at primary level, particularly in math.
2. Countries can make significant gains regardless of where they're starting from.
3. While some countries see very large increases, most experience more modest changes. Some see declines.


**Overall Grade 4 reading scores increasing, but so too is the gender gap**


**Grade 8 math scores dipped significantly in 2003 and 2007, but overall trend is upwards**

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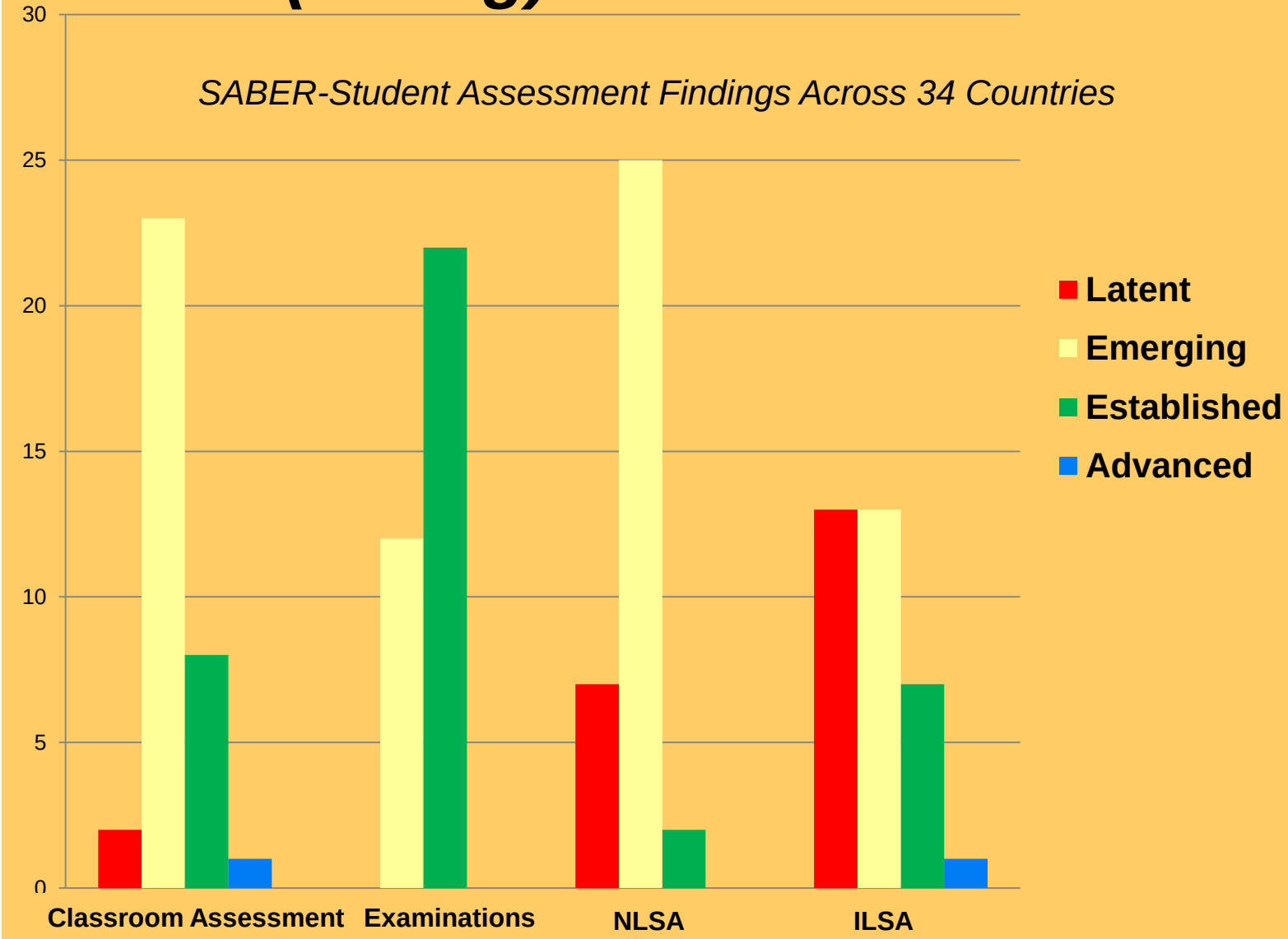
# ✓ What about countries that don't have (strong) assessments?




Source: http://saber.worldbank.org

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# *What are some of the proposed strategies for addressing these challenges?*

- ✓ **New global assessment offerings**
  - TIMSS Numeracy, PIRLS Literacy, LaNa, PISA for Development
- ✓ **New global technical partnerships**
  - Global Alliance to Monitor Learning (GAML)
    - Address measurement challenges, improve coordination, develop quality standards and guidelines
- ✓ **New global funding options**
  - GPE (A4L), others to support countries in enhancing assessment capacity

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# Don’t forget to join us for the next two Webinar sessions

**September 15**

Part 3: The importance of early interventions: How to measure child development?

**September 29**

Part 4: Equity in learning: Leaving no one behind in the SDG 4 monitoring agenda




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