



United Nations  
Educational, Scientific and  
Cultural Organization



UNESCO  
INSTITUTE  
FOR  
STATISTICS



SUSTAINABLE  
DEVELOPMENT  
GOALS

## SDG 4

# Exploring Options for Reporting

Silvia Montoya

Director, UNESCO Institute for Statistics



# Reporting and measuring progress in SDG4

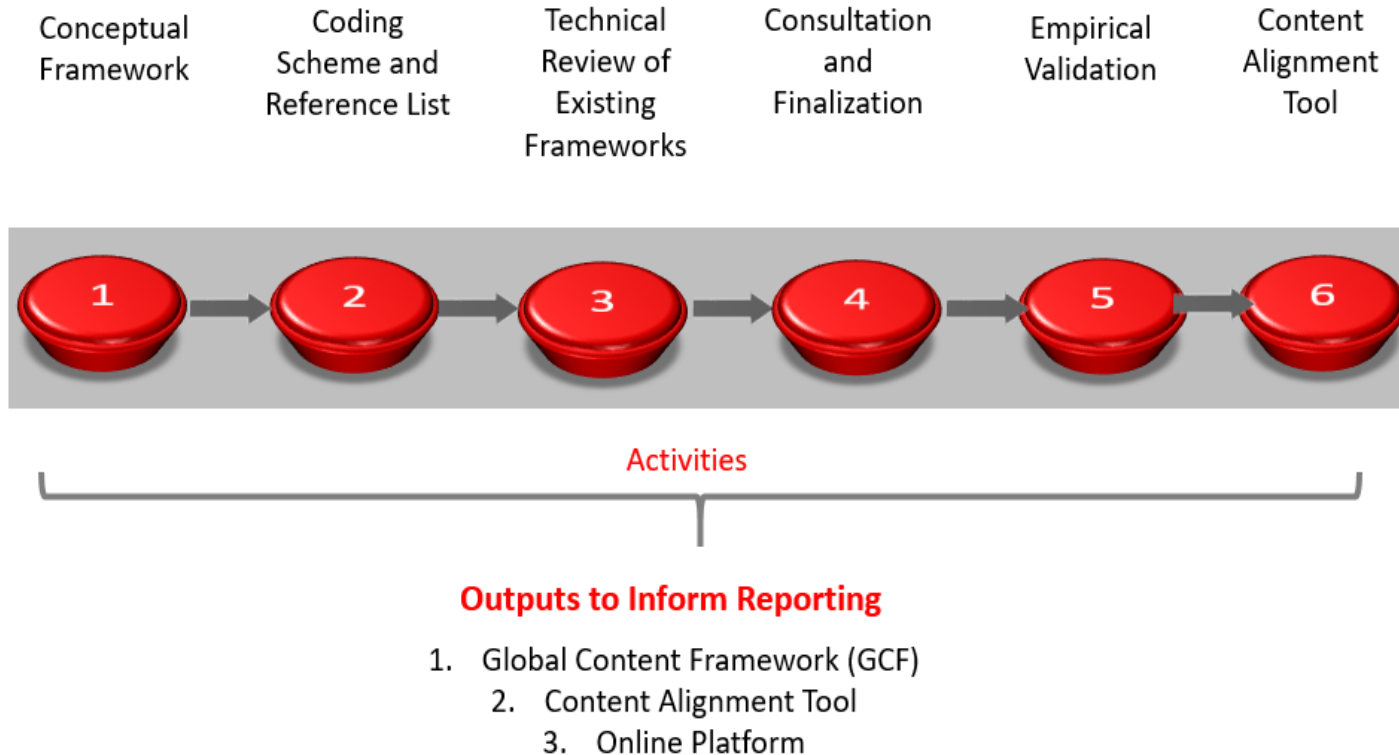
- What are now accepted as standard features of assessment systems that produce comparable results?
- What are some of the implementation problems detected even in relatively well-designed testing programmes ?
- How to build comparable results?
- Whole debate around measuring learning outcomes.
  - cross-country comparability has been over-emphasised relative to comparability over time within countries.
  - It is the latter the one of greatest importance for national policymakers

# Indicator 4.1.1

The reporting format aims to communicate two pieces of information:

- the percentage of students meeting minimum proficiency standards for the relevant domains (mathematics and reading) for each point of measurement (grades 2/3; end of primary and end of lower secondary); and
- when different programs can be considered comparable and the conditions under which the percentage can be considered comparable to the percentage reported from another country.

# Content Alignment



# Procedural Alignment

Conceptual  
Development

Quick Guides  
for  
implementation

Procedural  
Alignment  
Tool



## Outputs to Inform Reporting

1. Manual of Good Practices
2. Quick Guides for Implementation
3. Procedural Alignment Tool and Online Platform

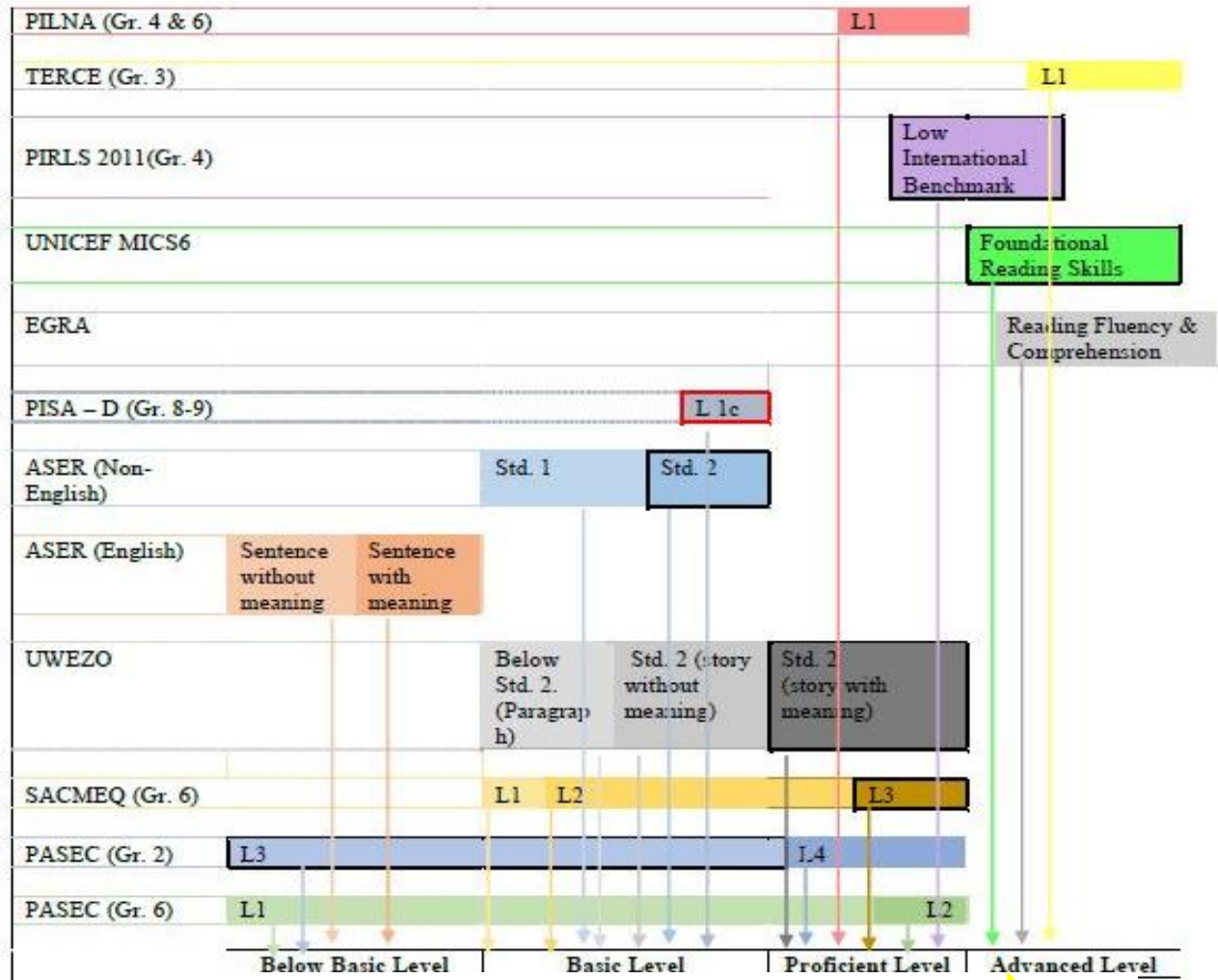
## Consensus Building Meeting on MPLs



Representatives from regional and international learning assessments met to agree on minimum proficiency levels (MPLs) in Paris, France.

SDG Indicator 4.1.1: *Proportion of children and young people in (a) Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education, achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex*

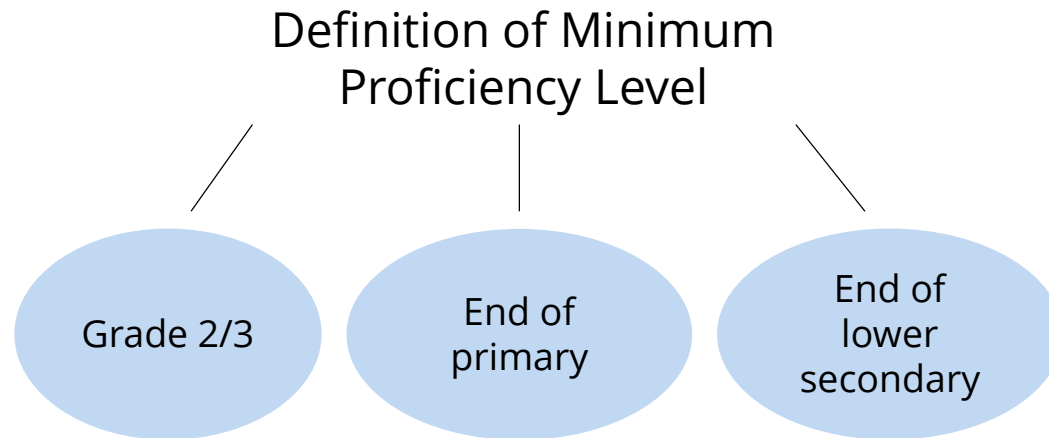




UIS Proficiency Scale (UIS-PS)



## Consensus Building Meeting on MPLs



### Reading & Mathematics

- Mapping proficiency levels
- Mapping proficiency level descriptors
- Identify common recommended benchmarks for MPLs → **Harmonizing national assessments**

- Facilitate alignment between assessment programmes;
- Enable countries to pursue different options for assessments; and
- Allow for some harmonization of results



# Agreement on MPL

- Agreement on comparability for reporting indicator 4.1.1
  - General Policy Level descriptor (what the child/youth) is able to do
  - Multi- fold reporting

## Mathematics

	Assessment/ Level
End of Lower Secondary	<ul style="list-style-type: none"> <li>• PISA level 2</li> <li>• TIMSS low international</li> </ul>
End of Primary	<ul style="list-style-type: none"> <li>• SACMEQ level 3 / level 4</li> <li>• PASEC grade 6 level 1</li> <li>• PILNA level 6</li> <li>• TERCE grade 6 level 1</li> <li>• TIMSS 4 intermediate international benchmark</li> </ul>
Grades 2/3	<ul style="list-style-type: none"> <li>• PASEC grade level 2</li> <li>• TERCE grade 3 level 2</li> <li>• Further work to align MICS/ASER/Uwezo</li> </ul>

# Linking: Several ways forward...

- Approaches that have been put forward differ most obviously in terms of their technical complexity, financial cost, and implied comparability of national statistics.
- Less obvious differences relate to
  - their sustainability over time,
  - their impact on the politics, planning and operations of national education authorities,
  - their ability to contribute to capacity building within these authorities, and
  - their persuasive power in the media and policy debates.

# The 2030 Agenda and reporting (II)

- A dialogue about definitional issues
  - What is the construct (for instance, reading?)
  - What are the contents ?
  - What is the minimum proficiency?
  - How to express everybody in same scale?
- No matter what methodology that is used there are assumptions need to be met...
  - Learning domains and target population needs similarities to have valid outcomes.
  - Ensure procedural consistency
- Respect to national ownership, meet national needs and sensitivity to cultural values

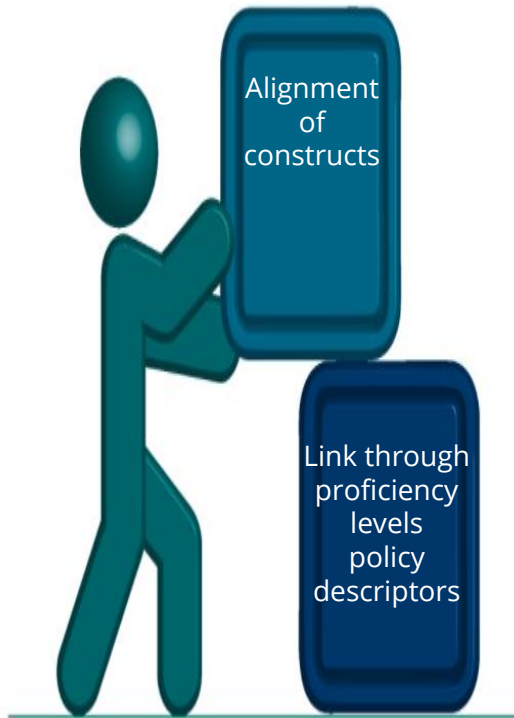
# SDG4 reporting – Innovative Solutions to comparability

## 3 options to link assessments to a global scale

### Non - Statistical Methods

#### Social Moderation

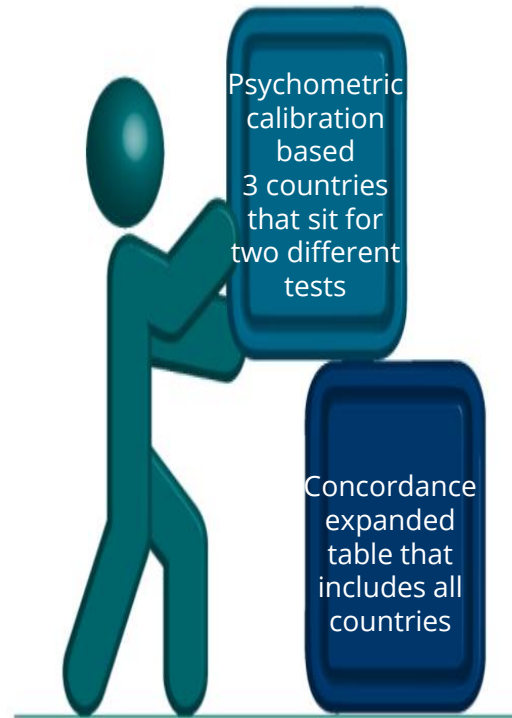
Experts as moderators



### Statistical Methods

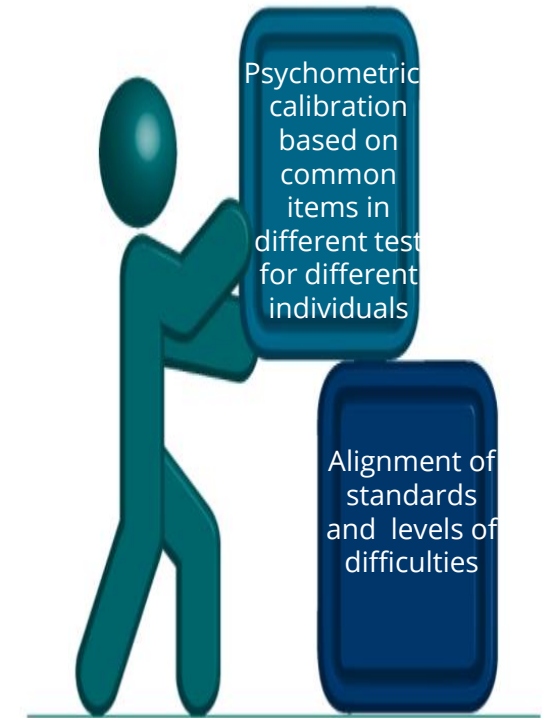
#### Test-based linking

Common individuals,  
different tests



#### Item-based linking

Common items,  
different individuals



# Rosetta Stone Proposal

## International Assessment

Expanded Table

## Regional Assessment

-  Bolivia
-  Argentina
-  Venezuela
-  Cuba
-  El Salvador
-  Costa Rica
-  Ecuador
-  Guatemala

-  Argentina
-  United States
-  South Africa
-  Ghana
-  El Salvador
-  Botswana
-  Tunisia
-  Pakistan

Countries in Regional Assessment not Participating in IEA

## Regional Assessment

-  Burkina Faso
-  Mozambique
-  Namibia
-  Burundi
-  Swaziland
-  South Africa
-  Senegal
-  Botswana

# Item-based linking: The Learning Progression Explorer

Students can elaborate on written text

Level 10 and above

Level 9

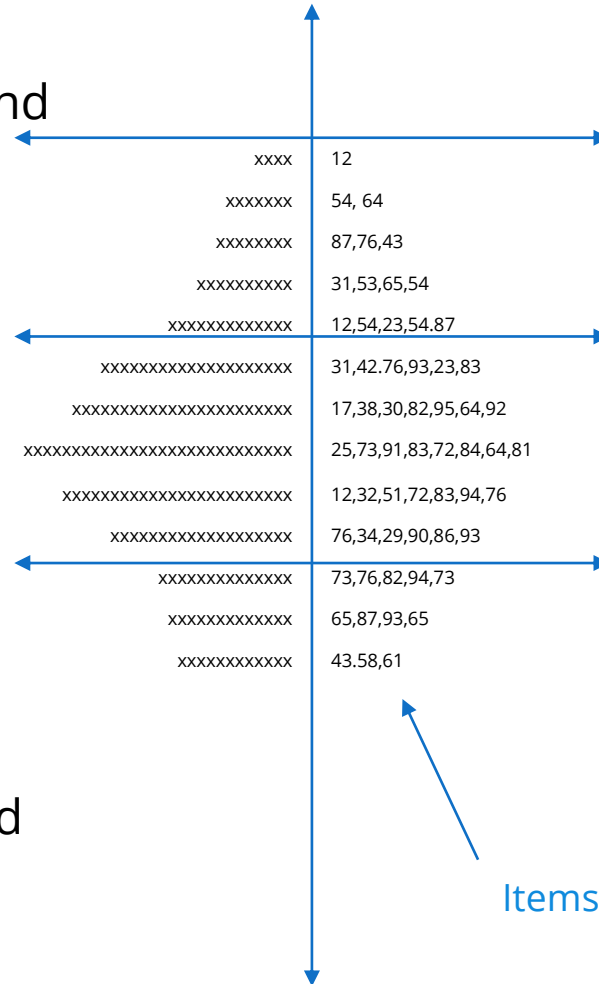
Level 8

Level 7

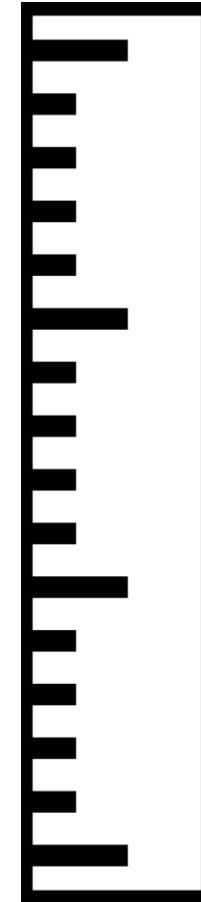
Level 6

Students can match a single word to a picture

Level 5 and below



Items





United Nations  
Educational, Scientific and  
Cultural Organization



UNESCO  
INSTITUTE  
FOR  
STATISTICS

# Thank you!

Silvia Montoya

[s.montoya@unesco.org](mailto:s.montoya@unesco.org)

Learn more:

[http://gaml.uis.unesco.org/index.html/  
@UNESCOstat](http://gaml.uis.unesco.org/index.html/@UNESCOstat)