







United Nations Educational, Scientific and Cultural Organization





Fifth Meeting

- ➤ Hamburg October 2018
- ➤ More than 80 attendants

Countries at GAML 5

Afghanist an	Chile	Kenya	Sweden
Banglades h	Dominica n Republic	Maldives	Tunisia
Belgium	Estonia	Mali	Turkey
Brazil	France	Mexico	Uruguay
Burundi	Gambia, the	Nepal	
Cambodia	Grenada	Russia	· ·
Canada	India	Slovakia	
		ChVinasant	



The 2030 Agenda and Reporting

- ? What is the construct?
- What is minimum proficiency?

?) What are the contents?

Definitional issues

? How to express everyone on the same scale?

- Regardless of the methodology, some assumptions need to be met...
 - Learning domains and target population need similarities to have valid outcomes
 - Procedural consistency needs to be ensured

National ownership, cultural values national needs, and sensitivity to cultural values all have to be respected



How do we organize our work?

Key phases in an assessment programme

Phase	What it addresses	Main components
Conceptual framework	What and who to assess	 Assessment/survey framework (cognitive, non-cognitive, and contextual) Target population
Methodological framework	How to assess	Test designSampling frameOperational designData analysis
Reporting framework	How to report	Defining scalesBenchmarkingDefining progress





Progress in indicator 4.1.1:

Consensus on minimum proficiency levels



Representatives from <u>regional</u> and <u>international</u> 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













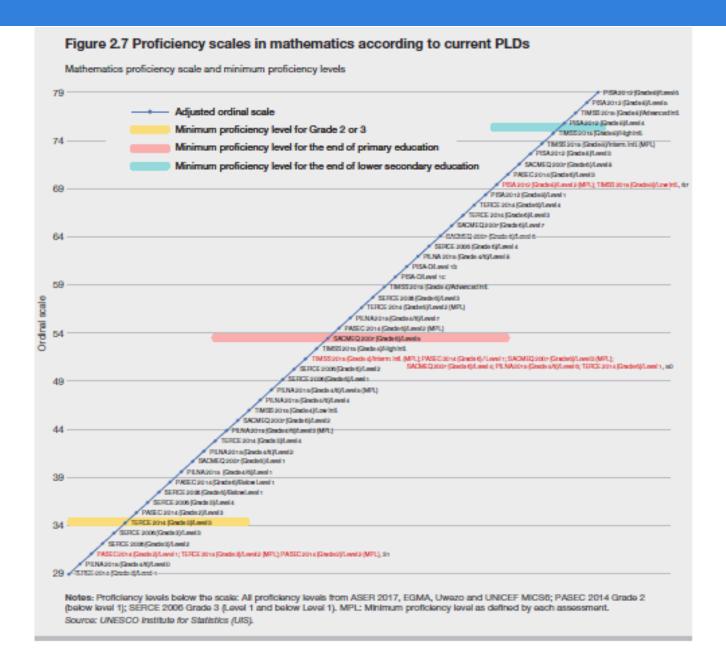






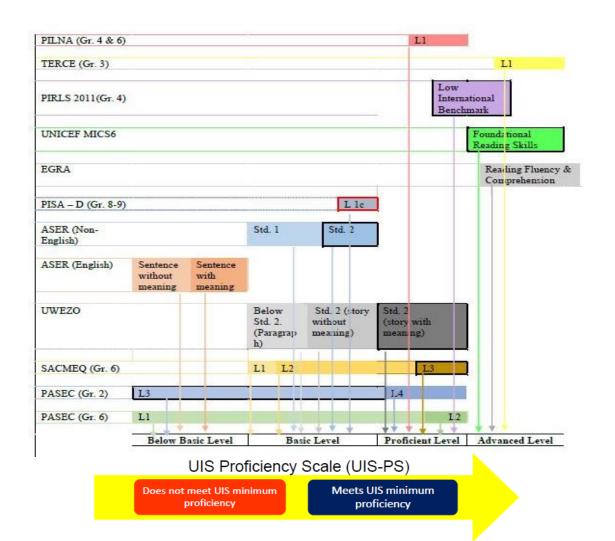


Mapping Proficiency Levels





Progress in indicator 4.1.1:



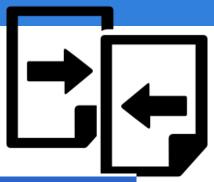


Progress in indicator 4.1.1:

Comparability in reporting indicator 4.1.1

- General policy level descriptors
- Multi-fold reporting





Educational level	Descriptor	Assessment PLDs that align with the descriptor	Minimum proficiency level in the assessment	
Grades 8 and 9	Students demonstrate skills	PISA 2015, Level 2	Level 2	
	in computation, application problems, matching tables and graphs, and making use of algebraic representations.	TIMSS 2015, Low International	Intermediate international	
Grades 4 and 6	Students demonstrate skills in number sense and computation, basic measurement, reading, interpreting, and constructing graphs, spatial orientation, and number patterns.	SACMEQ 2007, Level 3	Level 3	
		SACMEQ 2007, Level 4		
		PASEC 2014, Level 1	Level 2	
		PILNA 2015, Level 6	Level 5	
		TERCE 2014, Level 1	Level 2	
		TIMSS 2015 Intermediate international benchmark	Intermediate international	
Grade 2 or 3	Students demonstrate skills in number sense and computation, shape recognition and spatial orientation.	TERCE 2014, Level 2	Level 2	
		PASEC 2014, Level 1	Level 2	
		PASEC 2014, Level 2		



Indicator 4.1.1



Conceptual framework:

Global Content Framework of Reference for Mathematics

Global Content Framework of Reference for Reading

Content Alignment Tool

Online platform for Content Alignment Tool

Methodological framework:

Manual of Good Practices in Learning Assessment

Quick Guide: Making the Case for a Learning Assessment

Quick Guide: Implementing a National Learning Assessment

<u>Procedural Alignment Tool</u>

Online Dashboard on Using LA 4 SDG4

▲Measuring SDG4 using Learning Assessments

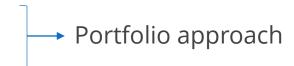
Reporting framework:

Minimum proficiency levels
Interim reporting strategy

Reporting Protocol

Linking methodologies:

- Pedagogical linking
- Non-pedagogical linking

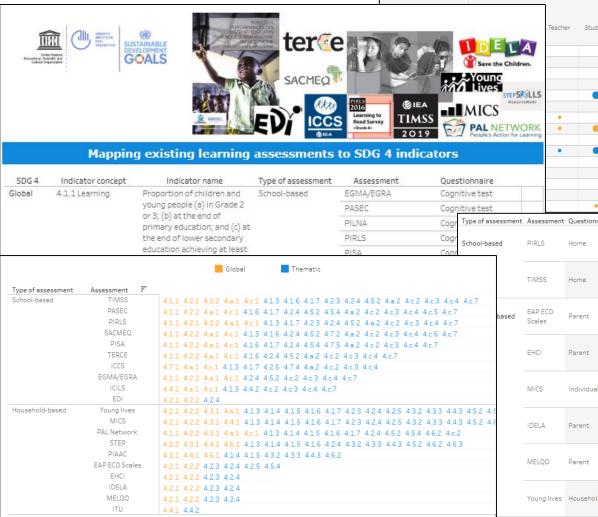






Learning Assessment Dashboard

http://gaml.uis.unesco.org/dashboard/





SDG4.1.1- 3 Innovative Solutions to generate comparable data

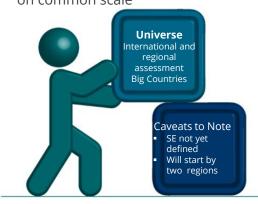
The UIS PS is the reference scale for reporting indicator 4.1.1, after all assessments are put on

Statistical methods

Test-based approach*

Anchoring: calibrated ability two test Tool: two different tests Common individuals

Output: concordance table on common scale

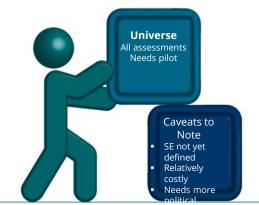


common scale

Item-based

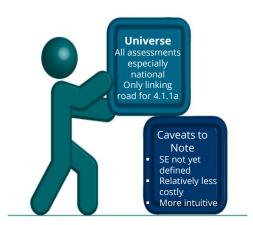
Anchoring: caipproach**bool
Tool: different tests with a sub-set of
common items

Output: assessments are on common scale



Non - Statistical methods Pedagogical calibration***

Anchoring: expert opinion
Tool: policy descriptors and difficulty linking
Output: assessments are on common scale







^{*} Test-based approach: Common individuals meaning representative individuals of similar characteristics are presented with two different tests.

^{**} Item-based approach: Common items different tests taken by different individuals. Tests will be put on common scale once embed the calibrated items from the item pool.

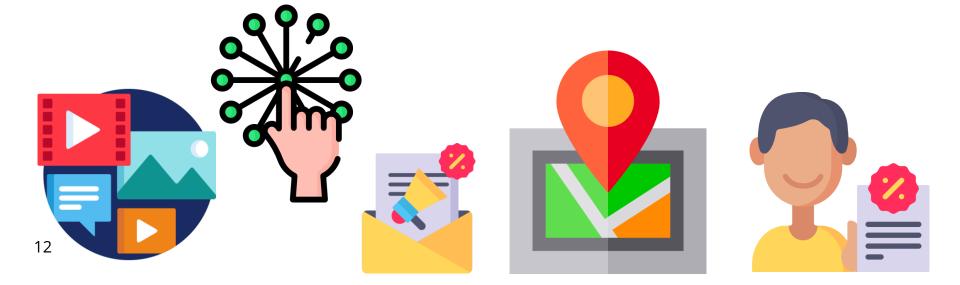
^{***} Pedagogical calibration approach: Use content/context experts with relevant experience in country to generate consensus on the alignment of national assessment to a Proficient Scale taking into account constructs and difficulties of the items. No extra field work required.



Progress in indicator 4.4.2

What is a globally agreed definition of ICT and digital literacy skills?

- Global Competency Framework of Reference on digital literacy skills
- Measurement strategy by Task Force chair
- Mapping of existing assessments on the Global Framework for Digital Literacy Skills





Task Force activities

2019/

2020

X

×

X

×

Cross-national examples		Global reporting Standard expected GAML outputs	2017/ 2018	2018/ 2019
Relevance				
Assessment and competence frameworks	IEA International Computer and Information Literacy Study (ICILS) OECD Programme for the International Assessment of Adult Competencies (PIAAC) ECDL Foundation International Computer Driving License (ICDL) European Commission Digital Competence Framework for Citizens (DigComp 2.1) LSE/Twente/Oii Measuring digital skills	Has a learning assessment taken place? Catalogue of learning assessments What is the least common denominator? Global content framework How do different assessment frameworks map against the global content framework? Content coding scheme Evaluation of content alignment	x	x x
Implementation				
Technical standards Sample, coverage etc. Modality, security etc.		Are the assessments technically robust? Evaluation of data quality		
Interpretation				
 Reporting scale Performance levels Benchmarks 	European Union Digital Economy and Society Index (DESI) Dimension 2: Human capital/digital skills	How does learning improve? Learning progression A score that is attached to each learning level Reporting scale What level should learners achieve on that scale? Minimum proficiency level		



Progress in indicator 4.7.5

What is "adequate understanding"?

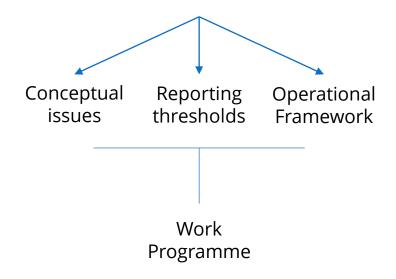
What is "proficiency"?

What are "issues related to sustainable development?

TIMSS data to measure indicator 4.7.5

TIMSS grade 8 science framework

- Proposal for refining indicator to include secondary education instead of 15 years old
- This would allow reporting





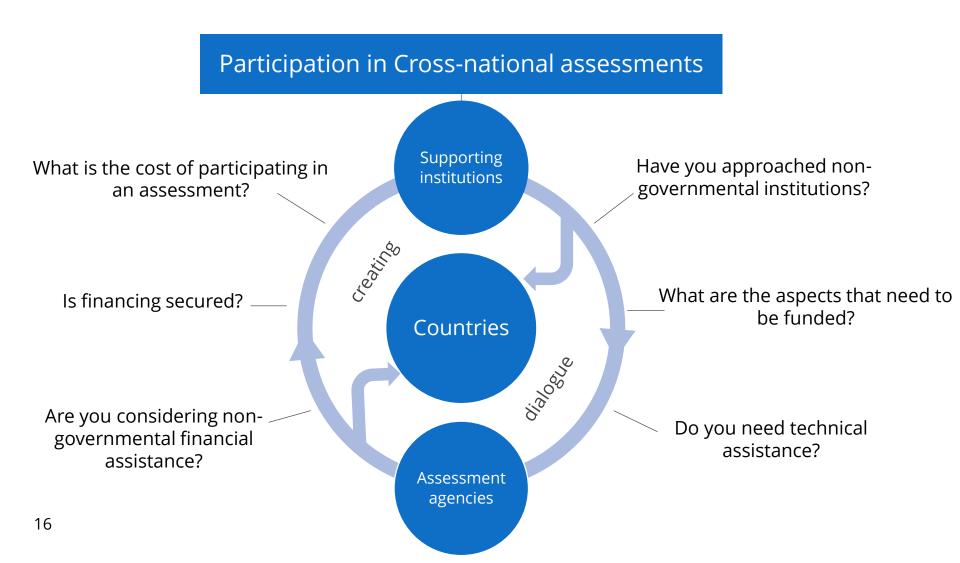
What do countries need?



- Sustainable funding
- Technical assistance
- Alignment tools
- Gaps in data collection addressed
- Consolidation of data sets across agencies
- Coordination between partners
- Networking arrangements
- Sharing of good practices
- Alignment of national policies with global requirements
- Capacity development workshops; training material

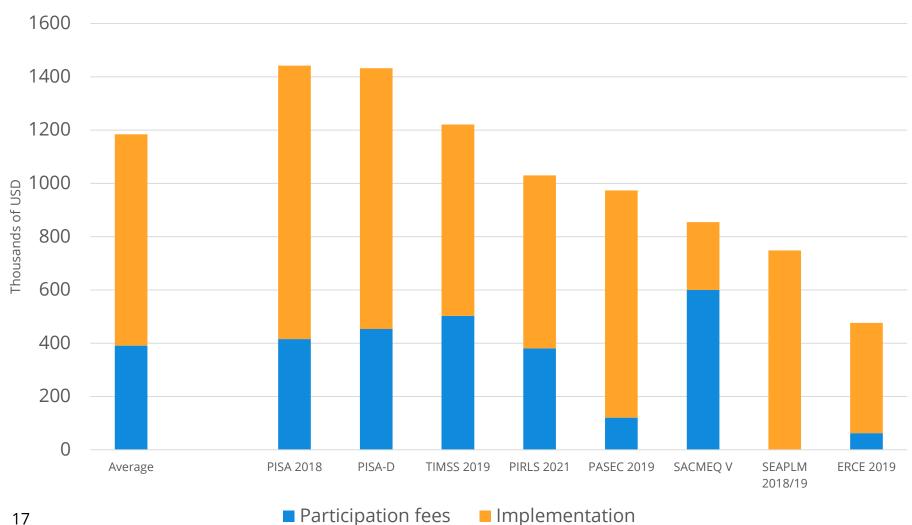


Understanding the Funding of Learning Assessments





How much does it cost participate in a cross-national assessment?





Tools need to address...



 Data coverage – not every country has data for every measurement point that is requested.



 Data quality – content and procedural alignment tool go some way to help countries reflect on the quality of assessments they are using to collect data points



Data coherence – if pulling different assessments for different points, to what extent can you use the alignment or linking strategies that have been proposed, statistical or not, pedagogical or not, to improve coherence.



Proposal for a new indicator on CREATIVITY

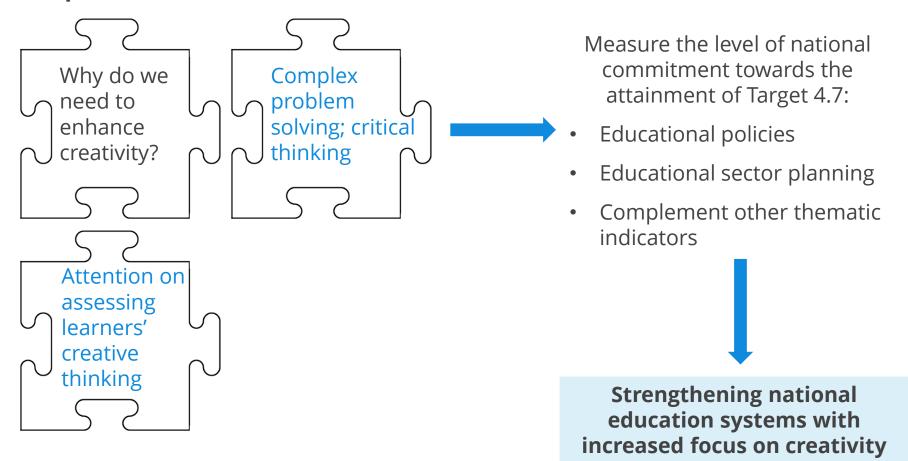
- Rationale
 - From MDG to SDG; responding to a changing environment
 - No mechanism to promote the development of a breadth of skills for all learners
 - Moving beyond basic functional and vocational skills
 - Some countries have already embedded those skills in their national curricula



Extent to which national education policies and education sector plans recognize creativity as a key skill that needs to be enhanced in national education systems



Proposal for a new indicator on CREATIVITY





Highlights from GAML 5

- Need to build capacities, funding, technical expertise, etc...
- Paradox: too much data, but not enough of the right kind
- National examination as a source of data for 4.1.1
- Sustainability of grant funded assessments
- Motivation for assessment and validation
- Minimum proficiency levels are lower at country level
- Timely dissemination of data
- Better coordination at country-level is needed
- Mother tongue of instruction in the first year of schooling





Adoption and Next Steps

- >4.1.1
 - Definition of MPL
 - Alignment methodology for indicator 4.1.1
 - Content Framework and mapping tools
 - Procedural guidelines and alignment tools
 - All three points are now in Tier II.
- **>**4.4.2.
 - Agreement on the content framework and next steps
- **>**4.6.1.
 - Agreement on the need to generate
 - Disagreement on proceed with self-reporting to report for indicator 4.6.1
 - Proposal on improving literacy measure on HHS
- **>**4.7.5.
 - Proposal on refining the indicator to open the door



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Thank you!

Silvia Montoya

Director, UNESCO Institute for Statistics