



United Nations
Educational, Scientific and
Cultural Organization



UNESCO Institute
for Lifelong Learning

Progress on Indicator 4.6.1

GAML 6 Meeting

27-28 August

Yerevan, Armenia

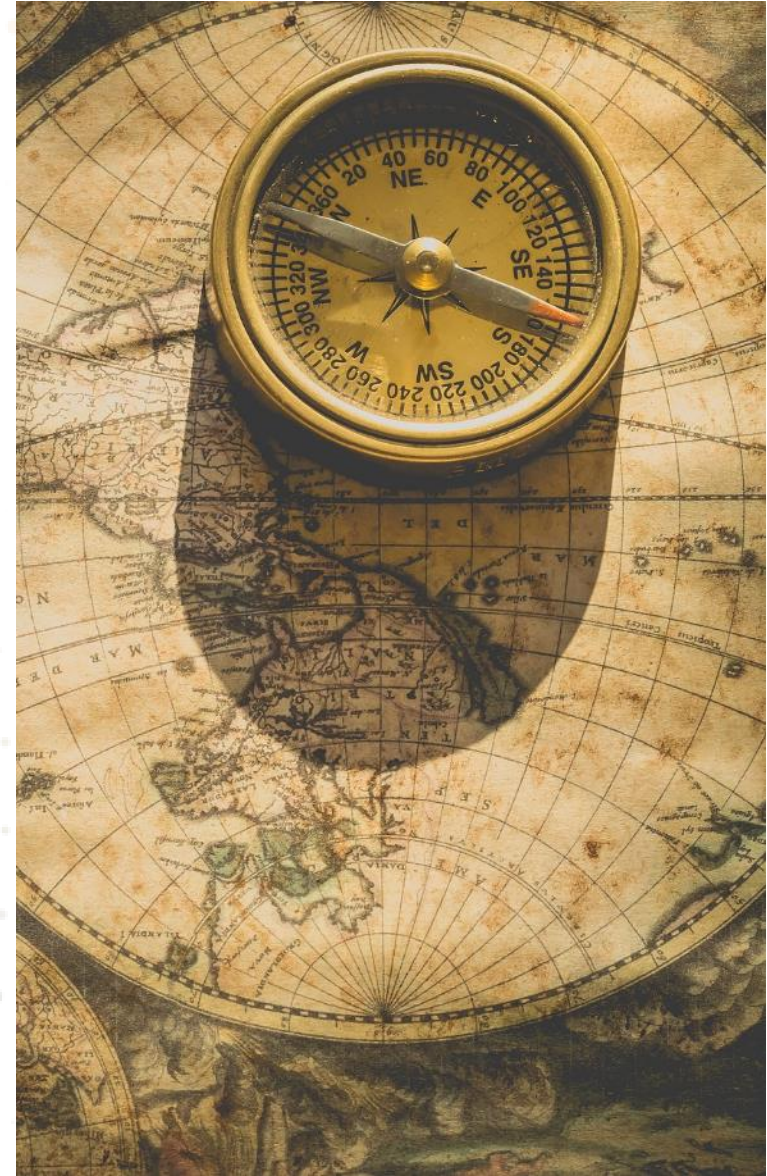


Adult global functional literacy and numeracy

Target 4.6: By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.

Indicator 4.6.1: The proportion 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.

Task Force co-chaired by the UNESCO Institute for Lifelong Learning (UIL) and the Organisation for Economic Cooperation and Development (OECD).





Taskforce on SDG 4.6

Summary of Phase 1 (2017/2018)

- Outputs:
 - 7 working papers
 - 1 inventory of adult literacy assessments
 - Several meetings for the Taskforce and expert groups
- The 1st phase Taskforce agreed on:
 - The need to assess separately literacy and numeracy
 - The adoption of the UNESCO definition of literacy and the OECD/PIAAC definition of numeracy
- Identify the first options for reporting on indicator 4.6.1

Phase 1 outcomes: Definitions adopted

Recommendation to use the UNESCO (2005) working definition of literacy (inclusive of numeracy):

Literacy is the ability to identify, understand, interpret, communicate and compute, using printed and written materials associated with varying contexts. It involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society.

Proposal to use a distinct definition for numeracy for measurement and reporting purposes with regard to indicator 4.6.1 (PIAAC, OECD, 2012)

Numeracy is the ability to access, use, interpret, and communicate (and critically evaluate) mathematical information and ideas, in order to engage in and manage the mathematical demands of a range of situations in adult life.

Numerate behavior involves managing a situation or solving a problem in a real context, by responding to mathematical content/information/ideas represented in multiple ways.

Phase 1 outcomes: Proposed reported scheme for Literacy

Level	Description / Difficulty level	Comments
E	Skills related to PIAAC/LAMP <i>lower</i> Level 3 (276–325 score range)	
D	Skills related to PIAAC/LAMP Level 2 (226–275 score range)	
C	Skills related to PIAAC Level 1 (176–225 score range)	"Fixed" minimum level for high- and upper-middle-income countries
B	Sentence Literacy Level (126–175 score range)	"Fixed" minimum level for lower middle income and low-income countries
A	Pre-Literacy Level (75–125 score range)	

Phase 1 outcomes: Proposed reported scheme for Literacy

Description of proposed Level B

(Based on below PIAAC-1 Level 1+ Level One Study in Germany + Skills for Life in UK)

Individuals at this level

- can read brief texts on familiar topics
- can locate a single piece of specific information identical in form to information in the question or directive; and
- are not required to understand the structure of sentences or paragraphs and only need to demonstrate basic vocabulary knowledge.

Text at this level consists of 1–2 sentences, of roughly 5–9 words.

Sentences follow a simple subject–verb–object (SVO) structure without any subordinate clause.

Familiar topics are presented in the text with frequently used words, excluding any foreign or technical words.

Tasks at this level do not make use of any features specific to digital text

Phase 1 outcomes: Proposed reported scheme for Literacy (cont.)

Level C: Skills related to PIAAC Level 1 (from PIAAC Level 1 descriptor)

Most of the tasks at this level require the respondent to read relatively short digital or print continuous, non-continuous, or mixed texts to locate a single piece of information that is identical to or synonymous with the information given in the question or directive.

Some tasks, such as those involving non-continuous texts, may require the respondent to enter personal information into a document. Little, if any, competing information is present. Some tasks may require simple cycling through more than one piece of information.

Knowledge and skills in recognizing basic vocabulary determining the meaning of sentences, and reading paragraphs of text, is expected.

Phase 1 outcomes: Proposed reported scheme for Literacy (cont.)

Setting the fixed minimum proficiency level for literacy:

- Proposed Level B for low-income and lower-middle-income countries (with skill below PIAAC Level 1);
- Proposed Level C for upper-middle income and high-income countries (with skills equivalent to PIAAC Level 1).

Logic: statistical arguments + policy considerations

- STEP data show that over 50 per cent of the adult urban population in middle income countries (e.g. Kenya and Jakarta) are at and/or below PIAAC level 1.
- Therefore, a single fixed level for global reporting could lead to a majority of countries having a large percentage of their adult population classified as being below the minimum literacy proficiency level.
- As a result, progress would be difficult to detect, were a single threshold applied globally.

Phase 1 outcomes: Proposed reported scheme for Numeracy

Level	Description / Difficulty level	Comments
E	Skills related to PIAAC lower 'Level 3	
D	Skills related to PIAAC / LAMP Level 2	
C	Skills related to PIAAC Level 1	"Fixed" minimum level for reporting
B	<i>Very-low-level skill</i> (mostly oral skills) mental calc, measurement Knows few print-based formal symbols Can do only very simply written problems	Based on: - oral assessment - text-free stimuli - "components"
A	Cannot recognize written digits Rudimentary mental computation skills	"Innumerate"

Phase 1 outcomes: Proposed reported scheme for Numeracy (cont.)

**A tentative description of this minimal proficiency level:
(Based on PIAAC-1 Level 1+ LAMP + additions by NCG)**

The respondent can carry out basic mathematical processes in common, concrete contexts where the mathematical content is explicit, with either little **or no** text and minimal distractors.

...Tasks usually require that people can perform simple one-step processes; understand representations of numerical entities (e.g., positions on a number line to 100),

...perform basic arithmetic operations related to written or visual representations of quantities; understanding simple proportions (e.g., fractions or percents such as $1/2$ or 50%);

...locate, identify, and use elements of simple graphical or spatial representations; and

... understand basic information about everyday measurement systems such as regarding time, length or weight.

Phase 1 outcomes: Proposed reported scheme for Numeracy (cont.)

Set the "fixed" reporting level in numeracy at the *minimum level* of cognitive skills - which is conceptually consistent with the (lower side of the) description of PIAAC Level 1

Logic: Statistical arguments + scholarly & policy considerations

- This level enables individuals to *begin* to successfully engage with and manage basic forms of written representations of mathematical information, beyond having "mental math" skills.

2nd phase of the workplan of the Taskforce

New terms of references (ToR)

- Revitalize the Task force on this indicator
- Presentation of a new approach

“By 2030, all young people and adults across the world should have achieved relevant and recognized proficiency levels in functional literacy and numeracy skills that are equivalent to levels achieved at successful completion of basic education” (Incheon Declaration, 2015).

1st virtual meeting (10 July 2019)

- Adoption of the ToR of the Taskforce and the new approach
- Strong willingness to build synergies with Indicator 4.1.1 (c)
- Discussion on the programme of work

Discussion Paper: GAML6 WD#4

Main objectives

- To rely on the work done during the first phase
- To take into account the current situation and the expected situation in 2030
- To initiate debates on the pending questions to be discussed
- To formulate recommendations for guiding the work of the Task force
- To draw a workable strategy in a middle/long-term vision

Questions agreed and to be discussed

Agreement on:

- General definition of functional literacy and numeracy
- New approach to establishing the fixed level of proficiency
- Exploring the opportunities of alignment with Indicator 4.1.1 (c), at least for young adults

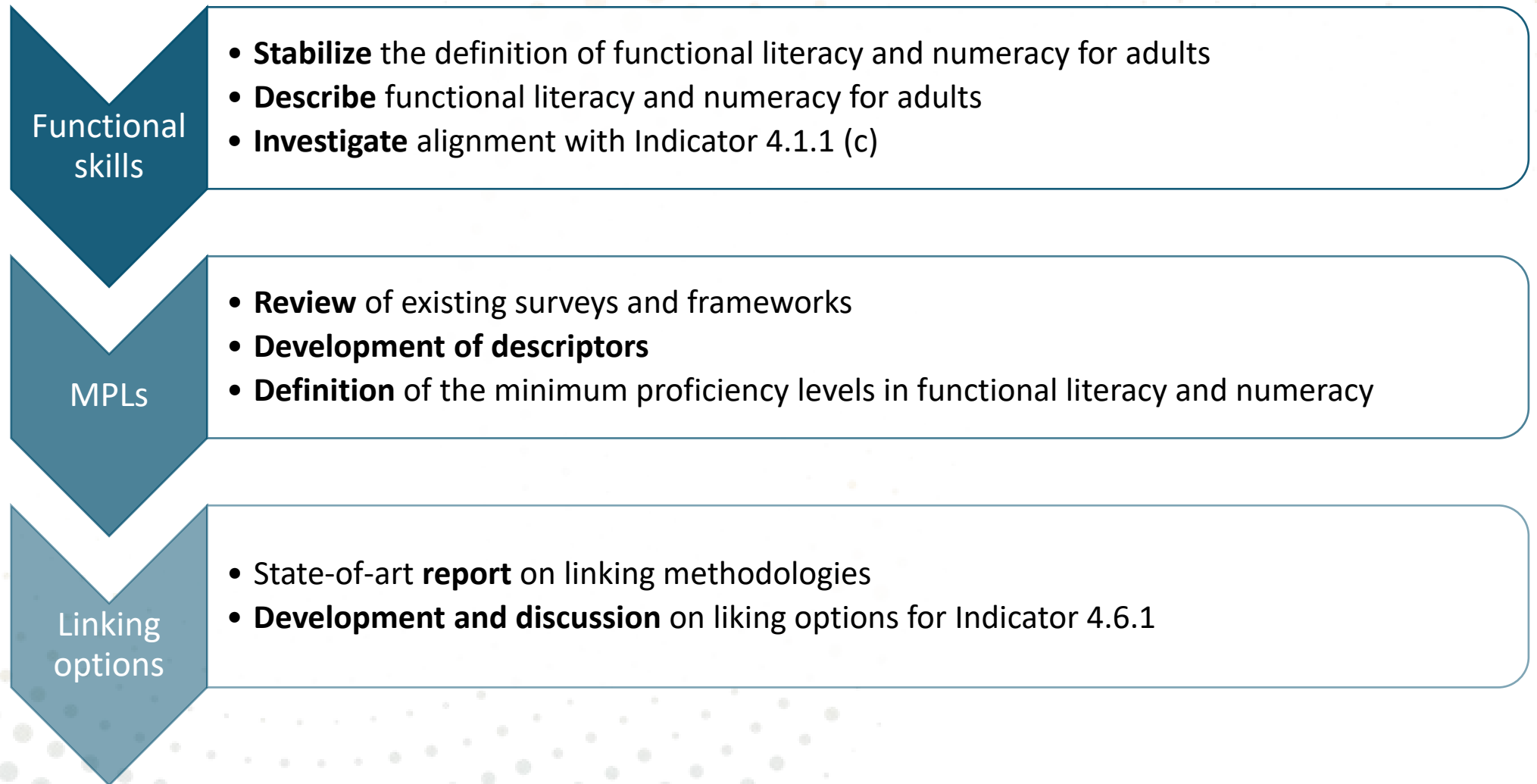
Debates on:

- Definition of the target population: young adults (15-24-year-olds) vs older adults. Implication for alignment strategies and production of data.
- Strategy for reporting results from very different sources (methodology and conceptual framework)

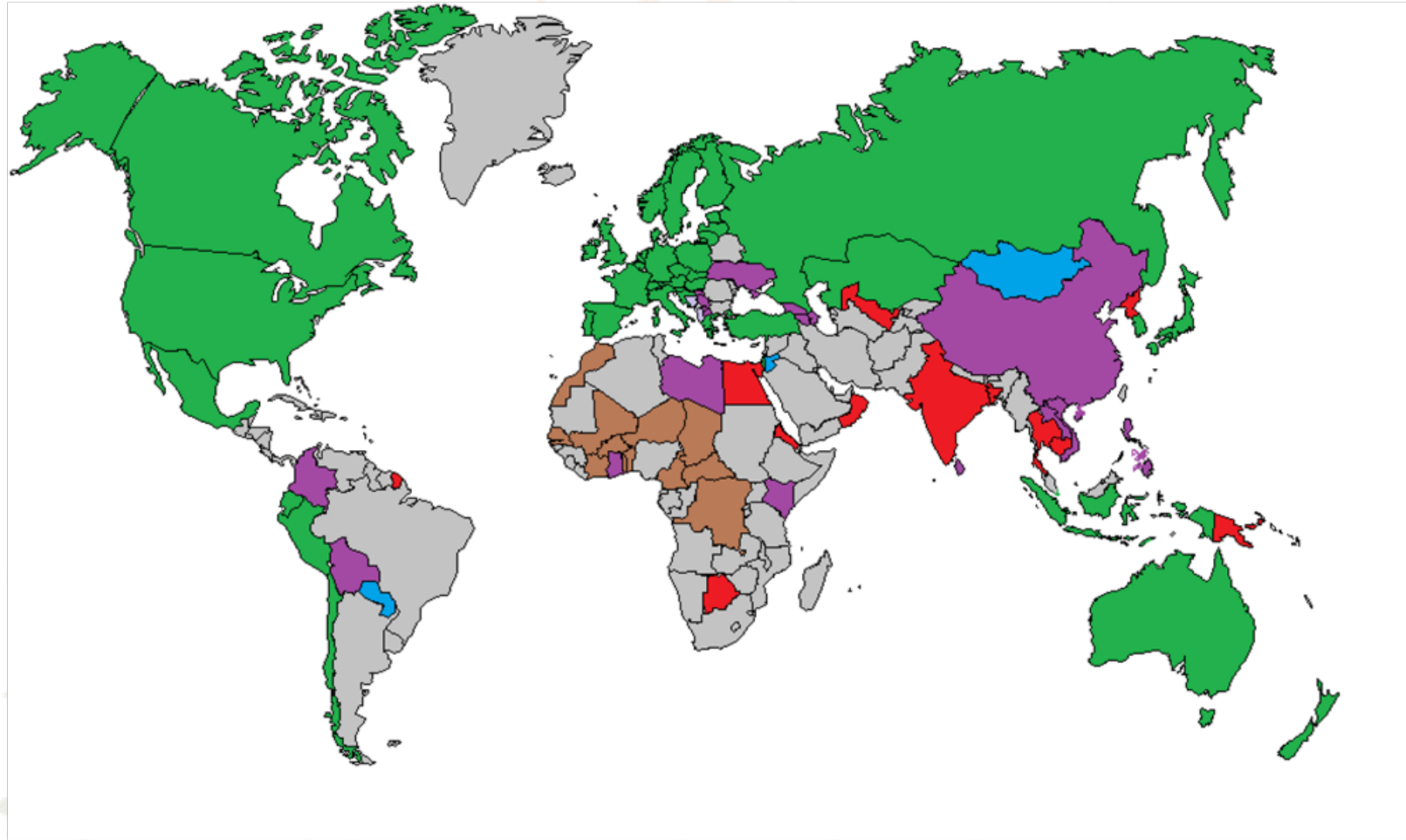


Next phase of Taskforce work:
WD#4

Definition and alignment



Producing data



RAMAA

LAMP

National assessment

PIAAC

STEP

STEP Employer

Producing data

Self reported questionnaires

- Improving self-reported questionnaires
- Test

Indirect estimates

- Work on new sources when available (ex: RAMAA)
- Test comparability and accuracy

Big Data

- Exploring possibilities provided by Big Data for assessing literacy and numeracy practices
- Test



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Thank you!

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