UNESCO
United Nations
Educational, Scientific and
Cultural Organization

UNESCO INSTITUTE FOR STATISTICS

GLOBAL ALLIANCE TO MONITOR LEARNING

SUSTAINABLE DEVELOPMENT GOALS

Self-Report Indirect and Simple Direct Assessment Tools for Reporting

Concept Paper for GAML 5

GAML Fifth Meeting
17-18 October 2018
Hamburg, Germany

UNESCO Definition of Literacy

Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts.

Literacy 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 (UNESCO, 2004; 2017).
- Literacy is about the uses people make of it as a means of communication and expression, through a variety of media;
- Literacy is plural, being practiced in particular contexts for particular purposes and using specific languages;
- Literacy involves a continuum of learning measured at different proficient levels.

Self-Report Indirect and Simple Direct Assessment Tools as Reporting Options

In another document prepared for the GAML5 meeting, *Reporting options for indicator 4.6.1: Working Paper for GAML 5 Endorsement* (October 2018), UIS reviewed the many options that are available for monitoring progress on SDG 4.6.1. One of the categories delineated in that paper for measuring and reporting progress is "self-report and simple assessment tools". Among the tools identified for this category are:
- dichotomous (Yes/No response to 'can you read or write' question)
- actually reading a written sentence
- several questions assessing skills use in daily functioning

This concept paper focuses on the possibility of using this category of tools for reporting.

The above-mentioned paper succinctly summaries the characteristics of these tools. The UIS summary is repeated here:

> A self-reported question is an indirect measure of reading. It collects a dichotomous response on literacy, by simply asking a person, 'can you read or write'. It may be administered as part of a country's household survey. However, this type of data collection faces challenges. For instance, if the construct of literacy is defined as "who can, with understanding, both read and write a short simple statement on his or her everyday life", then asking a person if they can read or write could be interpreted differently across cultures and countries, making this measure non-comparable. Further, the results of such self-report questions may over-estimate the literacy rate.

> The definition of literacy quoted above has long underpinned the UIS's literacy rate estimates. UIS produces estimates of the literacy rates in most developing countries. These estimates, in practice, only distinguish between those who cannot read or write at all and the rest of the population. However, those judged to be literate can have vastly different skill levels. Someone who can read and understand a simple statement about everyday life is arguably not sufficiently equipped to cope with the demands of modern-day living. Policy interventions are not only needed for those who are illiterate but also for those with weak literacy skills. In order to address the needs of people with low literacy skills, it is necessary to adopt a more nuanced definition of literacy, which identifies a range of literacy skills and levels of competence.

Simple direct assessment modules could be useful in household surveys like the Demographic and Health Survey (DHS) and the Multiple Indicator Cluster Surveys (MICS). In these surveys, developing countries try to address literacy assessments by adding a simple set of background questions on literacy skills used and by administering within the survey a short test of reading skills. In DHS and MICS, a sample of adult respondents, typically between 15 and 49 years old, is asked to read a card with a short, simple sentence in their language. The result is recorded as one of three options: (i) cannot read at all; (ii) able to read only parts of the sentence; or (iii) able to read the whole sentence. The results of these tests are available in nearly all DHS and MICS surveys carried out in the last decade, including a large number of surveys in less-developed countries. These test results are more reliable than self-reported data on literacy and give at least some sense of the level of reading skills. On the other hand, these simple reading tests do not allow the measurement of literacy on a continuum and are therefore only a partial improvement on traditional dichotomous literacy indicators. (OECD, no date).

Nevertheless, using the more well-developed cross-national and regional direct assessments is costly and the costs may be out of the reach of many countries. The self-report and simple direct assessments may offer an alternative by using them as a small module in a country's household survey. As OECD states:

"While the country coverage of large-scale assessments is likely to increase over the next few years, it can, nevertheless, be expected that for reasons of cost, complexity and capacity, many countries, especially low- and middle-income countries will not be in a position to implement such studies in the short to medium or even the long-term. The consequence is that, for many years to come, the only information available on the literacy and numeracy proficiency of adults in many countries will come from simple indirect and direct measures included in censuses and other household surveys."

This concept paper explores this option and suggests some questions that could comprise this module.

Disagreement about the Usefulness of this Option

Most would agree that the short, one sentence, direct assessment of reading, when used alone, provides a poor measure of literacy. Not only is a one item assessment unreliable (Neice and Murray, 1997). If it measures anything, it measures the ability to decode rather than reading comprehension. If it were to be used, it should be accompanied by other assessments of reading.

Self-report or self-assessed reading proficiency reports are indirect measures of reading in that they do not require respondents to demonstrate their claimed proficiency. The respondents may overestimate their proficiency and respond in socially desirable ways (Olson, Smyth, Wang, and Pearson, 2011).

Murray (October, 2018) stated that the self-report and short direct measure provide little discrimination along the continuum of reading. However, in their study, Olson, et al. found that a selection of five self-assessment and self-report item that were imbedded in the 2003 National Assessment of Adult Literacy survey (NAAL) in the USA, could provide a useful index of literacy that was reliable and had good correlations with the direct measures of reading that were included in

NAAL. The scale developed from these five items was able to discriminate among the NAAL literacy proficiency levels.

Questions that could be part of a Self-Assessment Module in a Household Survey

As the paper, *Reporting options for indicator 4.6.1Working Paper for GAML 5 Endorsement (October 2018)* states, the more extensive and well-developed direct assessments of literacy and numeracy are preferred, indirect assessments as party of a broader household survey could prove useful as a practical matter. Examples of the types of questions that could be included in such a model are shown in Annex A. Questions in this section were adapted from Olson, Smyth, Wang, and Pearson. (2011). *The self-assessed literacy index: Reliability and validity*. Sociology Department, Faculty Publications. 155. h<p://digitalcommons.unl.edu/sociologyfacpub/155 [Questions that study used were taken from 2003 National Assessment of Adult Literacy], from MICS, and from UIS: *Literacy Assessment and Monitoring Programme (LAMP) – Background Questionnaire*.

The self-assessment and self-reported question reflect the respondents' literacy and numeracy in and out of their work context. As a set, the questions would require administration by a survey interviewer. The questions are grouped as follows:

I. Background Questions
II. Main Literacy and Numeracy Questions
       A. Short Direct Assessment
       B. Self-Assessed Literacy
       C. Self-Reported Literacy Practices
       D. Self-Assessed Numeracy
       E. Self-Reported Work-Related Literacy Practices
       F. Self-Reported Work-Related Numeracy Practices

These questions are only suggestive. They have been adapted from existing household survey studies. The set could be shortened if some of the questions are judged to be irrelevant or if the amount of time for an interviewer to administer them is too long.

References

Brooks, Greg (13 June 2018) *Reflections on the UNESCO discussions about adult literacy and numeracy assessment*.

Murray, T. S. (October 2018). *Functional Literacy and Numeracy: Definitions and Options for Measurement of SDG 4.6.*

Neice, D. and Murray, T. S. (1997) The reliability of self-reports of literacy and numeracy skill, UNESCO Institute for Education, Hamburg.

OECD (no DATE). *Improving the collection of information on literacy proficiency in household surveys.*

Olson, K., Smyth, J. D., Wang, Y., and Pearson, J. E. (2011). *The self-assessed literacy index: Reliability and validity*. Sociology Department, Faculty Publications. 155. h<p://digitalcommons.unl.edu/sociologyfacpub/15.

UIS (October 2018). *Reporting options for indicator 4.6.1: Working Paper for GAML 5 Endorsement.*

Annex A: Examples of Possible Literacy Self-Assessment Questions that could be part of a Household Survey[i]

I. Background Questions

> *Note: If the household survey into which this module is embedded does not contain these background questions, they should be added.*

1. Have you ever participated in a literacy programme or any programme that involved learning to read or write, not including primary school?
> *(INTERVIEWER: Ensure options two and three are properly differentiated; prompt options if needed)*

___ Yes
___ No
___ No, because I know how to read and write

2. Have you participated in such a programme in the past 12 months (that is, since last *<name the corresponding month>*)?
___ Yes
___ No

3. What is the highest grade of formal education (name of person selected) has completed?
___ ISCED, pre-primary education
___ ISCED, primary education
___ ISCED, lower secondary education
___ ISCED, upper secondary education
___ ISCED, post-secondary non-tertiary education
___ ISCED, tertiary education
___ ISCED, advanced research education

4. What is the language that you first learned in childhood and still understand?
> Language 1 _____
> Language 2 _____
> Language 3 _____

5. What language(s) can you speak well enough to conduct a conversation?
> Language 1 _____
> Language 2 _____
> Language 3 _____

6. What language do you speak most often at home?
> Language 1 _____

Language 2 _____

Language 3 _____

7. In what language did you first learn to read?

Language 1 _____

Language 2 _____

Language 3 _____

____ None. I have not learnt to read

II. Main Literacy and Numeracy Questions

A. Short Direct Assessment

(Note: The language of this written sentence should be determined by local policy.)

1. Now I would like you to read this sentence to me.

Show sentence on the card to the respondent.

If respondent cannot read whole sentence, probe:

Can you read part of the sentence to me?

____ Cannot read at all

____ Able to read only parts of sentence

____ Able to read whole sentence

____ No sentence in required language/braille

(specify language) _____

B. Self-Assessed Literacy

(Note: The language referred to in the questions in this section should be determined by local policy.)

1. With regard to _____ language, how well do you: *read* it?

____ not at all

____ with difficulty

____ easily

2. Can you read material such as personal letters and newspapers in _____?

____ not at all

____ with difficulty

____ easily

3. Can you write a personal letter or short message easily, in _____?

____ not at all

___ with difficulty
___ easily

C. Self-Reported Literacy Practices

During the past month, *and excluding activities you perform at work*, how often have you read:

	Daily	At least once each week	Seldom	Never
1. I do not know how to read	▨	▨	▨	
2. directions such as road signs, or names of stores?				
3. posters, pamphlets, announcements and notice boards?				
4. text messages sent using a cell/mobile phone?				

D. Self-Assessed Numeracy

1. Can you make *mental calculations* for daily needs, such as checking if you received the right amount of money back at the shop or market?
   ___ not at all
   ___ with difficulty
   ___ easily

E. Self-Reported Work-Related Literacy Practices

During the past month at work, how often did you have to read …

	Daily	At least once each week	Seldom	Never
1. I do not know how to read	▨	▨	▨	
2. memos?				
3. reports?				
4. short messages?				

F. Self-Reported Work-related Numeracy Practices

During the past month at work, how often did you have to…

	Daily	At least once each week	Seldom	Never
1. I have not worked during the past month				
2. do counting mentally or orally?				
3. do arithmetic operations (adding, subtracting)?				
4. measure or estimate the size or weight of objects?				

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[i] Questions in this section were adapted from Olson, Kristen; Smyth, Jolene D.; Wang, Ying; and Pearson, Jennie E., The self-assessed literacy index: Reliability and validity" (2011). Sociology Department, Faculty Publications. 155.
h<p://digitalcommons.unl.edu/sociologyfacpub/155 [Questions that study used were taken from 2003 National Assessment of Adult Literacy], MICS, and from UIS: Literacy Assessment and Monitoring Programme (LAMP) – Background Questionnaire