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. [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


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


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

1. 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
C. Self-Reported Literacy Practices

During the past month, \textit{and excluding activities you perform at work}, how often have you read:

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

D. Self-Assessed Numeracy

1. Can you make \textit{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 \textit{past month at work}, how often did you have to read ...

<table>
<thead>
<tr>
<th></th>
<th>Daily</th>
<th>At least each week</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I do not know how to read</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. memos?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. reports?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. short messages?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F. Self-Reported Work-related Numeracy Practices

During the past month \textit{at work}, how often did you have to...
<table>
<thead>
<tr>
<th></th>
<th>Daily</th>
<th>At least once each week</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have not worked during the past month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. do counting mentally or orally?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. do arithmetic operations (adding, subtracting)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. measure or estimate the size or weight of objects?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. 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.

http://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