SDG indicator 4.6.1: 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

Training seminar on indicators of the fourth goal of sustainable development for Arab countries

9-11 May 2022
Definition of the indicator

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

Definition of the indicator: proportion of youth (aged 15-24 years) and of adults (aged 15 years and above) who have achieved or exceeded a fixed level of proficiency in (a) literacy and (b) numeracy.

Purpose of the indicator: The indicator is a direct measure of the skill levels of young people and adults in literacy and numeracy.

The fixed level of proficiency (FLP) is the benchmark of basic knowledge in a domain (literacy or numeracy) measured through learning assessments. This indicator is currently based on data published by agencies, specialized organizations, and countries in youth and adult competency assessment surveys.
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The fixed level of proficiency (FLP) for indicator 4.6.1 is currently defined as level 2 descriptor of:
Program for the International Assessment of Adult Competencies (PIAAC) - The International Adult Competency Assessment Program
The program includes 6 levels of proficiency according to the types of tasks (from literacy and numeracy) successfully completed at each level.
Definition of the concepts of literacy and numeracy

The concepts of functional literacy and functional numeracy are based on the UNESCO definitions, which cover a continuum of proficiency levels rather than a dichotomy. A person is functionally literate if he/she can engage in all those activities in which literacy is required for the effective functioning of his/her group and community and also which enables them to continue to use reading, writing and calculation for his/her own and the community’s development.
Definition of the fixed level of literacy proficiency

At this level, the medium of texts may be digital or printed, and texts may comprise continuous, non-continuous, or mixed types. Tasks at this level require respondents to make matches between the text and information, and may require paraphrasing or low-level inferences. Some competing pieces of information may be present. Some tasks require the respondent to:
- cycle through or integrate two or more pieces of information based on criteria;
- compare and contrast or reason about the information requested in the question; or
- navigate within digital texts to access and identify information from various parts of a document.
Definition of the fixed level of numeracy proficiency

Tasks at this level require the respondent to identify and act on mathematical information and ideas embedded in a range of common contexts where the mathematical content is fairly explicit or visual with relatively few distractors. Tasks tend to require the application of two or more steps or processes involving calculation with whole numbers and common decimals, percentages and fractions; simple measurement and spatial representation; estimation; and interpretation of relatively simple data and statistics in texts, tables and graphs.
Data sources

This indicator is collected through skills' assessment surveys of the adult population, for example:
- The International Adult Competency Assessment Program
  *Program for the International Assessment of Adult Competencies (PIAAC)*
- Skills for Work and Productivity Program (Reading Only)
  *Skills Towards Employment and Productivity (STEP) Measurement program*
- Literacy level assessment and tracking program
  *Literacy Assessment Measurement Program (LAMP)*
  *RAMAA*
- National adult literacy surveys

Data is collected from the respective organizations responsible for each assessment
Data collection and reporting

**Data collection method:** Data are collected from the respective organizations responsible for each assessment

**Data collection calendar:** Various depending on survey and country.

**Data release calendar:** The data is released by the UNESCO Institute for Statistics in March and September of each year

SDG Indicator 4.6.1
Method of computation

Population of young people and adults of a particular age group who have achieved or exceeded a fixed level of proficiency (in literacy or numeracy) x 100

Population of young people and adults of a certain age group

Age group: 16-65

SDG Indicator 4.6.1
Data quality

The UIS maintains a global database on learning assessments. The inclusion of a data point in the database to show transparency is completed by following a protocol and is reviewed by UIS technical focal points to ensure consistency and overall data quality, based on objective criteria to ensure that only the most recent and reliable information are included in the database.
Data quality assessment

The criteria to ensure the quality and standardization of the data are: the data sources must include adequate documentation; data values should be representative at the national population level and should otherwise be included in a footnote; data values are based on a sufficiently large sample; and the data are plausible and based on trends and consistency with previously published or reported estimates for the indicator.
Indicator limitation

Functional literacy and numeracy are related to context, thus survey programs need further development in order to frame questions in a way that are meaningful to different economic and social-settings and could be more efficient to reflect population level of skills.
Data availability and disaggregation

Data availability:
45 countries with at least one data point for the period 2010-2017

For the Arab region, data is available for Palestine only. This data is for 2011 and is from a LAMP survey

Time series:
2006 onwards.
Data disaggregation

Indicators are published disaggregated by age group, sex, socio-economic status and migration status, according to availability. The equivalence indicators are estimated in calculating the indicator 4.5.1. The following table provides information on the classification of the variable for the indicator 4.6.1

<table>
<thead>
<tr>
<th>Survey</th>
<th>Definition</th>
<th>number of categories</th>
<th>Description of the component</th>
<th>parity index</th>
<th>Related link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Sex of the respondent</td>
<td>2</td>
<td>Is the respondent male or female? Answer options: female, male</td>
<td>Female/Male</td>
<td><a href="https://www.oecd.org/skills/piaac/Complementary%20information%20from%20the%20Background%20Questionnaire.pdf">https://www.oecd.org/skills/piaac/Complementary%20information%20from%20the%20Background%20Questionnaire.pdf</a></td>
</tr>
<tr>
<td>STEP</td>
<td>Sex of the respondent</td>
<td>2</td>
<td>Is the respondent male or female? Answer options: female, male</td>
<td>Female/Male</td>
<td></td>
</tr>
</tbody>
</table>

SDG Indicator 4.6.1
## Data disaggregation

<table>
<thead>
<tr>
<th>Survey</th>
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<th>parity index</th>
<th>Related link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-economic status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PIAAC</td>
<td>Parents' education level</td>
<td>2</td>
<td>What is the highest level of education completed by your father/mother or guardian/caregiver? Primary or lower secondary education, secondary education, and higher education. Two categories are tabulated for this indicator: a) neither parent has attained tertiary education and b) at least one parent has tertiary education</td>
<td>Neither parent has attained tertiary education/ At least one parent has tertiary education</td>
<td><a href="https://www.oecd.org/skills/piaac/PIAAC">https://www.oecd.org/skills/piaac/PIAAC</a></td>
</tr>
<tr>
<td>STEP</td>
<td>Parents' education level</td>
<td>2</td>
<td>Same component</td>
<td>Same parity index</td>
<td></td>
</tr>
<tr>
<td>Survey</td>
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<tr>
<td>PIAAC</td>
<td>Country of birth</td>
<td>Country specific</td>
<td>Were you born in... the name of the country?</td>
<td>Born abroad / born in the country</td>
<td><a href="https://www.oecd.org/skills/piaac/Background%20Questionnaire%2015DEC10.pdf">Link</a></td>
</tr>
</tbody>
</table>

SDG Indicator 4.6.1
Thank you


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