PISA Houshold Survey Module (HSM)

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7th meeting of the Global Alliance to Monitor Learning (GAML)
– Wednesday, 23rd November 2022
PISA HSM origins

Roadmap for Measuring Learning through the Lifecycle in Multi-Topic National Household Surveys

IEA, OECD, UNICEF, UIL, UIS, World Bank
Motivation for PISA HSM

- Household surveys can be an important part of measurement agenda around student learning:
  - Can reach out of school students
  - Can help populate SDG indicators (4.1.1, 4.2.1, 4.5.1, and 4.6.1)
  - Provide rich detail of household environment (Intergenerational understanding, explaining learning poverty)
  - COVID school closures

- World Bank, UIS, UNICEF, OECD, UIL, and IEA are collaborating to develop short learning assessments for household surveys

- Roadmap report has been prepared discussing how to fit these into household surveys – presented to TCG and GAML in 2020
Tools can cover the age span with the understanding that we are not trying to build a single scale.
PISA and SDG 4 monitoring

- PISA is a source of data for global monitoring of SDG 4.

Global Indicator 4.1.1.c

Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex

- Equates to: Level 2 in PISA (at least 407 points for reading; 420 points for mathematics)
PISA and PISA HSM

- PISA is:
  - An International Large-Scale Assessment that tests the skills and knowledge of 15-year-old students who are enrolled in an educational institution at grade 7 or higher in reading, mathematics and science.
  - Also collects valuable information on student attitudes and motivations, and formally assesses skills such as collaborative problem solving and global competence.
  - The test is administered in educational institutions and provides valid evidence of student performance over the entire range of PISA’s scale, including against its six proficiency levels.

- PISA HSM is:
  - A short test for administration as part of a household survey with the sole purpose of measuring whether 14-to-16-year-olds have reached minimum levels of proficiency in reading and mathematics as per the end of lower secondary education benchmark (SDG 4.1 target and SDG 4.1.1.c global indicator).
  - The test provides valid evidence that respondents are above or below the lower limit of Level 2 proficiency on the PISA scale in reading and mathematics.
PISA HSM assessment structure

• Administration of a short assessment via tablets or on paper in households for 14-16 year-olds
• Maximizes the use of automatically scored items to capitalize on the use of tablets
• Focuses on reading and mathematics only
• Youth interviewed first for completion of background questionnaire and then takes the test
• Household Survey interviewer identifies youth and administers test or makes appointment to return to household to administer the test
Data Collection Design

**Respondent**
In-person interview

- **Youth Interview**
  (30-35 Min)

- **Core Module**
  (11 Reading and 6 Mathematics Items)
  (30 Min)

**Others**

- Person(s) most knowledgeable about the respondent questionnaire
  (i.e., parents, caregivers, Guardians)

- Household Survey Data
  (Interviewer)
<table>
<thead>
<tr>
<th>Illustrative examples</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1c</strong></td>
<td>• Decodes and understands short sentences (“The red car has a flat tyre”, “airplanes are made of dogs”)</td>
</tr>
<tr>
<td><strong>Level 1b</strong></td>
<td>• Understands short text, finds a single piece of explicitly stated information (e.g. “what colour is the car?”)</td>
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<tr>
<td><strong>Level 1a</strong></td>
<td>• Level 1b + Identifies the main theme or the author’s intent in a text about a familiar topic</td>
</tr>
<tr>
<td><strong>Level 2 (baseline)</strong></td>
<td>• Reads and understands simple texts; • connects pieces of information, draws inferences beyond the explicitly stated</td>
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</tbody>
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### 6 items on the lower end of the mathematics scale

<table>
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<th>Illustrative examples</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1c</td>
<td>• What is the price of orange juice at this restaurant?</td>
</tr>
<tr>
<td>Level 1b</td>
<td>• Which drink is most expensive?</td>
</tr>
<tr>
<td>Level 1a</td>
<td>• How much do you pay if you order 2 orange juices and a snack?</td>
</tr>
<tr>
<td>Level 2 (baseline)</td>
<td>• How much cheaper is the « breakfast deal » compared to ordering each item separately from the menu?</td>
</tr>
</tbody>
</table>
Thank you!

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