Assessment of Academic Learning Outcomes in Education in Emergencies

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Outline

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1. Background and Methodology
Background

- INEE’s Education Policy Working Group commissioned two mapping exercises with an aim to map what quality education in emergencies constitutes at program and individual level—on academic learning outcomes and social and emotional learning outcomes.

- This report outlines landscape of guidance documents, tools and program approaches that influence how academic learning outcomes are measured in education in emergency contexts.

- The purpose of the report is to inform more streamlined measurement of learning outcomes in emergencies.
Key Challenges to Measuring Learning

- The humanitarian sector faces unique challenges in delivering and measuring learning in emergencies:
  - Existing assessment systems are not set up to capture populations on the move or are inadequate in responding to additional strain.
  - Often parallel systems of education exist, which amplifies confusion.
  - National governments, particularly in countries affected by conflict and crisis, are often unable to fulfill the responsibility of collecting data and managing assessment systems.
  - There are some examples of cases where the host country and country of origin do not allow their national curricula to be used with refugee children, e.g. Bangladesh.
  - Children and youth who have been faced with conflict and crisis may face cognitive loads far beyond their peers, which may lead to poor performance on standardized tests.
Methodology

• 30 measurement tools (23 distinct approaches, with a group of 8 citizen-led assessments comprising the remaining tools), 8 guidance documents, and program approaches from 4 organizations used in at least one country affected by conflict or crisis in the past 5 years.

• Three key factors for selection:
  • Coverage
  • Quality
  • Relevance

• Uses a framework and coding scheme created by the UNESCO International Bureau of Education (UNESCO-IBE) and the UNESCO Institute for Statistics (UIS) to map content domains and sub-categories in mathematics and reading to identify commonalities and disparities across content area and coverage in the measurement of academic skills.
Types of M&E Documents

Monitoring and Evaluation (M&E) is designed to monitor the impact of a policy, or progress of program activities, against the overall goals, objectives and targets.

**Guidance Documents**
- Guidance documents are high-level goalposts for the achievement of learning outcomes at the global level, including national and international standards or monitoring and results documents. These documents may include targets and indicators to help guide programming at the international, country, or local-level.
- **Examples**: Sustainable Development Goals (SDG 4), GPE results framework, INEE Minimum Standards, ECW results framework

**Programs**
- Programs are the curricula, activities, lessons, training materials, etc., that include specific instruction in processing, integrating, and selectively applying academic skills in appropriate ways.
- **Examples**: Save the Children’s Literacy and Numeracy Boost, World Vision’s Unlock Literacy, UNRWA’s Education in Emergencies, EDC’s Read Right Now!

**Measurement & Assessment Tools**
- Measurement and assessment tools are standardized research instruments used to measure the presence of, or changes in, academic skills in individuals. Ideally, these skills are clearly specified in the guidance documents that underlie program design.
- **Examples**: surveys/questionnaires, observation checklists/forms, task-based assessments

Source: Harvard EASEL Lab
Conflict or Crisis-Affected Countries Included
2. Measurement tools
Coverage

• Mapping included cross-national (used in more than one country) academic learning assessment tools in 61 countries where EiE is provided. Of the 61 countries, only two—Eritrea and Libya—did not participate in any of the cross-national tools.

• Additional data from UNESCO UIS/IBE covered national assessments.

• Assessment tools selected for coding cover a range of target populations from early childhood to age 18.
Age and Grade Range of Multi-Country Tools

Grades 1-12

Early Childhood

Early Primary

Late Primary

Secondary

Age 3-18

PASEC*

LaNA PilNA

SEAMEC PASEC**

TERCE**

MELQO-Model IDELA MICS-EC

PIRLS TIMSS*

EGA

EGMA

TERCE*

SEA-PLM

TIMSS**

HALDO

CLAs MICS

PISA-D

Inter-agency Network for Education in Emergencies

UNBOUNDED ASSOCIATES
Administration

• Tools designed for children under Grade 3, citizen-led assessments (CLAs), assessments embedded into MICS household surveys, and tools designed specifically for displaced or out of school children are most often delivered orally face-to-face by a trained assessor.
  • These occur in a home, school or community center depending on the tool and purpose.

• Assessments administered in school to older children (e.g. PISA-D, PIRLS, PASEC) are typically paper-based with multiple choice and open response questions.
Information on Context

• All measurement tools included in the mapping collect at least information on characteristics like gender, socio-economic status, language, and education levels of the children.

• Some tools collect information on student learning opportunities outside of school, household characteristics, school characteristics, and village/community facilities.

• PILNA, EGRA, PIRLS, TIMSS, and TERCE often incorporate background questionnaires for parents, teachers, and principals that are administered alongside the learning assessments for children.

• Information about refugee or IDP status is not collected with these tools. Only recently have there been efforts to gain consensus on how to collect statistics on refugees and IDPs, including by UNESCO-UIS, UNHCR and the Education Equity Research Initiative.
Validity and Reliability

• All measurement tools assessed in this study have been designed and piloted to determine some psychometric standards of validity and reliability.

• Transparency of the results and the extent to which validity and reliability have been established varies.

• Three tools – Save the Children’s Holistic Assessment of Learning and Development (HALDO), the UNRWA Monitoring Learning Achievement (MLA), and EDC’s Out-of-School-Youth Literacy Assessment (OLA) – have been validated in an EiE setting.
How Assessment is Applied in EiE Contexts

• **Syria**: War Stressor Survey – measuring exposure to conflict and emotional repercussions of trauma – and the Snapshot of School Management and Effectiveness administered alongside EGRA and EGMA to provide a full picture of primary education in opposition-led areas in Syria.

• **Greece**: Oinofyta Community School, founded in a refugee camp in Central Greece serving Afghan refugee children as a project of the NGO ArmandoAid. Classroom assessments were used as a way of monitoring learning and each child’s behavior and general performance. The information on learning was maintained and utilized to improve the operation of the school and teaching and was shared with donors and other development partners to highlight progress and challenges.
Costs

• There are open source tools that are available online, but there are costs associated with in-country administration.

• Regional assessments as well as a few of the international assessments require countries to pay a participation fee in addition to the costs of administering the assessment in country.

• For international assessments, test administration represents about half of the total cost (largely driven by the cost of field testing and supervision) while institutional costs (driven by personnel costs and fees) accounts for around 25% of total costs.
3. Guidance Documents
## Guidance Documents Reviewed

<table>
<thead>
<tr>
<th>Framework</th>
<th>Agency</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDG 4</td>
<td>UIS is custodian agency for all indicators except 4.2, which is UNICEF</td>
<td>Global</td>
</tr>
<tr>
<td>Education 2030</td>
<td>UNESCO/UIS</td>
<td>Global</td>
</tr>
<tr>
<td>INEE Minimum Standards</td>
<td>INEE</td>
<td>All education in emergencies settings</td>
</tr>
<tr>
<td>Agenda 2063 and Continental Strategy for Education in Africa 2016-2025</td>
<td>African Union</td>
<td>55 African countries (North and Sub-Saharan)</td>
</tr>
<tr>
<td>Reimagining Life Skills and Citizenship Education in the Middle East and North Africa: Conceptual and Programmatic Framework</td>
<td>UNICEF</td>
<td>MENA region</td>
</tr>
<tr>
<td>Pacific Regional Education Framework</td>
<td>Countries of the Pacific Islands Forum</td>
<td>Pacific Island Countries</td>
</tr>
<tr>
<td>Global Partnership for Education (GPE) Results Framework</td>
<td>GPE</td>
<td>72 developing country partners, around half of which are considered fragile or conflict-affected</td>
</tr>
<tr>
<td>Education Cannot Wait (ECW) Results Framework</td>
<td>ECW/UNICEF</td>
<td>19 crisis-affected ECW countries</td>
</tr>
</tbody>
</table>
Sustainable Development Goals

• As agreed in 2015, do not provide common definitions or constructs of minimum proficiencies for what should be measured within reading and mathematics.

• UNESCO Institute for Statistics (UIS), as the custodian of SDG 4, has been tasked with developing standards and guidance for measurement of the indicators.

• In August 2019, the Global Alliance to Monitor Learning (GAML) met to agree upon minimum proficiency standards for reading and numeracy for grades 2-6.

• SDG 4.5 includes data collection and disaggregation on multiple equity indicators, including “conflict-affected”

• Sustainable Development Goals used as a reference point for many regional and organizational guidance documents.
Regional Frameworks

• Regional frameworks often define themselves as a regional extension of the SDGs, owning the sustainable development goals and adapting them to regional aspirations. For example,

  • *Continental Strategy for Education in Africa* uses the same SDG indicators for monitoring progress on learning.

  • *Pacific Regional Education Framework* does not specify targets but outline that the region will maintain alignment with SDG4 and prioritize a coordinated approach to SDG related monitoring.

• In line with the equity goals of SDG4, all frameworks highlight the importance of disaggregating data by gender, socio-economic status, disability, language, context and other indicators of marginalization. However, disaggregating by refugee or IDP status was not included in the global guidance documents reviewed.
Education in Emergencies

• In the EiE sector, the INEE Minimum Standards serve as the main reference point.
  • Referenced in several other frameworks, including *Reimagining Life Skills and Citizenship Education in the Middle East and North Africa: Conceptual and Programmatic Framework* and the *Education Cannot Wait (ECW) Results Framework*
  • INEE Minimum Standards do not recommend, require, or align to specific assessment tools.
4. Program Approaches
Program Approaches Reviewed

Selected four examples from the many program approaches in the world that strengthen learning and equity in conflict-affected settings.

• Save the Children’s Literacy Boost and Numeracy Boost
• World Vision’s Unlock Literacy
• Education Development Center’s Read Right Now!
• UNRWA’s EiE program, which includes the Monitoring Learning Achievement (MLA) tool
Themes Across the Four Approaches

• Programs tend to tweak existing tools to align with their program goals.
• These interventions tend to show evidence of improvements in academic outcomes.
• Academic learning assessments are sometimes supplemented with contextual surveys about the student background and school context.
5. Academic Domain Mapping
Academic Competencies

• To enable comparisons across the different tools, we adopted the framework and coding scheme created by the UNESCO International Bureau of Education and the UNESCO Institute for Statistics to map content domains and sub-categories in literacy and math.

  • Literacy: reading, linguistic and metalinguistic competencies.
    • Writing was added
  • Math: math proficiency, number knowledge, measurement, statistics, geometry, and algebra.
# Literacy Domains Coverage

<table>
<thead>
<tr>
<th>Category</th>
<th>Tools</th>
<th>Reading</th>
<th>Linguistic</th>
<th>Metalinguistic</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>System-monitoring tools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International assessments</td>
<td>PISA-D, TIMSS, PIRLS, LAMA</td>
<td>Blue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional assessments</td>
<td>LLCE, SEACMBQ, PASEC, MLNA, SEA-PLM, URWRA MLA</td>
<td>Blue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household</td>
<td>MICS-EODI, MICS-PLSM</td>
<td>White</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multipurpose tools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foundational skills³</td>
<td>MELQO, EGRA, STAR, Literacy Boost</td>
<td>Blue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizen-led</td>
<td>ASER, UNESCO, LearnNigeria, etc.</td>
<td>Blue</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Designed for EIE contexts</td>
<td>HALDO, IDELA, QUA</td>
<td>Blue</td>
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</tbody>
</table>

Darkest color indicates all tools in the category include sub-domain; Lighter color blue indicates half or more tools in the category include sub-domain; Lightest blue indicates one or a few tools in the category include sub-domain; No color indicates that no tools in the category include sub-domain.
Literacy Domain Coverage

• Reading competency is the most prevalent domain; all tools reviewed include some form of decoding and/or reading comprehension sub-domains.

• Reading and comprehending a simple text are understood as fundamental skills.

• Beginner tasks such as decoding are more frequently found in assessments of early childhood and early grades, while more complex tasks such as reading comprehension are found more frequently in assessments of higher grades.
# Mathematics Domain Coverage

<table>
<thead>
<tr>
<th>Category</th>
<th>Tools</th>
<th>Math Proficiency (e.g., problem-solving, reasoning)</th>
<th>Number Knowledge (incl. operations)</th>
<th>Measurement</th>
<th>Statistics &amp; Probability</th>
<th>Geometry</th>
<th>Algebra</th>
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<tr>
<td>Regional assessments</td>
<td>LLECE, SEACMEQ, PASEC, PILNA, SEA-PILM, URRWA MLA</td>
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<td></td>
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<tr>
<td>Household</td>
<td>MICS-ECIDI, MICS-FLPM</td>
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Mathematics Domain Coverage

• All tools, regardless of their intended use measured number knowledge.

• No tools cover all sub-domains, and tools covering more advanced content – like vectors and probability – are particularly sparse.

• Regional and international assessments (PISA-D, TERE, SEACMEQ, SEA-PLM, TIMSS) have a greater breadth of domains covered than the household surveys, early childhood/early grade assessments, or tools designed for EiE contexts.
6. Summary
Are Children Affected By Conflict and Crisis Included in Assessments of Academic Learning?

- The majority of learning assessments do not gather data on refugee or IDP status.
- Many learning assessments do not construct a sample to ensure inclusion of refugees and IDPs or for conflict- or crisis-affected regions.
- Most learning assessment studies are conducted in schools, with some in homes. Therefore, children affected by conflict and crisis and those who are out of school are unlikely to be included in a study unless they have been resettled in a home and enrolled in a government school.
- Even if children are enrolled in government schools, they are sometimes excluded from an assessment, as in the examples of EGRA, SEACMEQ and PASEC. The protocols for most large-scale assessments require testing in the national languages and excluding conflict zones for the safety of the test administrators.
Conclusions

• Measuring learning in EiE contexts is challenging, as transplanting assessments used in other contexts can result in assessments that are too difficult, not contextually valid, or do not capture contextual factors.

• Guidance documents, measurement tools, and program approaches have the potential to increase equity for children in conflict-affected and fragile contexts, but by and large they do not currently.

• Guidance documents do not provide robust details on which academic domains should be measured, or specifics on how assessment of learning should be contextualized in EiE settings. Of 30 measurement tools examined, only three were developed specifically for EiE contexts.

• There are some common domains across measurement tools, such as number knowledge and operations, decoding, and reading comprehension.
Thank you!

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