Assessments for Minimum Proficiency Levels a and b

GAML November 2023, Maurice Walker
AMP Lab participating countries, 2023

- Zambia
- The Gambia
- Kenya
- India
- Lesotho
The proportion of children…

(a) in grades 2/3;
(b) at the end of primary …

achieving at least a minimum proficiency level in
(i) reading and (ii) mathematics, by sex
Assessment of Minimum Proficiency Level (a) = AMPLa

Assessment of Minimum Proficiency Level (b) = AMPLb

Assessment of Minimum Proficiency Levels (a) & (b) = AMPLab
Develop AMPLa instrument

Implement AMPLa in 2 x end of lower primary populations for reporting against SDG4.1.1a

Implement AMPLb in 3 x end of primary populations for reporting against SDG4.1.1b

Implement AMPLa in 3 x end of primary populations to provide additional information for policy purposes

Develop capacity of participants in large scale assessment methods
## Grade and sample response rate

<table>
<thead>
<tr>
<th>SDG indicator</th>
<th>Target grade</th>
<th>School response rate (%)</th>
<th>Student response rate (%)</th>
<th>Overall response rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gambia</td>
<td>4.1.1(a)</td>
<td>3</td>
<td>100</td>
<td>96</td>
</tr>
<tr>
<td>Kenya</td>
<td>4.1.1(b)</td>
<td>6</td>
<td>100</td>
<td>96</td>
</tr>
<tr>
<td>Lesotho</td>
<td>4.1.1(b)</td>
<td>7</td>
<td>99</td>
<td>98</td>
</tr>
<tr>
<td>Zambia (Grade 4)</td>
<td>4.1.1(a)</td>
<td>4</td>
<td>98</td>
<td>95</td>
</tr>
<tr>
<td>Zambia (Grade 7)</td>
<td>4.1.1(b)</td>
<td>7</td>
<td>97</td>
<td>96</td>
</tr>
</tbody>
</table>
Assessments for Minimum Proficiency Levels

READING COMPREHENSION

- RETRIEVE INFORMATION
- INTERPRET INFORMATION
- REFLECT ON INFORMATION

AMPL-b Reading
Assessments for Minimum Proficiency Levels

NUMBER AND OPERATIONS

MEASUREMENT

GEOMETRY

STATISTICS AND PROBABILITY

ALGEBRA

AMPL-b Mathematics
Assessments for Minimum Proficiency Levels

- **LISTENING COMPREHENSION**
- **DECODING (AUDIO & WRITTEN)**
- **RETRIEVE INFORMATION**
- **INTERPRET & REFLECT ON INFORMATION**
Assessments for Minimum Proficiency Levels

NUMBER AND OPERATIONS

MEASUREMENT & GEOMETRY

STATISTICS, PROBABILITY, ALGEBRA

AMPL-A Mathematics
Setting the MPL standards

AMPLb standard set through MILO

AMPLa standard set through International Standard Setting Exercise

AMPLa standard validated through independent Pairwise Comparison Method workshop
Cognitive results, the Gambia

- Mathematics - The Gambia, Grade 3
  - 26% meet or exceed MPLa
  - 4% meet or exceed MPLb

- Reading - The Gambia, Grade 3
  - 22% meet or exceed MPLa
  - 23% Girls
  - 20% Boys
Cognitive results, Kenya

Mathematics - Kenya, Grade 6
- 87% meet or exceed MPLa
- 37% meet or exceed MPLb

Reading - Kenya, Grade 6
- 78% meet or exceed MPLa
- 26% meet or exceed MPLb
Cognitive results, Lesotho

- Mathematics - Lesotho, Grade 7:
  - 84% meet or exceed MPLa
  - 20% meet or exceed MPLb
  - 23% Girls
  - 17% Boys

- Reading - Lesotho, Grade 7:
  - 62% meet or exceed MPLa
  - 11% meet or exceed MPLb
  - 12% Girls
  - 9% Boys
Cognitive results, Zambia, Grade 4

14% meet or exceed MPLa

13% meet or exceed MPLa
Cognitive results, Zambia, Grade 7

Mathematics - Zambia, Grade 7
- 76% meet or exceed MPLa
- 16% meet or exceed MPLb

Reading - Zambia, Grade 7
- 55% meet or exceed MPLa
- 10% meet or exceed MPLb
- 11% Girls
- 8% Boys
Cognitive results, Zambia, Grades 4 & 7
Summary gender

Mathematics
More girls (23%) than boys (17%) meet MPLb in Lesotho

Reading
More girls (23%) than boys (20%) meet MPLa in The Gambia
More girls (12%) than boys (9%) meet MPLb in Lesotho
More girls (11%) than boys (8%) meet MPLb in Zambia

No other gender differences in target grade levels
Some key findings

More students in the participating populations are reaching MPL in mathematics than in reading.

There is a broad spread of proficiency amongst students within grades.

Girls and boys are achieving similar levels of proficiency in mathematics and reading and when there were differences they favoured girls.
Contextual factors

Students who had a lot of family support had higher proficiency in mathematics and reading.

Students who were from families with higher wealth had higher proficiency in mathematics and reading.
For all countries, between 94 and 96 percent of students indicated the main language spoken at home was not English (the language of assessment).
<table>
<thead>
<tr>
<th>Criterion 1 – is the assessment aligned to the MPL?</th>
<th>Mathematics and reading aligned to GPF &amp; MPL</th>
</tr>
</thead>
</table>
| Criterion 2 – is there evidence that the items in the assessment have been reviewed qualitatively and quantitatively | Professional item development processes  
Item reviews  
Item statistics available |
| Criterion 3 – is the sample of learners that took the assessment representative of the population against which the results will be reporting? | Sample design  
Sample outcomes published |
| Criterion 4 – is there evidence that the assessment was administered in a standardised way? | Technical standards published  
Standardised manuals  
Test administrator training |
| Criterion 5 – are the outcomes of the assessment sufficiently reliable? | PV Reliability  
Mathematics: 0.899  
Reading: 0.907 |
Thank you