Assessments for Minimum Proficiency Levels a and b (AMPL-ab)

Acknowledgments

Background

As part of Sustainable Development Goal (SDG) 4, Indicator 4.1.1 aims to measure the "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." To meet this goal, UIS has coordinated efforts to establish common reading and mathematics scales for all three points of Indicator 4.1.1, building on existing cross-national and national assessments. As a result of these efforts, two important points of consensus have been reached: the definition of the Minimum Proficiency Level (MPL) and the Global Proficiency Framework (GPF).

The overarching objective of the AMPLab project is to measure and analyze the performance of students at the end of lower and upper primary using an assessment that aligns with the GPF. This will:

- enable the collection of more informative data about where students are performing in terms of the MPLs at the end of lower and upper primary in reading and mathematics,

- produce baseline measures to set targets and compare learning gains/losses over time

- facilitate reporting on SDG 4.1.1

- aid the tracking of learning progress over time

- complement tools that had been already developed in 2021 in the Monitoring the Impacts on Learning Outcomes (MILO) study.

The results of this study can be found in the International Report (UIS, 2023). This document provides a summary of the results for The Gambia.

Assessments for Minimum Proficiency Levels a and b (AMPL-ab)

INTERNATIONAL REPORT
January 2024

unesco
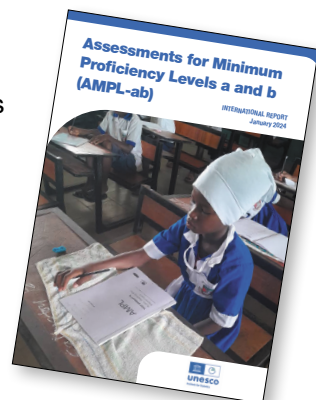
Introduction

In The Gambia AMPL-a was administered to a representative sample of Grade 3 students. There are 6 grades in primary school in The Gambia, with Grade 3 marking the final year of lower primary school. The Gambia sample and response rate can be seen in Table 1.

TABLE 1: Sample of The Gambia Grade 3 population

SCHOOL POPULATION	SCHOOL SAMPLE	SCHOOL RESPONSE RATE (%)	STUDENT POPULATION	STUDENT SAMPLE	STUDENT RESPONSE RATE (%)	OVERALL RESPONSE RATE (%)
710	220	100%	55,506	4,345	96%	96%

Response rates refer to weighted data of sampled and substitute schools.

PERFORMANCE DISTRIBUTION CHARTS

For each country, the distribution of students' mathematics and reading performance is displayed in a 'performance distribution chart'.

The 2 dashed vertical lines in these charts indicate the approximate locations of the MPLa and MPLb benchmarks – providing information about the approximate proportion of students achieving above MPLa and below MPLb (ie., between MPLs).

The vertical axis of these plots indicates the 'density' of student proficiency. The entire shaded area is equal to a total probability of 1. The shaded area sectioned by the MPL vertical lines gives the proportion of the students above and below each benchmark.

Assessment results – The Gambia

In The Gambia, just over a quarter of students met or exceeded MPLa for mathematics, and over a fifth of students for reading, as seen in **Table 2**. A greater proportion of girls achieved the MPLa in reading than boys, with a 3.4 percentage point gap. This is the only statistically significant difference between girls' and boys' proficiency.

TABLE 2: Proportion of Grade 3 students in the Gambia reaching or exceeding MPLa in mathematics and reading

| Domain	PERCENT REACHING OR EXCEEDING MPLA (LOWER PRIMARY)		
	All students	Girls	Boys
Mathematics	25.8	27.0*	24.4*
Reading	21.5	23.1	19.6

Due to rounding to one decimal place, some differences described might not exactly accord with the table.
* The difference between girls and boys is not statistically significant.

A fuller picture of student proficiency in The Gambia can be provided by breaking down these figures according to the proportion of students below MPLa, between MPLa and MPLb and above MPLb. This is illustrated in Figure 8 and Figure 9. Amongst Grade 3 students 74.2% were below MPLa in mathematics, and 78.5% were below MPLa in reading. 22.2% of students achieved between MPLa and MPLb in mathematics, 20.5% in reading. 3.6% of students achieved MPLb in mathematics, and 1% in reading – the standard associated with end of primary school.

The below figures also illustrate the breadth of mathematics and reading performance amongst Grade 3 students in The Gambia. The figures show a similar distribution in reading and mathematics, with most students clustering around the middle of the distribution, which is below MPLa. In both reading and mathematics, there was a broader distribution of students performing above the mean, than below the mean.

**FIGURE 1:** Mathematics performance distribution, The Gambia, Grade 3
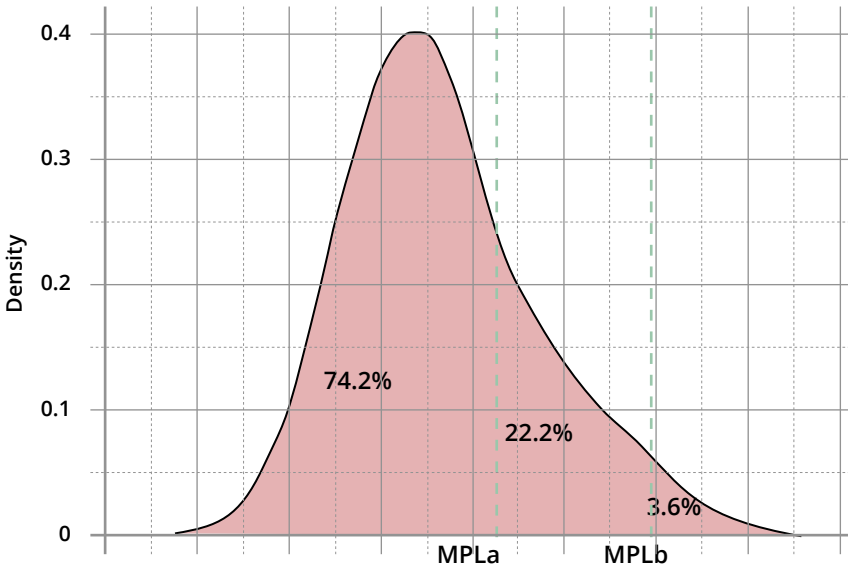
FIGURE 2: Reading performance distribution, The Gambia, Grade 3
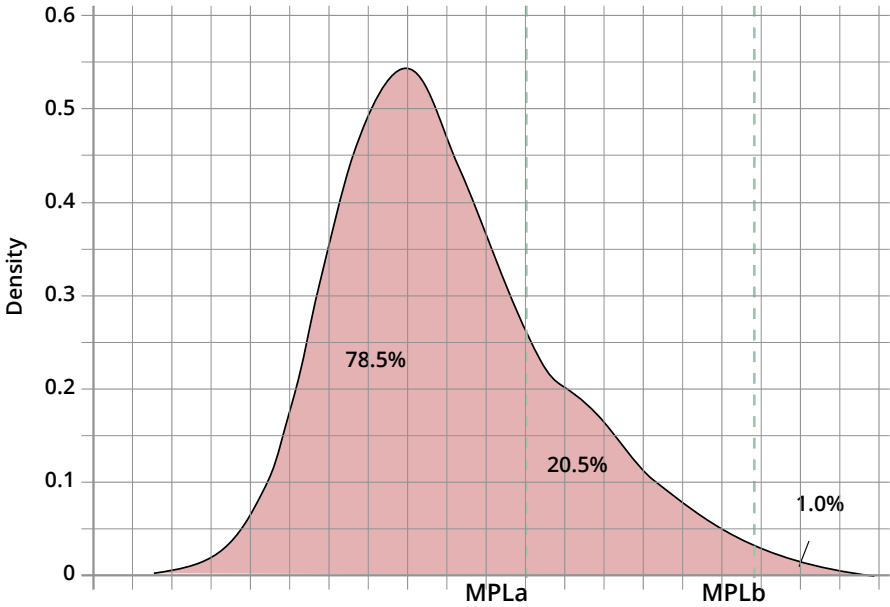
Contextualising the results – The Gambia

The AMPL-ab results for the Gambia can be better understood by recognising the contexts associated with student learning. Effect sizes are used to indicate the strength of a relationship between a contextual indicator and performance. Figure 10 shows that in The Gambia, 'nutrition' had a strong effect on mathematics and reading proficiency. 'Wealth' had a moderate to strong effect. 'Family support' and 'parental literacy' had a moderate effect. Students who indicated they spoke the assessment language at home (i.e. English) demonstrated lower proficiency in mathematics and reading than those students who did not speak English as home. This is counter-intuitive but the fact that those speaking English at home represent only 6% of the population suggests a more detailed examination is needed of the context of these learners.

FIGURE 3: Effect sizes of selected contextual factors on mathematics and reading outcomes – The Gambia
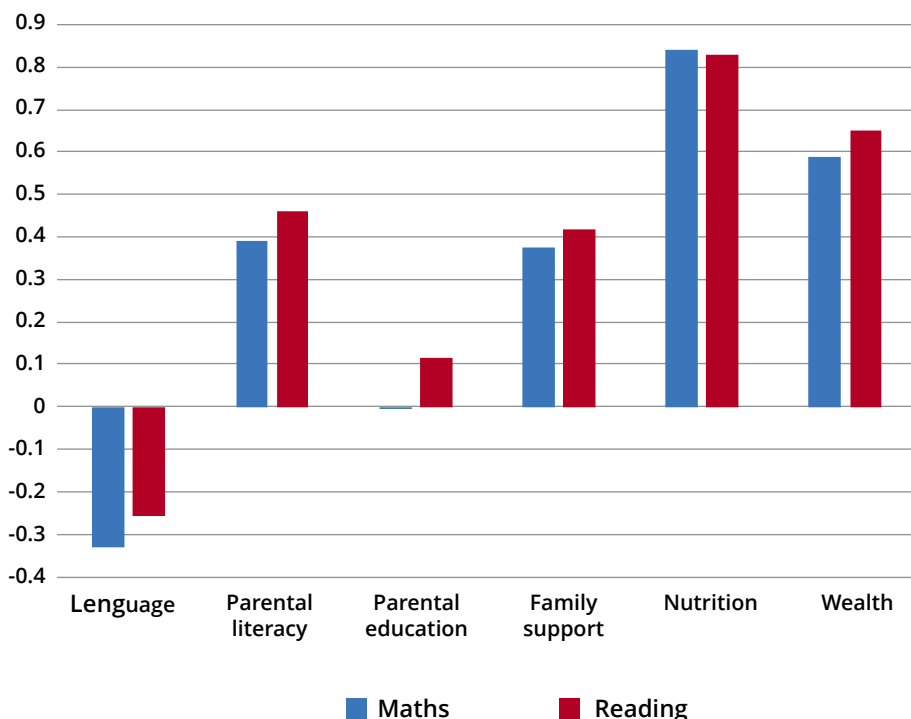
* Language: Students who spoke the assessment language (i.e. English) at home, compared to those who did not speak the assessment language at home.

References

ACER. (2022). Minimum Proficiency Levels: Described, unpacked and illustrated. https://research.acer.edu. au/monitoring_learning/63/

UIS. (2023). *Assessments for Minimum Proficiency Levels 'a' and 'b' (AMPL-ab): International Report*.

UNESCO. (2012). ISCED 2011: *International standard classification of education*. UNESCO Institute of Statistics.

Assessments for Minimum Proficiency Levels a and b (AMPL-ab)

INTERNATIONAL REPORT
January 2024

unesco
Institute for Statistics

ACER