



Madagascar Learning Poverty Brief

Public Disclosure Authorized

Learning Poverty: A World Bank-UNESCO Institute of Statistics (UIS) Indicator to Highlight the Learning Crisis

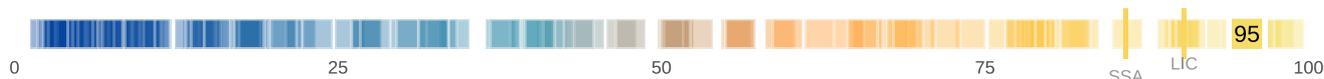
Learning Poverty is unacceptably high. In low- and middle-income countries, [more than half the children cannot read and understand a short age-appropriate text by the end of primary school](#). This learning crisis threatens countries' efforts to build human capital and achieve the Sustainable Development Goals (SDGs), undermining sustainable growth and poverty reduction. It is crucial for countries, with support of development partners including the World Bank, to aim to fully eliminate learning poverty, and make sure that every child can read.

Learning Poverty shows the extent of the learning crisis by focusing on the share of children who don't learn to read with comprehension by age 10. Children who are Learning Poor are not able to reach minimum proficiency in reading, either because of poor quality education or because they don't have access to education at all. Learning Poverty therefore is a summary measure of the outcomes of both the quality of education systems (which we call Learning Deprivation) as well as their accessibility (which we call Schooling Deprivation). Higher rates of learning poverty, learning deprivation, or schooling deprivation indicates that the country is performing worse than comparison groups.

Learning Poverty in Madagascar

Learning Poverty: According to the latest available data (before COVID-19 related school closures), 95 percent of children in Madagascar at late primary age today are not proficient in reading, adjusted for out-of-school children. This is 9 percentage points higher (worse) than the average for Sub-Saharan Africa (SSA) and 5 percentage points higher (worse) than the average for low income (LIC) countries.

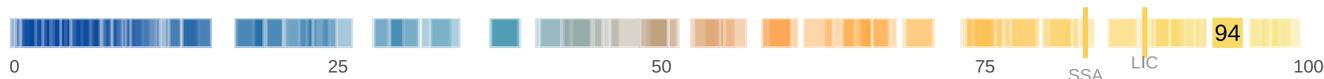
Figure 1a. Learning Poverty and its components



Sources: UIS and World Bank as of April 2024. Notes: (1) Highlighted squares represent country and vertical lines denote its benchmarks. (2) Faded colors represent other countries. Squares are colored by country ranking in the measure. (3) All benchmark comparisons are weighted by population.

Learning Deprivation (LD): In Madagascar, 94 percent of students do not achieve the Minimum Proficiency Level (MPL) at the end of primary school, proxied by data from grade 6 in 2019. This is 11 percentage points higher (worse) than the average for Sub-Saharan Africa (SSA) and 6 percentage points higher (worse) than the average for low income (LIC) countries.

Figure 1b. Learning Deprivation and its components



Sources: UIS and World Bank as of April 2024. Notes: (1) Highlighted squares represent country and vertical lines denote its benchmarks. (2) Faded colors represent other countries. Squares are colored by country ranking in the measure. (3) All benchmark comparisons are weighted by population (4) The LD number for Madagascar is the share of grade 6 students achieving at least level 4 (minimum proficiency level) in Programme for Analysis of Educational Systems (PASEC). This is calculated using the [Global Learning Assessment Database \(GLAD\)](#) harmonization based on PASEC.

Schooling Deprivation (SD): In Madagascar, 24 percent of primary school-aged children are not enrolled in school. Children who are out of school are regarded as being below the minimum proficiency level. This is 2 percentage points higher (worse) than the average for Sub-Saharan Africa (SSA) and 4 percentage points lower (better) than the average for low income (LIC) countries.

Figure 1c. Schooling Deprivation and its components



Sources: UIS and World Bank as of April 2024. Notes: (1) Highlighted squares represent country and vertical lines denote its benchmarks. (2) Faded colors represent other countries. Squares are colored by country ranking in the measure. (3) All benchmark comparisons are weighted by population. (4) SD for Madagascar is calculated using Country Team Validation for primary aged children released by the country for 2018.

Madagascar's Gender Gap

In Madagascar, lack of data prevents comparisons of Learning Poverty for boys and girls. Table 1 shows Learning Poverty and Human Capital Index (HCI) components when available.

Table 1. Sex Disaggregation

	Boys	Girls	All
Learning Poverty (LP), %	—	—	95
Learning Deprivation (LD), %	94.6	92.9	93.7
Schooling Deprivation (SD), %	—	—	24.0
Human Capital Index (HCI)	0.38	0.40	0.39
Learning Adjusted Years of Schooling (LAYS)	4.6	4.8	4.7

Sources: UIS and World Bank for LP, LD, and SD as of April 2024. EdStats/World Development Indicators for [HCI and LAYS](#). The full Learning Poverty database is available for download at [Development Data Hub](#).

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Data to Estimate Learning Poverty and Data Gaps

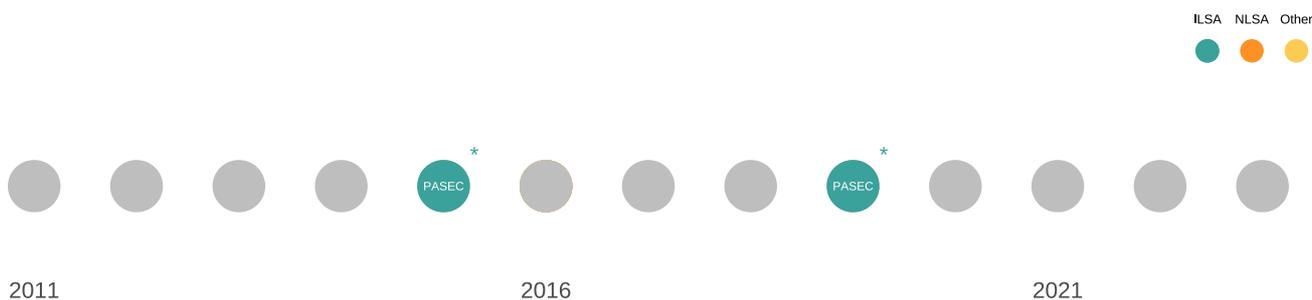
Learning Deprivation: This component of **Learning Poverty** is the share of students not achieving the global Minimum Proficiency Level (MPL) in reading at the end of primary school. It is estimated using data from large-scale learning assessments administered to students at the end of primary school, with a hierarchical preference for (1) international or regional assessments in reading that are mapped to the **Global Proficiency Framework (GPF)** such as PIRLS, ERCE, SEA-PLM, or PASEC, (2) international assessments that are statistically linked to historical regional or national assessments such as UIS's Assessment for Minimum Proficiency Levels (AMPLs), (3) national learning assessments in reading linked (using policy-linking or pairwise comparison) to historical international or regional assessments, and (4) international assessment in a subject other than reading, such as TIMSS science. Country validated learning assessments meeting minimum quality criteria and including valid benchmarks, as opposed to those available in the UIS database, are used on an exceptional basis for interim reporting.

In recent years, Madagascar participated in PASEC (2015, 2019). Madagascar does not administer a National Large-Scale Assessment (NLSA) at the end of primary school.

The data from PASEC 2019 (administered before COVID-19 related school closures) for grade 6 students is used to estimate **Learning Deprivation** for Madagascar presented in this brief.

Assessments of student learning outcomes in Madagascar are led by the Service des Examens within the Ministère de l'Éducation Nationale.

Figure 2. Years of Assessment Participation



Notes: (1) The definition of NLSA does not include National Exams. (2) NLSA stands for any National Learning Assessment. (3) ILSA represents any international or regional large-scale learning assessments, such as PIRLS, TIMSS, LLECE, SEA-PLM, or PASEC. (4) Other represents any other learning assessment initiatives, including AMPLs. (5) Asterisks (*), if any, denote learning assessments that have benchmarks validated for global reporting. NLAs with asterisks completed policy linking.

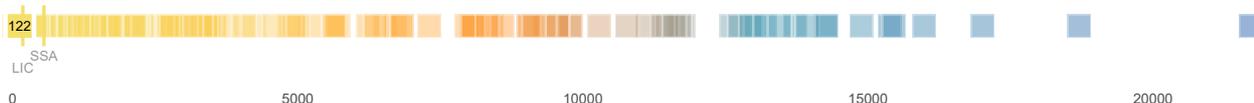
Schooling Deprivation: This component of **Learning Poverty** is the share of primary-school-aged students not enrolled in school. It is estimated using enrollment data (for the year closest to the assessment year) compiled by **UNESCO Institute for Statistics (UIS)**, with a hierarchical preference for (1) Adjusted Net Enrollment Rate (ANER), (2) Total Net Enrollment Rate (TNER), (3) Net Enrollment Rate (NER) and (4) Gross Enrollment Rate (GER) in primary school. Enrollment data relies on population censuses and the countries' administrative records such as the Education Management Information System (EMIS). Country validated enrollment rates or attendance rates from household surveys, as opposed to those available in the UIS database, are used on an exceptional basis for interim reporting.

In the case of Madagascar, enrollment based on household survey data is for 2018 (before COVID-19 related school closures) presented in this brief.

Primary Education Expenditure

Primary education expenditure per child of primary education age in Madagascar is **USD 122 (PPP)**, which is **78 percent below** the average for the Sub-Saharan Africa (SSA) region and **32 percent below** the average for low income (LIC) countries.

Figure 3. Expenditure per child of primary school age (constant PPP\$)



Source: World Bank calculations using UIS as of April 2024. Notes: (1) Primary education expenditure per child is calculated as total expenditure on primary education divided by total number of children of primary school age. (2) In cases where more recent data using government expenditure on primary education as a percent of GDP per capita is available, it will be prioritized over (1), where share of GDP expenditure is multiplied by GDP and divided by the total number of children of primary school aged is used. (3) Data for Madagascar is from 2012, using the reported expenditure on primary education. (4) All benchmark comparisons are weighted by population.



Madagascar Learning Poverty Brief

What is Learning Poverty?

Being **Learning Poor** means being unable to **read and understand a short age-appropriate text by age 10**. All foundational skills are important, but **Learning Poverty** focuses on reading because: (i) reading proficiency is an easily understood measure of learning; (ii) reading is a student's gateway to learning in every other area; and (iii) reading proficiency can serve as a proxy for foundational learning in other subjects. Because reading is a prerequisite for all other types of learning, reading levels can be taken as a barometer of overall education system performance. Inability to read with comprehension constrains learning in all subjects, including in mathematics and science.

The Learning Poverty indicator illustrates progress toward SDG 4's broader goal to ensure inclusive and equitable quality education for all. It particularly highlights progress toward **SDG 4.1.1b**, which includes a target for achieving the minimum proficiency level (MPL) in reading at the end of primary and **SDG 4.1.4**, which includes a target for reducing out-of-school primary-age children.

It is important to note that learning to read with comprehension is hard, and requires a substantial amount of instruction and focused practice. Reading with comprehension is a complex task, for which our brains are not designed. Reading requires us to retrieve information, interpret the information and reflect on that information, all at the same time. Even a simple text needs to be decoded in terms of its structure (including e.g. the recognition of letters, words and sentences) as well as the meaning of texts (which we do through our knowledge of vocabulary and context). We also need to reach a minimum fluency, or speed, for reading to be effective. And while all children at age 10 can be taught to become competent readers, many education systems in low-, middle-income, and even some high-income countries lack the sustained focus to ensure that all children learn to read with comprehension.

How is Learning Poverty Measured?

Reading levels are measured through student assessments, which can be administered by national ministries of education, specialized student assessment agencies or international organizations. At the end of primary education, these assessments should include short texts with multiple questions to assess students' reading comprehension. While these assessments are technically complex to design and administer, there has been a lot of effort from the international community to improve the frequency and comparability of student learning assessments

The indicator combines the share of primary-aged children who are out of school (**Schooling Deprived, SD**), and the share of pupils below minimum reading proficiency (**Learning Deprived, LD**). By combining schooling and learning, it brings into focus both "more schooling", which by itself serves a variety of critical functions, and "better learning", which is important to ensure that time spent in school translates to acquisitions of skills and capabilities.

Learning Poverty: The share of children at the end of primary who are in...

$$LP = SD + [(1-SD) \times LD]$$

Schooling Deprivation:

Out-of-School (SDG 4.1.4), who are implicitly assumed to be below minimum proficiency

Learning Deprivation:

Below minimum proficiency, as defined by the Global Alliance to Monitor Learning (GAML) for SDG 4.1.1b

Comparability of reading proficiency across countries is possible due to harmonization efforts by the **Global Alliance to Monitor Learning (GAML)**, led by the UNESCO Institute of Statistics (UIS) with participation of other development partners (including the World Bank). The Minimum Proficiency Level (MPL) in reading is defined using the **Global Proficiency Framework (GPF)**. The Alliance has developed this Global Proficiency Framework, which sets a global consensus on the minimum skills and competencies that learners should be able to demonstrate at various grade levels. The Global Proficiency Framework is specifically designed to set clear benchmarks against which progress towards the Sustainable Development Goals (SDG) 4.1.1 a, b, and c can be measured. SDG Indicator 4.1.1 is defined as **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.**

The Global Proficiency Framework sets four different proficiency levels: (1) *does not meet minimum proficiency*, (2) *partially meets minimum proficiency*, (3) *meets minimum proficiency*, and (4) *exceeds minimum proficiency*. The share of students that are **Learning Deprived** is the same as the proportion of students who do not achieve the Minimum Proficiency Level (MPL) in reading by the end of primary education (i.e. below level 3). This MPL is formally defined as **"Students independently and fluently read simple, short narrative and expository texts. They locate explicitly-stated information. They interpret and give some explanations about the key ideas in these texts. They provide simple, personal opinions or judgements about the information, events and characters in a text."**

Because achievement of the Minimum Proficiency Level is a global standard, the numbers reported on **Learning Deprivation** sometimes differ from official statistics produced by governments to report on achievement of national standards. Such differences can come about because the same learning assessments can allow for comparison of learning levels against globally agreed standards as well as nationally defined ones. There are various methods to align national learning assessments with global proficiency standards, which includes statistical linking, policy linking, and pairwise comparison.

How is the Indicator Processed?

The methodological approach to calculate **Learning Poverty** and its two components is updated annually in the Learning Poverty technical notes. The notes highlight country-level changes in estimates and underlying data as well as the hierarchy of data selection.

Country level estimates are available both in the **Global Learning Poverty Database** and in the **Learning Poverty Country Briefs** page. The code used to generate these estimates can be replicated by accessing the **GitHub Repository**.

This brief is produced by the World Bank's EduAnalytics team, which aims to provide timely access to high quality education data, tools, and analytics that can be used to measure, monitor, and understand the education sector across regions.



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Coordination Efforts at the Global Level

Despite the wide recognition of the importance of measuring learning outcomes, many countries remain unable to monitor this key indicator of the quality of their education systems because they do not collect regular and reliable measures of learning. This is both a challenge for the countries, who don't know whether their children are on track with meeting global minimal learning goals for children's development, as well as for the global community, who won't know whether the SDG goals are being met.

In the last 4 years, **102 countries have not reported on SDG 4.1.1 a, b, or c**, and **12 reported on only 1 of the SDG 4.1.1s**. These two groups of countries represent 47 and 6 percent of countries globally. In **Sub-Saharan Africa** these same two groups represent **65 and 4 percent** of countries in the region. Madagascar is one of the countries that is considered on track for SDG 4.1.1 reporting since it has reported at least two SDG measurement points in the last 4 years.

Several development partners have recently come together at the global level to ensure better coordination and scale up of quality measurement of learning. In 2021, building on the work of the Global Alliance to Monitor Learning (GAML), the UNESCO Institute of Statistics (UIS), UNICEF, UNESCO, and the World Bank jointly in 2021 founded the Learning Data Compact (LDC). In 2022, following the successful Transforming Education Summit (TES) convened by the UN Secretary General where foundational learning was featured prominently, many countries and organizations have signed the new World Bank-led Commitment to Action on [Foundational Learning](#) and UNICEF, UNESCO, the World Bank, Foreign, Commonwealth & Development Office (FCDO) and the Bill & Melinda Gates Foundation (BMGF) jointly founded the Coalition for Foundational Learning (CFL).

One of the [CFL pillars](#) aims to support countries to monitor learning progress and improve availability of learning data. To do so, partners are committed to (i) collate common tools as a menu of options available to countries to measure and report on learning; (ii) coordinate between agencies to support countries without learning data in rolling out best available resources and tools to measure progress on learning, including through shared training with 'field staff'; (iii) support countries to use data, share and amplify existing information on learning using available resources and tools.

Read More

[2022 Global Learning Poverty Report](#): Regional and global Learning Poverty numbers were last estimated in June 2022. This report stresses that COVID-19-related school closures and other disruptions are likely to have sharply increased Learning Poverty.

[RAPID Framework](#): The global disruptions to schooling caused by the COVID-19 pandemic have been unprecedented in the history of mass education. The framework is a guide to tackle the learning losses caused by the pandemic and build forward better. It is based on five evidence-based policy actions: **Reach** all children; **Assess** learning; **Prioritize** the fundamentals; **Increase** the efficiency of instruction and **Develop** psychosocial health and wellbeing.

[Sustainable Development Goal 4](#): SDG 4 has 10 targets encompassing many different aspects of education. There are seven targets which are expected outcomes and three targets which are means of achieving these targets. [Learning Poverty](#) focuses on SDG 4.1.1b, which targets universal primary and achievement of minimal proficiency levels in reading (and in mathematics) by all students at the end of primary.

[UNESCO Institute for Statistics \(UIS\) Database for SDG 4](#): The data portal contains up-to-date measures for SDG 4 data from 2000 onward. Comparisons are available across countries, years, and regions.

[Framework for SDG 4.1.1](#): This resource compiles various documents related to the conceptual, methodological, and reporting framework for SDG 4.1.1.

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