LEARNING POVERTY: A WORLD BANK-UIS INDICATOR TO HIGHLIGHT THE LEARNING CRISIS

All children should be able to read by age 10. Reading is a gateway for learning as the child progresses through school—and conversely, an inability to read constrains opportunities for further learning. Reading proficiency is also critical for foundational learning in other subjects.

In low- and middle-income countries, more than half the children cannot read and understand a simple story 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.

Tackling the learning crisis in the foreseeable future requires rapid progress at a scale that has not been seen yet. To galvanize action on this crisis, we introduced the concept of Learning Poverty (LP), a measure constructed jointly by the World Bank and the UNESCO Institute for Statistics (UIS).

WHAT IS LEARNING POVERTY?

Learning Poverty means being unable to read and understand a short, age-appropriate text by age 10. All foundational skills are important, but we focus 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.

The Learning Poverty indicator allows us to illustrate progress toward SDG 4’s broader goal to ensure inclusive and equitable quality education for all. It particularly highlights progress towards SDG 4.1.1b, which specifies that all children at the end of primary reach at least a minimum proficiency level (MPL) in reading.

HOW IS LEARNING POVERTY MEASURED?

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

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

where, \( LP \) is Learning Poverty, \( SD \), Learning Deprivation, is share of children at the end of primary below minimum proficiency, as defined by the Global Alliance to Monitor Learning (GAML) in the context of the SDG 4.1.1b monitoring. \( SD \), Schooling Deprivation, is the share of primary-aged children who are out-of-school, and is linked to SDG 4.1.4. All out-of-school children are implicitly assumed to be below minimum proficiency.

The data used to calculate Learning Poverty has been made possible thanks to the work of the Global Alliance to Monitor Learning led by UIS, which established minimum proficiency levels that enable countries to benchmark learning across different cross-national and national assessments.

LEARNING POVERTY IN PANAMA

- **Learning Poverty.** 67 percent of children in Panama at late primary age today are not proficient in reading, adjusted for the out-of-school children.

- **Learning Deprivation.** Large-scale learning assessments of students in Panama indicate that 64 percent do not achieve the MPL at the end of primary school, proxied by data from grade 6 in 2013.

- **Schooling Deprivation.** In Panama, 7 percent of primary school-aged children are not enrolled in school. These children are excluded from learning in school.

For countries with very low Schooling Deprivation, the share of children with Learning Deprivation will be very close to the reported Learning Poverty.

**BENCHMARKING PANAMA’S LEARNING POVERTY**

Learning Poverty in Panama is **15.8 percentage points higher** than the average for the Latin America and Caribbean region and **43.7 percentage points higher** than the average for high income countries.

**Figure 1. Learning Poverty and components**

Source: UIS and World Bank as of May 2021.
Notes: (1) Yellow circle represents Panama; (2) Gray circles represent other countries; and, (3) Vertical lines reflect the averages of Panama’s region and income group.
HOW DOES PANAMA’S GENDER GAP COMPARE GLOBALLY?

As in most countries, Learning Poverty is higher for boys than for girls in Panama.

This result is a composition of two effects. First, the share of out-of-school children is lower for boys (6.7%) than for girls (7.5%).

Second, boys are less likely to achieve minimum proficiency at the end of primary school (67.6%) than girls (61.1%) in Panama.

Table 1 shows sex disaggregation for Learning Poverty and Human Capital Index (HCI) education components whenever available.

Table 1. Sex Disaggregation

<table>
<thead>
<tr>
<th>Indicators and Components</th>
<th>Boys</th>
<th>Girls</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Poverty</td>
<td>69.7</td>
<td>64</td>
<td>66.6</td>
</tr>
<tr>
<td>Learning Deprivation</td>
<td>67.6</td>
<td>61.1</td>
<td>64.1</td>
</tr>
<tr>
<td>Schooling Deprivation</td>
<td>6.7</td>
<td>7.5</td>
<td>7.1</td>
</tr>
<tr>
<td>Human Capital Index</td>
<td>0.49</td>
<td>0.52</td>
<td>0.5</td>
</tr>
<tr>
<td>Learning-Adjusted Years of Schooling</td>
<td>6.4</td>
<td>6.6</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Source: UIS and World Bank for LP, LD and SD as of May 2021; EdStats/WDI (World Development Indicators) for HCI and LAYS (Learning-Adjusted Years of Schooling). The Full Learning Poverty database is available for download at the Development Data Hub.

PRIMARY EDUCATION EXPENDITURE

Primary education expenditure per child of primary education age in Panama is USD 1,526 (PPP), which is 46.3% below the average for the Latin America and Caribbean region and 81.3% below the average for high income countries.

Figure 3. Expenditure per child of primary school age

Source: UIS and World Bank as of May 2021. Note: Primary education expenditure per child is calculated as total expenditure on primary education divided by total number of children of primary school age. Data for Panama is from 2011.

DATA AND DATA GAPS ON LEARNING AND SCHOOLING IN PANAMA

Panama administers a National Large-Scale Assessment (NLSA) at the end of primary school, according to UIS SDG 4.1.1b monitoring. If this NLSA is mapped against the SDG 4 Global Proficiency Framework using policy linking, student linking or item linking, it may be possible to monitor Learning Poverty with it in the future.

Panama participated in the following published cross-national learning assessments in recent years: LLECE (2006, 2013) and PISA (2009, 2018).

Panama has not participated in the World Bank’s LeAP diagnostic exercise to analyze its assessment system. To get started, contact the LeAP team.

The out-of-school adjustment in Learning Poverty relies on enrollment data. Our preferred definition is the adjusted net primary enrollment rate (ANER) as reported by UIS. This data relies both on the population census and EMIS (Education Management Information System). We use enrollment data for the year closest to the assessment year. In the case of Panama, ANER based on EMIS data is for 2013.

Notes: The definition of NLSA does not include National Exams; LeAP: Learning Assessment Platform (LeAP-team@worldbank.org); LLECE: Laboratorio Latinoamericano de Evaluacion de la Calidad de la Educacion. PISA: Programme for International Student Assessment. For questions related to the data in the brief, contact the EduAnalytics team (eduanalytics@worldbank.org).

POINT OF CONTACT

Panama: Monica Yanez-Pagans
Latin America and Caribbean: Maria Jose Vargas Mancera

Disclaimer: The numbers in this brief are based on data harmonization efforts by UIS and the World Bank to increase cross-country comparability of learning data. Therefore, numbers may be different from official statistics reported by governments. Such differences are due to their different purposes, which can be global comparison or meeting national definitions.