



WBG SCORECARD FY24-FY30 METHODOLOGY NOTE

WBG Client Context & Vision Indicators

The purpose of this note is to ensure the rigor, transparency, and reproducibility of the WBG client context and vision indicators included in the new WBG Scorecard FY24-FY30, as well as their alignment with the WBG’s vision. Technical teams were asked to provide a sufficiently detailed methodology so that anyone who reads this note can understand its rationale, theory of change, data sources, and method of calculation.

Definitions included in this template are aligned to the WBG Scorecard paper endorsed by the Board on Dec 19th, 2023. The methods notes are living documents and will be subject to updating and revision pending operational inputs and implementation lessons over time.

OVERVIEW	
INDICATOR NAME	Percentage of children who cannot read by end-of-primary-school age
SUB-INDICATORS	N/A
VISION / CLIENT CONTEXT	<input type="checkbox"/> Vision indicator <input checked="" type="checkbox"/> Client context indicator
OUTCOME AREA	<input type="checkbox"/> Protection for the Poorest <input checked="" type="checkbox"/> No Learning Poverty <input type="checkbox"/> Healthier Lives <input type="checkbox"/> Effective Macroeconomics and Fiscal Management <input type="checkbox"/> Green and blue planet and resilient populations <input type="checkbox"/> Inclusive and equitable water and sanitation services <input type="checkbox"/> Sustainable food systems <input type="checkbox"/> Connected Communities <input type="checkbox"/> Affordable, reliable, and sustainable energy for all <input type="checkbox"/> Digital connectivity <input type="checkbox"/> Digital services <input type="checkbox"/> Gender equality and youth inclusion <input type="checkbox"/> More and Better Jobs <input type="checkbox"/> Better Lives for People in Fragility, Conflict, and Violence <input type="checkbox"/> More private investments
SDG ALIGNMENT	<p>See https://sdgs.un.org/ for further details on SDGs:</p> <input type="checkbox"/> 1. No Poverty <input type="checkbox"/> 10. Reduced Inequalities <input type="checkbox"/> 2. Zero Hunger <input type="checkbox"/> 11. Sustainable Cities and Communities <input type="checkbox"/> 3. Good Health and Well-being <input type="checkbox"/> 12. Responsible Consumption and Production <input checked="" type="checkbox"/> 4. Quality Education <input type="checkbox"/> 13. Climate Action <input type="checkbox"/> 5. Gender Equality <input type="checkbox"/> 14. Life Below Water <input type="checkbox"/> 6. Clean Water and Sanitation <input type="checkbox"/> 15. Life on Land <input type="checkbox"/> 7. Affordable and Clean Energy <input type="checkbox"/> 16. Peace, Justice and Strong Institutions <input type="checkbox"/> 8. Decent Work and Economic Growth <input type="checkbox"/> 17. Partnerships for the Goals <input type="checkbox"/> 9. Industry Innovation and Infrastructure
	List of specific UN targets (if applicable):
UNIT OF MEASURE	<input checked="" type="checkbox"/> Number of people <input type="checkbox"/> Number of countries <input type="checkbox"/> USD <input type="checkbox"/> GW <input type="checkbox"/> Hectares <input type="checkbox"/> tCO2eq/year <input type="checkbox"/> Other: _____ [Please specify]
LEGACY INDICATOR NAME	<input type="checkbox"/> WB Old Scorecard indicator: <input type="checkbox"/> WBG Old Scorecard indicator: <input checked="" type="checkbox"/> N/A
RATIONALE	
DEFINITION	The share of 10-year-olds who cannot read and understand a short passage of age-appropriate material—in other words, those who are below the “minimum proficiency” threshold for reading. This measure is defined as the union of two deprivations: (1) schooling deprivation and (2) learning deprivation. A child is considered schooling-deprived (SD) if he or she is of primary school age and out-of-school. The dimension of learning deprivation (LD) applies only for children in school and

identifies those pupils who are below the minimum proficiency level (MPL) for reading, as defined by the Global Alliance to Monitor Learning (GAML), measured in standard learning assessments, and reported in the context of the United Nations (UN) Sustainable Development Goal (SDG) 4.1.1(b) monitoring. This “union approach” to measurement reflects the choice that all 10-year-old children must be both in school and learning, as reflected in the SDGs.¹ The final learning poverty measure combines the two dimensions in a single indicator using the following formula:

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

DEVELOPMENT RELEVANCE

Ensuring that all students read with comprehension is essential to achieving the ambitious SDG targets and to building human capital. Children need to learn to read so that they can “read to learn:” those who do not become proficient in reading by the end of primary school often cannot catch up later, because the curriculum of every school system assumes that secondary-school students can learn through reading. Reading is a gateway to all types of academic learning. In high-income countries, 90 percent of all children learn to read with comprehension before the end of primary school, and for the highest-performing countries, the figure reaches 97 percent or more. Yet past evidence from many low- and middle-income countries has shown that many children are not learning to read with comprehension in primary school.

The learning poverty indicator illustrates progress toward SDG 4’s broader goal of ensuring inclusive and equitable quality education for all. It particularly highlights progress towards SDG 4.1.1(b) and SDG 4.1.4, which specifies that all children attend primary school and reach at least a minimum proficiency level in reading at the end of primary school. The indicator is also aligned with the World Bank’s Human Capital Project, which aims to ensure that children reach their full potential in school and in life. The ability to read with comprehension is a foundational skill that every education system around the world strives to impart by late primary school—generally by age 10. Moreover, attaining the ambitious SDGs in education requires first to achieve this basic building block, and so does improving countries’ Human Capital Index scores.

The Learning Poverty (LP) metric was launched jointly by the World Bank and UNESCO Institute for Statistics (UIS) in October 2019. This metric highlighted that 53 percent of all children in low- and middle-income countries were not able to read an age-appropriate text with comprehension by age 10 (World Bank 2019). In 2022, the United Nations Children’s Fund (UNICEF), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Kingdom Foreign and Commonwealth Development Office (FCDO), the United States Agency for International Development (USAID), and the Gates Foundation jointly produced “The State of Global Learning Poverty: 2022 Update.” This report presented updated learning poverty estimates and simulations of the impact of school closures related to the COVID-19 pandemic on LP, using these findings to call attention to and spur action on an unprecedented education crisis. The report had three major messages. First, it used new data from multiple assessments to update the global estimates, showing that progress on learning poverty had stalled even before the pandemic, with a slight rise from 53 percent in 2015 to 57 percent in 2019. Second, by creating new simulations based on data on school closures and other variables, it showed that learning poverty may well have risen to 70 percent by 2022—a human capital disaster for this generation of children that could cost them \$21 trillion in lifetime earnings. Third, it laid out responses for learning recovery and acceleration, combined with a program for filling data gaps through the efforts of the Global Alliance to Monitor Learning (GAML).

LIMITATIONS

The construct of “all children reading by age 10” is an ideal that embodies normative statements about both learning and access. To achieve it, not only should all children be reading proficiently after three full years in primary education, but they should also have entered school at the age of six or seven. By contrast, the actual indicators used to measure learning poverty are based on grade rather than age. Since the assessments are of 4th- through 6th-graders, the children tested will

¹ For more information, please see: Azevedo, Joao Pedro; et al. 2021. Will Every Child Be Able to Read by 2030? Defining Learning Poverty and Mapping the Dimensions of the Challenge. Policy Research Working Paper; No. 9588. World Bank, Washington, DC. World Bank. <https://openknowledge.worldbank.org/handle/10986/35300>; <https://www.worldbank.org/en/topic/education/brief/what-is-learning-poverty>; <https://github.com/worldbank/LearningPoverty>

have had at least three to five years in school to reach what, according to the ideal, should be an age-10 minimum proficiency, or even the entire primary-school-age segment for the out-of-school indicator.

Different availability of learning assessment data and school enrollment data within and between countries negatively affects data comparability and poses a significant challenge, both within countries over time and across countries. As a result, global and regional aggregates of the learning poverty indicator are not released on a yearly basis, but only every few years once country coverage with new learning assessment data is sufficiently high.

The learning poverty indicator is based on data covering four-fifths of children at the end of primary school. In other words, a little more than 80 percent of children in low- and middle-income countries live in a country where at least one learning assessment at the end of primary was carried out in the past nine years. For regional and global aggregates, weighted imputations affect regions with less data coverage. The major gaps are concentrated in countries where the learning crisis is most acute. Less than half of children in Sub-Saharan Africa live in a country with a National Large-Scale Learning Assessment (NLSA) or an international or regional large-scale learning assessment (ILSA or RLSA) of adequate quality to be used for this purpose.

This coverage became possible only in recent years, with the progress in measuring learning in countries and the GAML's efforts to establish comparability, which has made possible the construction of a global indicator based on harmonized proficiency levels. Future efforts by coalition organizations are also ensuring more flexible assessment options are available for expanding data availability for countries, such as the Assessment of Minimum Proficiency Levels (AMPL) and policy linking exercises led by UIS.

DATA AND CALCULATION

Data are managed by the World Bank and the UIS. Learning assessments used to calculate Learning Poverty meet the standards for reporting on SDG 4.1.1(b) including a benchmark aligned with the global minimum proficiency level (MPL) and identified using protocols developed by the GAML under the leadership of the UIS and was administered within the reporting window. To operationalize this concept, the current SDG monitoring process is followed by defining “proficiency” as reaching at least the Low International Benchmark on the international PIRLS literacy assessment.

PIRLS is the major global primary-age assessment focused on reading, and if all countries participated in it, the task of constructing global estimates of minimum proficiency would be trivial, as it would simply require the aggregation of results from a single cross-national assessment. However, most countries participating in PIRLS are high-income, and only a small minority of low- and middle-income countries participate. One of the main contributions of the GAML process is that it has overcome this data gap by benchmarking several major cross-national assessments—and increasingly national learning assessments as well—against the standard.

DATA SOURCE(S)

The MPL for each learning assessment is used to calculate the reading proficiency rate for that country (which is the share of students scoring at or above the minimum proficiency level), and conversely to calculate the learning deprivation. The Proficiency and Grade Levels used for each assessment is as follows: PIRLS (grade 4)—Level 2 (Low international benchmark, 400 points); TIMSS (grade 4)—Level 2 (Low international benchmark, 400 points); LLECE (SERCE, grade 6)—Level 3 (513.66 points); PASEC (grades 5 and 6)—Level 4 (595.1 points); SEA-PLM (grade 5)—Level 6 and above; National Learning Assessment (grade 4, 5 and 6)—Varies by country.

When a given country has administered multiple types of learning assessments, a hierarchy is applied in the order listed below to ensure best comparability across countries: International or Regional Learning Assessment for Reading (PIRLS, LLECE, PASEC, SEA-PLM) >> AMPL-b > Policy linked National or other Large-Scale Learning Assessments in reading > TIMSS Science > Non-Linked National or other Large-Scale Learning Assessments (only used for Interim Reporting). Note that as

the GAML and joint coalitions continue their efforts to improve learning data coverage, the hierarchy may be revised.

Schooling Deprivation is derived using enrollment rates computed by UIS using administrative records and follows the SDG 4.1.4 indicator. To ensure country coverage of data, we consider other enrollment definitions to use for learning poverty, if the first-best option is not available.

We construct an enrollment dataset from 1990 to the year of the current release, relying on multiple enrollment definitions. Our dataset is constructed from UIS (UNESCO Institute of Statistics), and other sources suggested by World Bank regional or country education specialists. Data sources are typically from administrative records (school registers, school censuses, or education management information system) for data on enrolment by age, and UNPD population estimates for school-age population (UIS). Enrollment by single years of age in all levels of education and the total primary-school-age population are used to compute enrollment rates.

Until 2023, we followed this hierarchy of enrollment definitions: Adjusted Net Enrollment Rate (ANER) > Total Net Enrollment Rate (TNER) > Net enrollment rate (NER) > Gross Enrollment Rate (GER; if the gross enrollment rate is higher than 100%, it is adjusted to be 100%). UIS stopped releasing ANER in September 2023 therefore the new hierarchy is Total Net Enrollment Rate (TNER) > Adjusted Net Enrollment Rate (ANER) > Net Enrollment Rate (NER) > Gross Enrollment Rate (GER; if the gross enrollment rate is higher than 100%, it is adjusted to be 100%). In some cases, country specialists will provide a data point that reflects enrollment in the country better than UIS statistics; in this case the specialists' data point is used. In future Learning Poverty releases, the enrollment hierarchy may be adjusted as availability of indicator definitions change.

The enrollment year used is the one that best pairs with the assessment year used to compute Learning Deprivation. The year of the preferred assessment is the base. If the same enrollment year is not available, we use a step function to fill the data in with the value of the closest year. If there is data available for two years equally close to the year to fill, the older value is used. This procedure to extrapolate enrollment for missing values is required for us to pair the proficiency measure with enrollment measures from the same year, or its best proxy when enrollment is not available for the same year of the assessment.²

The learning poverty indicator brings together schooling and learning indicators. It starts with the share of children in school who have not achieved minimum reading proficiency (Learning Deprived) and adjusts it by the proportion of children who are out of school (Schooling Deprived). Formally, Learning Poverty is calculated as:

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

LP = Learning poverty; LD = Learning deprivation or the share of children at the end of primary who read at below the minimum proficiency level, as defined by the Global Alliance to Monitor Learning (GAML) in the context of the SDG 4.1.1 monitoring; SD = Schooling deprivation or the share of primary-school-age children who are out-of-school (OOS) and in which all OOS are regarded as being below the minimum proficiency level.

Because out-of-school children are treated as non-proficient in reading, learning poverty will always be higher than the share of children in school who haven't achieved minimum reading proficiency. For countries with a very low schooling deprivation, the learning deprivation value will be very close to Learning Poverty. Estimating the current level of global and regional learning poverty requires deciding how to define "current." We include results of assessments within four years before or after a set anchor year. This decision is driven by data availability. International and regional large-scale learning assessments used for SDG 4.1.1(b) reporting are carried out only every

METHOD OF CALCULATION (CORE)

² The Learning Poverty data are publicly available at World Bank Education Statistics: <https://databank.worldbank.org/source/education-statistics-%5e-all-indicators>, and also via World Development Indicators (WDI) at <http://wdi.worldbank.org/>.

	<p>three to four years. Even where assessments have been carried out recently, there is a lag of a couple of years before the data are available. This band is intended as a moving window. In the original 2019 release, the anchor year used was 2015 (Assessments between 2011 and 2019 are included in the learning poverty estimate). In the 2022 Global Update, the anchor year was moved to 2019 (assessments between 2015 and 2023 are included).</p> <p>Aggregations for each region comprise the average learning poverty of countries with available data, weighted by their population ages 10–14 years old. To obtain a global estimate, we weight the regional aggregations by the 10–14-year-old population regardless of data availability. This is equivalent to imputing missing country data using regional values.³</p>
<p>METHOD OF CALCULATION (DISAGGREGATION)</p>	<p>Learning poverty estimates are disaggregated by sex. The methodology for producing sex-disaggregated learning poverty estimates is the same as for the overall measure combining both sexes. For each sex, the learning poverty estimate is the share of male or female children in school who haven't achieved minimum reading proficiency adjusted by the proportion of male or female children who are out of school.</p>
<p>VERSION</p>	<p>Version 1. Revised March 28, 2024</p>

³ For more information, please see: Azevedo, Joao Pedro; et al. 2021. Will Every Child Be Able to Read by 2030? Defining Learning Poverty and Mapping the Dimensions of the Challenge. Policy Research Working Paper; No. 9588. World Bank, Washington, DC. World Bank. <https://openknowledge.worldbank.org/handle/10986/35300>, <https://www.worldbank.org/en/topic/education/brief/what-is-learning-poverty>; <https://github.com/worldbank/LearningPoverty>.