

Learning Assessment Capacity Index (LACI)

Methodology document

Background

Learning is at the top of the Education 2030 agenda and the focus of five of the seven targets of Sustainable Development Goal 4. A growing number of countries are assessing learning through national, regional and citizen-led initiatives. However, the results are not internationally comparable and therefore cannot be used to monitor progress globally.

To bridge this gap, the UNESCO Institute for Statistics (UIS) is working with partners to build a Global Alliance for Learning to ensure that quality data are used to track progress and formulate policies to improve the learning outcomes of all.

Instead of developing a new assessment, the Alliance will link existing assessments through a common measurement framework. Getting more countries to regularly conduct assessments is one step towards this goal but are they ready?

The implementation of large-scale assessments is very complex and involves a wide range of activities – from planning and fundraising to sampling design and reporting of the resulting data. Each of these phases requires significant human and material resources. According to recent UIS estimates, the infrastructure costs for testing can demand up to US\$4-5 million (UIS, 2016)¹.

In the case of cross-national assessment, resources are needed to ensure country support and continuity in the project. For example, countries are expected to follow precise guidelines to ensure comparability and may also need to provide potential cognitive items and country-specific background questions within the survey while adapting and translating existing instruments. As part of the review process, countries must also ensure test and framework alignment, test specifications, survey items, assessment tasks, data analysis and reports.

A global snapshot of country-level capacity to measure learning

The UIS has developed a new tool, the Learning Assessment Capacity Index (LACI), to gauge the readiness of countries to conduct assessments and produce the data needed to monitor the new global education goal. With this tool, national authorities, donors and the wider development community can better identify and prioritise the specific needs of countries in terms of statistical capacity building.

The index is based on the premise that countries that are already implementing assessments are better prepared to monitor Education 2030. Therefore, it shows the extent to which countries have undertaken large-scale learning assessments in primary and secondary education between 2010 and 2015.

The index provides a clear and accurate perspective on the assessment experience of each country, based on reliable and understandable indicators that can be compared internationally.

¹ UNESCO-UIS (2016): *The cost of not assessing learning outcomes*. Information paper no. 26. Montreal Canada.

How the index is calculated

The index ranges from zero to five, with higher values reflecting greater ‘readiness’ to measure learning outcomes in terms of a country’s human and financial resources. Countries are given one point for meeting each of the following components between 2010 and 2015:

✓ **1: Coverage – primary education**

One point is given for conducting a national assessment at the primary level of education (zero otherwise).

✓ **2. Coverage – secondary education**

One point is given for conducting a national assessment at the secondary level of education (zero otherwise).

✓ **3. Intensity – primary and secondary education**

*One point is given for conducting using national assessments to measure learning at two points of time in both primary **and** secondary levels of education (zero otherwise).*

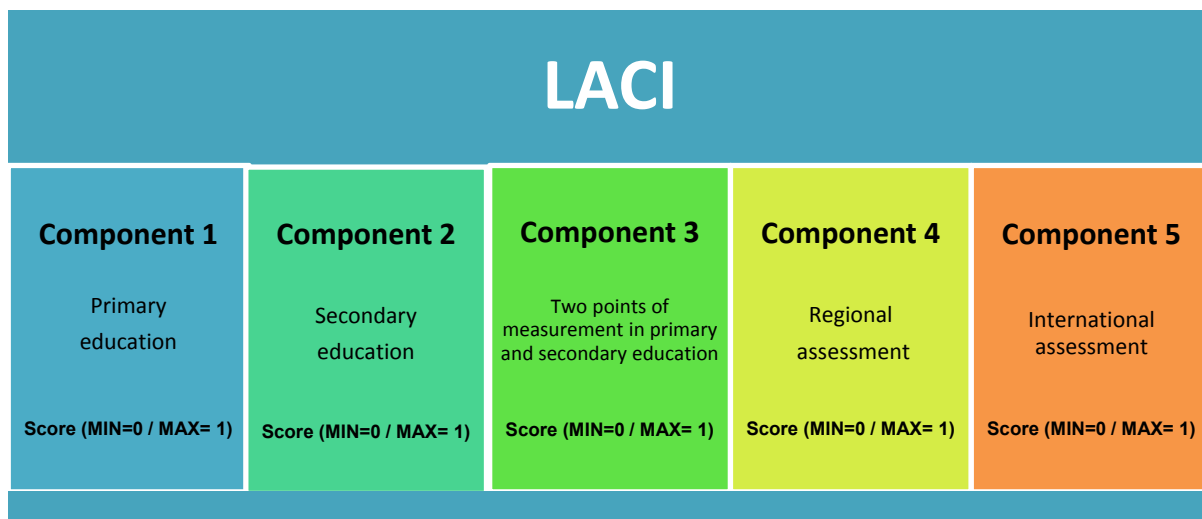
✓ **4. Participation in regional assessments**

One point is given for participating in a regional assessment (zero otherwise).

✓ **5: Participation in international assessments**

One point is given for participating in an international assessment (zero otherwise).

Figure 1. Components of the Learning Assessment Capacity Index



What types of assessments are included?

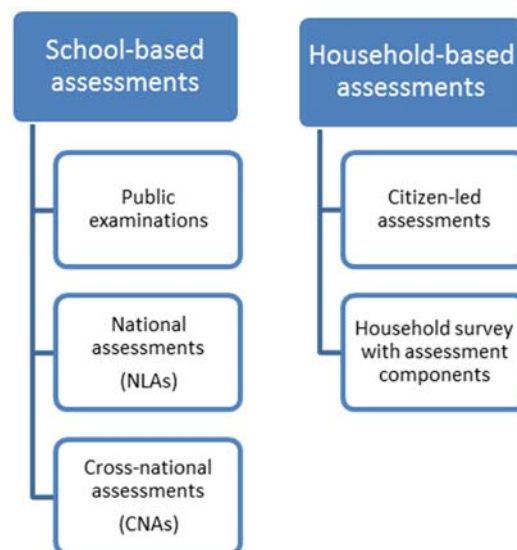
Large-scale assessments can be classified in two categories in terms of population coverage: school-based surveys and household surveys (*see Figure 2*).

There are three types of school-based assessments:

- National assessments designed to measure specific learning outcomes at a particular age or grade that are considered relevant for national policymakers;
- Cross-national initiatives (either regional or international) administered in a number of countries, based on a common agreed framework, following similar procedures yielding comparable data on learning outcomes;
- Public examinations intended to certify specific levels of achievements linked to curricula and often used to select students for continuing education programmes or attainment of a certain cycle.

Household-based learning assessments include citizen-led assessments and any household surveys that include an assessment component in their data collection.

Figure 2. Types of assessments



Source: UNESCO Institute for Statistics (UIS)

It is important to note that LACI does not include household surveys. It is based on national and cross-national school-based assessments administered in primary or secondary education between 2010 and 2015 in more than 200 countries and territories. **Table 1** shows the cross-national learning assessments included in the index. The [UIS Catalogue of Learning Assessments](#) is the source of information for national assessments.

Table 1. Cross-national learning assessments

Scope of assessment	Organization responsible for assessment	Name of assessment	Grade	Area	Year
Regional	Conference of Education Ministers of Francophone Countries across the World	Programme on the Analysis of Education Systems of the CONFEMEN (PASEC)*	2 and 5 or 6	French and mathematics	2014-2015
	Educational Quality and Assessment Programme (EQAP)	Pacific Islands Literacy and Numeracy Assessment (PILNA)	4 and 6	Literacy and numeracy	2012
	Latin American Laboratory for Assessment of the Quality of Education (LLECE)	Terce Estudio Regional Comparativo y Explicativo (TERCE)	3 and 6	Reading, mathematics and science	2013
	Ministries of Education of the Southern and Eastern Africa	Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ)	6	Reading literacy	2012-2014
International	International Association for the Evaluation of Educational Achievement (IEA)	International Computer and Information Literacy Study (ICILS)	8	Computer and information literacy	2013
		Progress in International Reading Literacy Studies (PIRLS)	4 and 6	Reading	2010
		Trend in International Mathematics and Science Studies (TIMSS)	4 and 8	Mathematics and science	2010 and 2015
	Organisation for Economic Co-operation and Development (OECD)	Programme for International Student Assessment (PISA)	15-year-old students regardless of grade	Mathematics, reading and science	2012 and 2015

Note: The index includes 2011 PASEC National Assessments for four countries (Cambodia, Mali, Viet Nam and Indonesia). Although PISA is a regional assessment, it is included as a cross-national initiative in the LACI calculation.

Source: OECD, PASEC, PILNA, SACMEQ and TERCE

How to interpret the index

To help ensure accurate use and interpretation of the index, the tables below present the different scenarios that can lead to a particular score or value.

Table 2. Variables leading to a score of one

Countries	Conducted national assessment in primary education 2010-2015	Conducted national assessment in secondary education 2010-2015	Conducted national assessment for two points of measurement in primary and secondary education 2010-2015	Participated in regional assessment 2010-2015	Participated in international assessment 2010-2015	LACI score
Country A	1	0	0	0	0	1
Country B	0	1	0	0	0	1
Country C	0	0	0	1	0	1
Country D	0	0	0	0	1	1

Table 3. Variables leading to a score of three

Countries	Conducted national assessment in primary education 2010-2015	Conducted national assessment in secondary education 2010-2015	Conducted national assessment for two points of measurement in primary and secondary education 2010-2015	Participated in regional assessment 2010-2015	Participated in international assessment 2010-2015	LACI score
Country A	1	1	1	0	0	3
Country B	1	0	0	1	1	3
Country C	0	1	0	1	1	3
Country D	1	0	0	1	1	1