





SDG 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

METADATA

- Target 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- 4.1.1 Proportion of children and young people (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex

Definition

Percentage of children and young people achieving at least a minimum proficiency level in (i) reading and (ii) mathematics during primary education (Grade 2 or 3), at the end of primary education, and at the end of lower secondary education. The minimum proficiency level will be measured relative to new common reading and mathematics scales currently in development.

Purpose

The indicator aims to measure the percentage of children and young people who have achieved the minimum learning outcomes in reading and mathematics during or at the end of the relevant stages of education.

Calculation method

The number of children and/or young people at the relevant stage of education \mathbf{n} in year \mathbf{t} achieving or exceeding the pre-defined proficiency level in subject \mathbf{s} expressed as a percentage of the number of children and/or young people at stage of education \mathbf{n} , in year \mathbf{t} , in any proficiency level in subject \mathbf{s} .

 $MPL_{t,n,s} = \underline{MP_{t,n,s}}$

 $P_{t,n}$

Where:

 $\mathbf{MP_{t,n,s}}$ = the number of children and young people at stage of education \mathbf{n} , in year \mathbf{t} , who have achieved or exceeded the minimum proficiency level in subject \mathbf{s} .



Indicator 4.1.1 comprises the following six indicators:

- 4.1.1.a (i) Proportion of children and young people in <u>Grade 2 or 3</u> achieving at least a minimum proficiency level in <u>reading</u>, by sex
- 4.1.1.a (ii) Proportion of children and young people in <u>Grade 2 or 3</u> achieving at least a minimum proficiency level in <u>mathematics</u>, by sex
- 4.1.1.b (i) Proportion of children and young people at the <u>end of primary education</u> achieving at least a minimum proficiency level in <u>reading</u>, by sex
- 4.1.1.b (ii) Proportion of children and young people at the <u>end of primary education</u> achieving at least a minimum proficiency level in <u>mathematics</u>, by sex
- 4.1.1.c (i) Proportion of children and young people at the <u>end of lower secondary</u> education achieving at least a minimum proficiency level in <u>reading</u>, by sex
- 4.1.1.c (ii) Proportion of children and young people at the <u>end of lower secondary</u> education achieving at least a minimum proficiency level in <u>mathematics</u>, by sex

Interpretation

Each measurement point by grade and subject has a verbal definition of what children should be able to achieve as a minimum. For each point of measurement, there is a threshold which divides students either above or below a minimum proficiency level. Each of the indicators for Indicator 4.1.1 are interpreted as follows, based on if the student falls above (i) or below (ii) the threshold:

- a. <u>Above the minimum threshold</u>: the proportion or percentage of students who have achieved at least the minimum proficiency level as defined by each assessment.
- b. <u>Below the minimum threshold</u>: the proportion or percentage of students who do not achieve the minimum proficiency level as defined by each assessment.

See **Methodological Challenges** for the minimum proficiency levels by assessments.

Type of data source

For each of the six indicators of 4.1.1 previously listed for global reporting, the sources of data are:

- i. International assessments
- ii. Regional assessments
- iii. National assessments data collected through the Catalogue of Learning Assessments (CLA) and/or available in national reports
- iv. Population-based assessments:
 - a. Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA)
 - b. UNICEF Multiple Indicator Cluster Surveys (MICS)



c. People's Action for Learning (PAL) NETWORK (e.g. Annual Status of Education Report (ASER), UWEZO, etc.)

When the results are not nationally representative, a footnote should be added to the data point.

Methodological challenges

The indicator faces the following methodological challenges:

- i. Define a minimum proficiency level (MPL)
- ii. Harmonize various data sources, including non-official data sources
- iii. Define how to include the out-of-school children in a population and to assess their level of proficiency

i. Define Minimum Proficiency Levels

A minimum proficiency level (MPL) is the benchmark of basic knowledge in a domain (mathematics, reading, etc.) measured through learning assessments. In September 2018, an agreement was reached on a verbal definition of the global MPL of reference for each of the areas and domains of Indicator 4.1.1 as described in the Minimum Proficiency Levels (MPLs): Outcomes of the consensus building meeting.

To ensure comparability across learning assessments, a verbal definition of MPL for each domain and levels between cross-national assessments (CNAs) was established by conducting an analysis of the performance level descriptors (PLDs) of cross-national, regional, and community-led tests in reading and mathematics. The analysis was led and completed by the UIS and a consensus among experts on the proposed methodology was deemed adequate and pragmatic.

The global MPL definitions for the domains of reading and mathematics are presented in the following tables, by grades and for various sources of data (assessments), including: Programme d'analyse des systèmes éducatifs de la confemen (PASEC), Programme for International Student Assessment for Development (PISA-D), Uwezo, Regional Comparative and Explanatory Study (ERCE), Multiple Indicator Cluster Surveys (MICS), Early Grade Reading Assessment (EGRA), Early Grade Mathematics Assessment (EGMA), Annual Status of Education Report (ASER), Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ), Progress in International Reading Literacy Study (PIRLS), Pacific Islands Literacy and Numeracy Assessment (PILNA), and Trends in International Mathematics and Science Study (TIMSS). Tables to guide the alignment for CNA, presented here, are to be used to define the MPLs thresholds for reporting on Indicator 4.1.1.



	MINIMUM PROFI	CIENCY LEVELS FOR READING	
EDUCATIONAL LEVEL	DESCRIPTOR	ASSESSMENT PLD WHICH ALIGNS WITH DESCRIPTOR	MPL ASSESSMENT
Grade 2	They read and comprehend most of written words, particularly familiar ones, and extract explicit information from sentences.	PASEC (Grade 2) – Level 3	Level 3
		PISA-D – Level 1c	Level 2
		Uwezo – Standard 2 (Story with meaning)	Standard 2 (Story with meaning
	Students read aloud written words accurately and fluently.	PASEC 2014 (Grade 2) – Level 4	Level 3
Grade 3	They understand the overall	Third ERCE (Grade 3) – Level 1	Level 2
Graue 5	meaning of sentences and short texts. Students identify the texts' topic.	MICS 6 – Foundational Reading Skills	Foundational Reading Skills
		EGRA – Level 9	Not specified
		ASER – Standard 2 (story)	Standard 2 (story)
	Students interpret and give	SACMEQ 2007 – Level 3	Level 3
Grades 4 &	some explanations about the main and secondary ideas in different types of texts. They	PASEC 2014 (Grade 6) – Level 2	Level 3
6	establish connections between	PIRLS 2011 – Low	Low
	main ideas on a text and their personal experiences as well as general knowledge.	Second ERCE 2006 (Grade 6) – Level 2	Level 1 (from Technical reports)
		PISA 2015 – Level 2	Level 2
	Students establish connections	PILNA 2015 – Level 6	Level 4 (Grade 4) Level 5 (Grade 5)
Grades 8 &	between main ideas on different text types and the	Third ERCE 2014 (Grade 3) – Level 3	Level 2
9	author's intentions. They reflect and draw conclusions based on the text.	PIRLS 2011 or 2016 - Intermediate	Low
		SACMEQ 2007 – Level 6	Level 3
		Third ERCE 2014 (Grade 6) – Level 1	Level 2



	MINIMUM PROFICIEN	CY LEVELS FOR MATHEMATICS	
EDUCATIONAL LEVEL	DESCRIPTOR	ASSESSMENT PLD WHICH ALIGNS WITH DESCRIPTOR	MPL IN ASSESSMENTS
Grades 2-3	Students demonstrate skills in number sense and computation, shape	PASEC 2014 – Level 1 PASEC 2014 – Level 2	Level 2
	recognition and spatial orientation.	Third ERCE 2014 – Level 2	Level 2
		PASEC 2014 – Level 1	Level 2
	Students demonstrate skills in number sense	SACMEQ 2007 – Level 3	Level 3
Grades 4-6	and computation, basic measurement, reading,	SACMEQ 2007 – Level 4	2010.0
Grades 4-0	interpreting, and constructing graphs, spatial orientation, and	PILNA 2015 – Level 6	Level 5
	number patterns.	Third ERCE 2014 – Level 1	Level 2
		TIMSS 2015 – Intermediate International	Intermediate International
Grades 8 & 9	Students demonstrate skills in computation, application problems,	PISA 2015 – Level 2	Level 2
	matching tables and graphs, and making use of algebraic representations.	TIMSS 2015 – Low International	Intermediate International

ii. Harmonize various data sources

To address the challenges posed by the limited capacity of some countries to implement cross-national, regional, and national assessments, actions have been taken by the UIS and its partners. The UIS has proposed some options to link assessments together; one of these strategies is the Rosetta Stone, a subject-based psychometric linking approach (new data collection). The second one is the Policy linking approach, which consists on setting benchmarks, or cut scores, on learning assignments to align them with other assessments across countries or contexts (alignment with existing data).



The objective of the <u>Rosetta Stone</u> is to link together assessments, which have been administered in the recent past, to build concordance tables to compare their outcomes and benchmark national results to those of the regional assessments. This method enables countries to measure Sustainable Development Goal (SDG) 4 Indicator 4.1.1.

The **Policy linking** method makes use of a standard-setting methodology (the Angoff approach for those familiar with standard setting methodologies), long used in many countries, to set benchmarks (also known as "cut scores" or "thresholds") on learning assessments. While it is an old standard-setting methodology, the UIS and its partners have now extended its use to help countries set benchmarks using the <u>Global Proficiency Framework</u> (GPF), a framework developed by multilateral donors and partners based on current national content and assessment frameworks across more than 100 countries. The GPF provides performance expectations/standards for learners in Grades 2-6 in reading and mathematics. By linking their national assessments to the GPF, countries and donors are able to compare learning outcomes across language groups in countries as well as across countries and over time, assuming all new assessments are subsequently linked to the GPF. Policy linking allows countries to use their existing national assessments or early grade reading and mathematics assessments to report against Indicator 4.1.1.

National learning assessments

It is possible for countries to report on Indicator 4.1.1 using national learning assessments (NLA), providing the following principles apply:

- a. NLA uses Item response theory (IRT);
- b. Results from NLA are available as the percentage of students by proficiency levels;
- c. Proficiency level descriptors are aligned to the global minimum proficiency level;
- d. The content of NLA sufficiently covers the Global Content Framework (GCF) in the relevant domain, either <u>reading</u> and/or <u>mathematics</u>. The <u>Content Alignment Tool</u> (CAT) allows to map the content of NLA to the GCF.¹
- e. The NLA complies with the minimum level of good practices, based on an evaluation using the <u>Procedural Alignment Tool</u> (PAT) (the PAT is also available <u>online</u>). The PAT allows countries to assess the national level of compliance with a set of good practices and, most importantly, evaluate if a minimum level is reached.²

¹ The CAT includes <u>questionnaire</u> which allows respondents to determine the level of alignment of their NLA with the GCF in reading and mathematics. The exercise can be completed with guidance from the <u>reference document</u>, and with support from the UIS.

² The PAT requires respondents to answer a series of questions on their implementation of NLA based on five major groupings (capacity and technical standards, instrument development, linguistic control, sampling, and data control, analysis and reporting). Upon completion of the questionnaire, a report is produced (PAT Report).



f. Footnotes are added to the data points (e.g. name of the national assessment, minimum proficiency level, and grade)

iii. Out-of-school children

In 2016, 263 million children, adolescents and youth were out of school, representing nearly one-fifth of the global population of this age group. 63 million, or 24% of the total, are children of primary school age (typically 6 to 11 years old); 61 million, or 23% of the total, are adolescents of lower secondary school age (typically 12 to 14 years old); and 139 million, or 53% of the total, are youth of upper secondary school age (about 15 to 17 years old). Not all these kids will be permanently outside school, some will re-join the educational system and, eventually, complete late, while some of them will enter late. The quantity varies per country and region and demands some adjustment in the estimate of Indicator 4.1.1. One pending methodological discussion is how to adjust to reflect all the population. In 2017, the UIS proposed to make adjustments using the out-of-school children (OOSC)³ and the completion rates.

Protocol for reporting Indicator 4.1.1

In reporting on Indicator 4.1.1, questions may arise in relation to:

- how to map assessments to measurement points of the indicator (grade 2 or 3, end of primary, end of lower secondary);
- ii. the selection of domains for reporting on reading and mathematics, based on those included in a given assessment; and
- iii. the selection of the source of data.

Protocols are given to address these challenges.

i. Mapping of grade to measurement point

- 1. Grade 2 or 3: Plus one year when primary lasts more than 4 years according to ISCED⁴ levels in the country
- 2. End of primary: Plus or minus one year from the last year of primary according to ISCED level mapping in the country
- 3. End of lower secondary: Plus two or minus one of last year of lower secondary according to ISCED level mapping in the country

³ UIS (2017a). More than one-half of children and adolescents are not learning worldwide. Montreal and UIS (2017b). Counting the number of children not learning: Methodology for a global composite indicator for education. Montreal.

⁴ ISCED: International Standard Classification of Education



ii. Mapping of domains to reading or mathematics

- 1. Reading:
 - a. When a country has no assessment in reading, alternative domains like language or writing should be used.
 - b. When results are available in different languages, the official or most relevant language in the country should be used.
- 2. Mathematics: alternative domains can also be considered and used for reporting.

	Protocol for reporting on Indicator 4.1.1						
Measurement	Туре о	f assessm	ent				
point	School-base	ed Population-		Which grade to select			
	Cross-national	National	based				
Grade 2 or 3	LLECE PASEC TIMSS PIRLS	Yes	MICS 6 EGRA EGMA PAL Network	Plus one year when primary lasts more than 4 years according to ISCED levels in the country			
End of primary	LLECE PASEC SACMEQ PILNA SEAMEO TIMSS PIRLS	Yes	PAL Network	Plus or minus one year of last year of primary according to ISCED levels in the country			
End of lower secondary	TIMSS PISA PISA-D	Yes	Young Lives	Plus two or minus one of last year of lower secondary according to ISCED levels in the country			
Definition of mini release	Definition of minimum level until 2018 release			assessment by point of nain			
Definition of mini	9 to Moni	According to alignment as adopted by Global Alliance to Monitoring Learning (<u>GAML</u>) and Technical Cooperation Group (<u>TCG</u>)					
Grade for end of lower secondary	As defin	As defined by the ISCED levels in each country					
Validation		Sent by	Sent by the UIS for countries' approval				



Notes: *TIMSS/PIRLS Grade 4: these results are allocated to the end of primary when, according to the ISCED levels in a given country, there are 4 grades in primary. When primary has more than 4 grades, they are allocated to Grade 2 or 3. ** The UIS advises to complement this indicator with out-of-school children indicators.

<u>LLECE</u>: El Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación

PILNA: Pacific Islands Literacy and Numeracy Assessment

PISA: Programme for International Student Assessment

<u>SEAMEO</u>: Southeast Asian Ministers of Education Organization

Source: UIS.

iii. Decision tree for sources of data

In the selection of the source of data to use for reporting, the assessment which maps the best to the grade should always be the preferred choice of source of data. Until the equating across assessments is complete, cross-national assessments for which data has been collected within the window of reporting should be the second preferred choice, as it allows comparisons with other countries. A national assessment should be selected only if no alternative program for reporting is available within the window of time for reporting.

In the situation where a country has different sources of data available for reporting for a given year and multiple levels, for instance ERCE for Grade 2 or 3, and PISA or TIMSS for the end of lower secondary, only one level (and domain) should be used.

A concrete example illustrates the selection process: Honduras has learning assessments data for Indicator 4.1.1.a (reading) for different years (2011, 2013, 2016). These data have been generated from national, regional, and international learning assessment programs:

YEAR	Source of data	GRADE
2011	PIRLS 2011	4
2013	ERCE 2013	3
2016	National Learning Assessment (NLA)	3

In this example, the assessment program to use for reporting on Indicator 4.1.1.a (reading) for Honduras should be ERCE 2013. The alternative of PIRLS for 2011 was completed for Grade 4, which is one grade above the intended grade of the indicator to measure (either Grade 2 or 3). ERCE 2013 and the NLA of 2016 both assess Grade 3 students could appear as are better options than PIRLS 2011. However, ERCE, a regional assessment, prevails over Honduras NLA, as according to the priority of data sources indicated above and since it



facilitates comparisons between different countries which have implemented a same assessment.

Until the process of equating international, regional and national assessments is complete, it is important to use only one source of information so progress can be tracked on a comparable basis.

The following table illustrates the priorities in the selection of data sources.

Assessment	Source of data	Alignment to the Global MPL	Priority for reporting by education level	Footnotes to include when reporting
International assessments (PISA, PISA-D, TIMSS, PIRLS)	Yes	*According to Consensus Meeting	1	[Assessment name and year]
Regional assessments (LLECE, PASEC, SACMEQ, PILNA)	Yes	*According to Consensus Meeting	2	[Assessment name and year]
National learning assessments (NLA)	Yes	Alignment should be suggested and validated prior to use for reporting	3	"National Learning Assessment (NLA):" [assessment name] & "; Grade " [grade number] & "; Minimum proficiency level: " [name or number of the MPL used for reporting]
EGRA and EGMA	Yes	*According to Consensus Meeting	4	[Assessment name and year]
MICS	Yes	*According to Consensus Meeting	4	[Assessment name and year]
PAL NETWORK (ASER, UWEZO, etc.)	Yes	*According to Consensus Meeting	4	[Assessment name and year]

^{*} See Minimum Proficiency Levels (MPLs): Outcomes of the consensus building meeting

Source: UNESCO Institute for Statistics (UIS)

iv. Metadata points

Footnotes are added to data points (e.g. name of the assessment, minimum proficiency level, and grade)



Disaggregation:

Indicators are published disaggregated by age or age-group, sex, location, socio-economic status, immigrant status, ethnicity, and language of the test at home. Parity indexes are estimated in the reporting of Indicator 4.5.1. Information on the disaggregation of variable for Indicator 4.1.1 are presented in the following tables.



Sex or Gender	r					
Assessment	Definition	Metrics	Categories	Item and component description	Parity index (API)	Relevant link
PISA	Sex of students	Nominal	2	Are you female or male?	Female Male	https://www.oecd.org/pi sa/data/CY6_QST_MS_ST Q_CBA_Final.pdf
PIRLS TIMSS	Sex of students	Nominal	2	Are you a girl or a boy?	Girls Boys	https://timssandpirls.bc. edu/timss2015/question naires/downloads/T15_S tuQ_4.pdfhttps://timssa ndpirls.bc.edu/pirls2016 /questionnaires/downlo ads/P16_StuQ.pdf
LLECE	Sex of students	Nominal	2	Usted es niño o niña?	Niña Niño	https://unesdoc.unesco. org/ark:/48223/pf00002 43533
PASEC	Sex of students	Nominal	2	Are you a girl or a boy?	Fille Garçon	http://www.pasec.confe men.org/wp- content/uploads/2016/0 3/PASEC_2014_CADRE_R EFERENCE_QUESTIONNA IRE_VF.pdf
SACMEQ	Sex of students	Nominal	2	What is your sex?	Female Male	http://www.sacmeq.org/ sites/default/files/sacme q/training- modules/sacmeq- training-module-8.pdf
PILNA EGRA EGMA, MICS	Sex of students	Nominal	2	Are you a girl or a boy?	Girls Boys	



Location						
Assessment	Definition	Metrics	Categories	Item and component description	Parity index (API)	Relevant link
PILRS TIMSS	School location declared by the principal	Nominal	5	Which best describes the immediate area in which your school is located? Urban-Densely populated, Suburban-on fringe or outskirts of urban area, Medium size city or large town, Small town or village, remote rural	Remote rural Urban Densely populated	https://timssandpirls.b c.edu/pirls2016/questi onnaires/downloads/P 16_SchQ.pdf http://timssandpirls.bc. edu/timss2015/questio nnaires/downloads/T1 5_SchQ_4.pdf
PISA	School location declared by the principal	Nominal	5	Which of the following definitions best describes the community in which your school is located? A village, hamlet or rural area (fewer than 3.000 people), A small town (3.000 to about 15.000 people), A town (15.000 to about 100.000 people); A city (100.000 to about 1.000.000 people); A large city (over 1.000.000 people)	Rural area City	https://www.oecd.org/ pisa/data/2018databas e/CY7_201710_QST_MS _SCQ_NoNotes_final.pd f
PASEC	School location declared by the principal	Nominal	4	Votre école est située dans.? Une ville, Une banlieue de grande ville, Un grand village (plusieurs centaines de concessions), Un petit village (plusieurs dizaines de concessions)	Un petit village Une ville	http://www.pasec.conf emen.org/wp- content/uploads/2016/ 03/PASEC_2014_CADRE _REFERENCE_QUESTIO NNAIRE_VF.pdf



Location						
Assessment	Definition	Metrics	Categories	Item and component description	Parity index (API)	Relevant link
LLECE	School location declared by the principal	Nominal	5	Su escuela se encuentra en una localidad de: 2.000 habitantes o menos, Entre 2.001 y 5.000 habitantes, entre 5.001 y 10.000 habitantes, entre 10.001 y 100.000 habitantes, más de 100.000 habitantes	Rural/urban	https://unesdoc.unesc o.org/ark:/48223/pf000 0243533
SACMEQ	School location declared by the principal	Nominal	5	Which of the following best describes the location of your school? Isolated, Rural, In or near a small town, in or near a large town or city	Rural/Urban (city)	http://www.sacmeq.or g/sites/default/files/sac meq/training- modules/sacmeq- training-module-8.pdf; http://www.sacmeq.or g/sites/default/files/sac meq/reports/sacmeq- iii/working- documents/wd01_sac meq_iii_results_pupil_a chievement.pdf
EGMA EGRA	School location declared by the principal	Nominal	2	Is this considered an urban or a rural school? Urban, Rural		



Assessment	Definition	Metrics	Categories	Item and component description	Parity index (API)	Relevant link
PISA	Index of Economic, Social and Cultural Status (ESCS) In PISA, a student's socio-economic status is estimated by the PISA index of economic, social and cultural status (ESCS), which is derived from several variables related to students' family background: parents' education, parents' occupations, a number of home possessions that can be taken as proxies for material wealth, and the number of books and other educational resources available in the home.	Quartiles	Bottom quarter, Second quarter, Third quarter Top quarter	The ESCS is a composite score built by three components: the indicators parental education in years (PARED), Highest parental occupational status (HISEI), and home possessions (HOMEPOS) via a proxy measure for family wealth that includes (25 items): availability of country-specific household for example, such as a subscription to a daily newspaper, an MP3 player, Internet connection at home, the number of books at home, a computer or specific educational software.	Bottom quarter, Top quarter	Technical report PISA 2015 - Chapter 16: https://www.oecd.org/p sa/data/2015-technical- report/PISA2015_TechR ep_Final.pdf Pisa Result 2018, volume II Chapter 2: http://www.oecd.org/pu blications/pisa-2018- results-volume-ii- b5fd1b8f-en.htm



Assessment	Definition	Metrics	Categories	Item and component description	Parity index (API)	Relevant link
LLECE	Indice de nivel socioeconómico de los estudiantes INSE is constructed from the information of the complementary questionnaires of parents or guardians. INSE is composed of the variables related to the mother's educational and work history, household income, housing goods and services, and the amount of books available.	Quartiles	Low quarter, Second quarter, Third quarter, High quarter	¿Cuál es el nivel educativo más alto que la madre del estudiante ha completado? Si la madre trabaja, señale aquella labor que más se parezca al trabajo que generalmente realiza; En un mes normal, ¿en cuál de los siguientes rangos se encuentra actualmente el ingreso total líquido del hogar donde vive el niño? ¿De qué material es la mayor parte de los pisos de su vivienda? ¿Cuenta con alguno de los siguientes servicios en su hogar? ¿Cuántos de los siguientes bienes tiene en su hogar? ¿Cuántos libros hay en la casa del niño? Considere todos los tipos de libro: poesía, novelas, diccionarios, libros de estudio, etc.	Low quarter/High quarter	Informe de resultados TERCE: Factores asociados. See: https://unesdoc.unesc org/ark:/48223/pf0000 43533



Socio-Econom	nic Status					
Assessment	Definition	Metrics	Categories	Item and component description	Parity index (API)	Relevant link
PASEC	Capital socioéconomique et culturel des familles L'Indice Capital socioéconomique et culturel des familles est construit à partir des réponses du questionnaire complémentaire détenu aux étudiants (résultats non disponibles)	Quintiles	1 quintile 2 quintile 3 quintile 4 quintile 5 quintile	Variables: Possession de biens matériels, caractéristiques de l'habitation, alphabétisme de la famille, utilisation de la langue d'enseignement et de(s) langue(s) de socialisation, indice socioéconomique	1 quintile/5 quintile	Cadre de référence des questionnaires contextuels, Voir: https://www.pasec.conf emen.org/wp-content/uploads/2016/0 3/PASEC_2014_CADRE_R EFERENCE_QUESTIONN AIRE_VF.pdf; Rapport PASEC 2014, voir: https://www.confemen.org/wp-content/uploads/2019/0 5/RapportPasec2014_FR_BD1.pdf
SAQMEC	Index of the Socioeconomic Status (SES) of pupils The SACMEQ Index of the socioeconomic status (SES) of pupils is derived from five elements that define the pupils' family environment	Quartiles	Low SES (25%) High SES (75%)	Components: - the level of education of the father and mother, - the number of books in the home, - the presence of eleven items in the home (a newspaper, a magazine, a radio, a television, a VCR, an audio cassette player, a telephone, a refrigerator, a car, running water and a table), - the structural quality of the house (floor, outside walls and roof), - the main source of light, determining whether	Bottom quarter Top quarter	See: http://www.sacmeq.org/ sites/default/files/sacme q/reports/sacmeq- iii/working- documents/wd01_sacm eq_iii_results_pupil_achi evement.pdf; http://www.sacmeq.org/ sites/default/files/sacme q/research/Papers%20fr om%20the%202005%20 International%20Invitati onal%20Educational%2 0Policy%20Research%2

4.1. 1	1 Proportion of children and young people (a) in Grade 2 or 3; (b) at the end of primary education;
	and (c) at the end of lower secondary education achieving at least a minimum proficiency level in
	(i) reading and (ii) mathematics, by sex



	or not pupils can read.	0Conference/dolata.pdf



Immigration Status						
Assessment	Definition	Metrics	Categories	ltem and component description	Parity index (API)	Relevant link
PIRLS TIMSS	Status declared by Students	Nominal	Country specific	1. Were you born (country)? 2. Was your child born in (country of test)? If, No, how old was your child when he/she came to (country od test) Younger than 3 years old, 3 to 5 years old, 6 to 7 years old, 8 years old or older.	No Yes (native born)	http://timssandpirls.bc .edu/timss2015/questi onnaires/downloads/T 15_StuQ_IntSc_8.pdf
PISA	Status declared by Students	Nominal	Country specific	In what country were you and your parents born? You, Mother and Father	Immigrant Non- immigrant	https://www.oecd.org/ pisa/data/2018databas e/CY7_201710_QST_MS _STQ_NoNotes_final.p df
ERCE	Status declared by Students	Nominal	Country specific	¿Naciste en este país? Si no naciste en este país ¿ qué edad tenías cuando llegaste?	Migrante No migrante	https://unesdoc.unesc o.org/ark:/48223/pf00 00243533
PIACC	Status declared by respondents	Nominal	Country specific	Were you born in (country) in what country were you born? At what age or in which year did you first immigrant to (country)?	Foreign- born/Native- born	https://www.oecd.org/ skills/piaac/publication s/PIAAC_Technical_Rep ort_2019.pdf
PASEC	Le statut est directement reporté par les élèves avec l'appui de l'enquêteur	Nominal	Country specific	Were you born in (country) in what country were you born?	No Yes (native born)	http://www.pasec.conf emen.org/wp- content/uploads/2016/ 03/PASEC_2014_CADR E_REFERENCE_QUESTI ONNAIRE_VF.pdf



Language of t	Language of test at home						
Assessment	Definition	Metrics	Categories	Item and component description	Parity index (API)	Relevant link	
EGMA EGRA	The main language is declared by the student	Nominal	Country specific	Do you speak the same language at home as you speak at school?			
PASEC	The main language is declared by the student	Nominal	Country specific	Quelle langue parles-tu chez toi?		http://www.pasec.confemen.o rg/wp- content/uploads/2016/03/PAS EC_2014_CADRE_REFERENCE_ QUESTIONNAIRE_VF.pdf	
PISA	The main language is declared by the student	Nominal	Country specific	What language do you speak at home of the time?	Students who speak mainly another language at home / Students who speak mainly the test language at home	https://www.oecd.org/pisa/da ta/2018database/CY7_201710 _QST_MS_STQ_NoNotes_final. pdf	
SACMEQ	The main language is declared by the student	Nominal	2	Do you speak English outside school? Yes/No		http://www.sacmeq.org/sites/ default/files/sacmeq/training- modules/sacmeq-training- module-8.pdf	
LLECE	The main language is declared by the student	Nominal	4	En tu casa ¿qué idioma hablan la mayor parte del tiempo? Castellano o portugués, lengua extranjera, lengua indígena, otra lengua	Habla lengua de la evaluación No habla lengua de la evaluación	https://unesdoc.unesco.org/a rk:/48223/pf0000243533	

Limitations and comments

Learning outcomes from cross-national learning assessment are directly comparable for all countries which participated in the same cross-national learning assessments. However, these outcomes are not comparable across different cross-national learning assessments or with national learning assessments. A level of comparability of learning outcomes across assessments could be achieved by using different methodologies, each with varying standard errors. The period of 2020-2021 will shed light on the standard errors' size for these methodologies.

The comparability of learning outcomes over time has additional complications, which require, ideally, to design and implement a set of comparable items as anchors in advance. Methodological developments are underway to address comparability of assessments outcomes over time.

Acronyms

CAT Content Alignment Tool

CLA Catalogue of Learning Assessments

CNA Cross-national assessments

GAML Global Alliance to Monitoring Learning

GCF Global Content Framework
GPF Global Proficiency Framework

IRT Item response theory

ISCED International Standard Classification of Education

MPL Minimum proficiency level
PAT Procedural Alignment Tool
PLD Performance level descriptors
SDG Sustainable Development Goal
TCG Technical Cooperation Group

Assessments

ASER Annual Status of Education Report
EGRA Early Grade Reading Assessment
EGMA Early Grade Mathematics Assessment

ERCE Regional Comparative and Explanatory Study

LLECE El Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación

MICS Multiple Indicator Cluster Surveys
PAL Network People's Action for Learning Network

PASEC Programme d'analyse des systèmes éducatifs de la confemen

Place Programme for the International Assessment of Adult Competencies

PILNA Pacific Islands Literacy and Numeracy Assessment
PIRLS Progress in International Reading Literacy Study
PISA Programme for International Student Assessment

<u>PISA-D</u> Programme for International Student Assessment for Development

SACMEQ Southern and Eastern Africa Consortium for Monitoring Education Quality

<u>SEAMEO</u> Southeast Asian Ministers of Education Organization

<u>TIMSS</u> Trends in International Mathematics and Science Study

<u>UWEZO</u> (not an acronym)