Minimum Proficiency Levels

Minimum Proficiency Levels for Mathematics

Educational Level	Descriptor	Assessment PLD's that align with the descriptor	MPL's in the Assessments
Grades 2-3	Students demonstrate skills in number sense and computation, shape recognition and spatial orientation.	☐ PASEC 2014 – Level 2 ☐ TERCE 2014 – Level 2 ☐ SERCE 2006 – Level 2	Level 2 Level 2
Grades 4-6	Students demonstrate skills in number sense and computation, basic measurement, reading, interpreting, and constructing graphs, spatial orientation, and number patterns.	☐ PASEC 2014 – Level 3 ☐ SACMEQ 2007 – Level 5 ☐ PILNA 2015 – Level 6 ☐ SERCE (6to grade) - Level 3 ☐ TERCE 2014 (6to grade) – Level 3 ☐ TIMSS 2015 (4th grade)– Intermediate International	Level 2 Level 3 Level 5 Level 2 Intermediate International
Grades 8 & 9	Students demonstrate skills in computation, application problems, matching tables and graphs, and making use of algebraic representations.	☐ PISA 2012/2015/PISA4D – Level 2 ☐ TIMSS 2015 (8th grade) – Intermediate International	Level 2 Intermediate International

Note: alignment for the Math component of some assessment is pending upon analysis of items and test.

Unpacking of the general descriptors

- Number sense: skills such as reading, writing, comparing, and ordering numbers.
- Computation: math problems presented without context, in arithmetic form.
- Spatial orientation: position and direction on a diagram, map, or graph, often described by words such as "above", "below", "left", "right", "inside", "outside", etc.
- Application problems: also known as "word problems" or "story problems", these are problems that are presented in context, without explicitly telling students *which* mathematical operation(s) to use.
- Algebraic representations: examples include expressions, equations, and inequalities, all of which contain one or more variables.

Minimum Proficiency Levels for Reading

Educational Level	Descriptor	Assessment PLDs that align with the descriptor	MPL in the assessment, if available
Grade 2	They read and comprehend most of written words, particularly familiar ones, and extract explicit information from sentences.	☐ PASEC (Gr. 2) – Level 3	☐ Level 3
Grade 3	Students read aloud written words accurately and fluently. They understand the overall meaning of sentences and short texts. Students identify the texts' topic.	☐ Uwezo – Std. 2 (Story with meaning)	☐ Std. 2 (Story with meaning
		☐ PASEC 2014 (Gr. 2) – Level 4	☐ Level 3
		☐ SERCE (Gr.3) – Level 2	☐ Level 1 (appears that way from Technical reports)
		☐ TERCE (Gr. 3) – Level 2	☐ Level 2
		☐ UNICEF MICS 6 – -**Proficient Level**	"demonstrated foundational reading skills"
		☐ EGRA – Level 9	☐ Not specified
		☐ ASER – Std. 2 (story)	☐ Std. 2 (story)
Grades 4 & 6	Students interpret and give some explanations about the main and secondary ideas in different types of texts. They establish connections between main ideas on a text and their personal experiences as well as general knowledge	☐ SACMEQ 2007 – Level 5	☐ Level 3
		☐ PASEC 2014 (Gr. 6) – Level 4	☐ Level 3
		☐ PIRLS 2011 and 2016 – Low	☐ Low
		☐ PILNA 2015 (Gr. 4 & 6) Level 5	☐ • Level 4 (grade 4) and Level 5 (grade 5)

		⬜ SERCE 2006 (Gr. 6) – Level 3 ⬜ TERCE 2014 (Gr. 6) – Level 3	⬜ Level 2
Grades 8 & 9	Students establish connections between main ideas on different text types and the author´s intentions. They reflect and draw conclusions based on the text.	⬜ PISA 2011/2015/PISA4D – Level 2	⬜ Level 2

<u>Unpacking of the general descriptors</u>
- Familiar words: words that are part of the students' vocabulary and that have been read before more than once.
- Explicit information: information that is presented in the text.
- Accuracy/Precision (in decoding): Correct recognition of the phonological form of a word based on its orthographic form.
- Fluency (in decoding): Presupposes accuracy and speed in word recognition. It can also include qualities such as volume (reading at a volume that is adequate to the instructions given or the audience), pace (adjusting the pace to the instructions, to improve precision or comprehension), expressiveness and tone (adjusting it to the audience' characteristics, to the content and the characters).
- Short texts: texts that are between 60-80 words in length.
- Overall meaning of a text or sentence: refers to the most relevant information of the text.
- Topic of a text: an identified theme or subject.
- Interpret: Extract and recognize implicit and explicit information from a written sentence or text to relate it with other information or apply it to new situations or problem solving.
- Text types: narrative, descriptive, expository, procedural, verbal interaction, that report a central paragraph and complementary information and reference texts.
- General knowledge: previous knowledge that the student has in reference to everyday life and world affairs.
- Author´s intentions: may include the author´s choices (literary resources, title, words, etc.); the author´s feelings or motivations when/for writing, the author´s aim when writing, the author´s intentions when sharing a text in social media or publishing online.
- Reflect: Critically analyze and give an opinion about the information presented in a written sentence or text and the consequences the information may have.
- Draw conclusions: Generate conclusions from a text; generate conclusions about a topic considering different sources of information; generate conclusions about a character´s motivations or intentions.

Appendix A. Assessment Programs whose PLDs were analyzed

	Assessment Name	Type of Assessment	Level of Assessment
ASER	Annual Status of Education Report	National Citizen-Led	Grades 2-3
EGRA	Early Grade Reading Assessment	Cross-national	Grades 2-3
PASEC	The Analysis Program of the CONFEMEN Education Systems	Regional	Grades 2-3
TERCE	Third regional Comparative and Exploratory Study	Regional	Grades 2-3
SERCE	Second regional Comparative and Exploratory Study	Regional	Grades 2-3
UNICEF MICS6	UNICEF Multiple Indicator Cluster Service	Household Survey	Grades 2-3
Uwezo	Capacity Annual Learning Assessment	National Citizen-Led	Grades 2-3
PASEC	The Analysis Program of the CONFEMEN Education Systems	Regional	Grades 4-6
PILNA	Pacific Islands Literacy ad Numeracy Assessment	Regional	Grades 4-6
PIRLS	Progress in International Reading Literacy Study	Regional	Grades 4-6
SACMEQ	Southern and Eastern African Consortium for Monitoring Educational Quality	Regional	Grades 4-6
PILNA	Pacific Islands Literacy ad Numeracy Assessment	Regional	Grades 4-6
PIRLS	Progress in International Reading Literacy Study	Cross-national	Grades 4-6
TERCE	Third regional Comparative and Exploratory Study	Regional	Grades 4-6
SERCE	Second regional Comparative and Exploratory Study	Regional	Grades 4-6
TIMSS	Trends in International Mathematics and Science Study	Cross-national	Grades 4-6
PISA,	Programme for International Student Assessment	Cross-national	Grades 8-9

PISA -D			
TIMSS	Trends in International Mathematics and Science Study	Cross-national	Grades 8-9