



WG/GAML10/CM/1

Descriptions of decoding in Minimum Proficiency Levels Unpacked for Reading SDG4.1.1a

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MPLa and the assessment of decoding

Suggested modifications to the descriptions of
decoding in Minimum Proficiency Levels Unpacked for
Reading SDG4.1.1a.

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The Global Education Monitoring (GEM) Centre drives improvements in learning by supporting the monitoring of educational outcomes worldwide. The GEM Centre is a long-term partnership between the Australian Council for Educational Research (ACER) and the Australian Government's Department of Foreign Affairs and Trade (DFAT).

Introduction

ACER recommends making minor changes to the current descriptions of decoding in reading in the *Minimum Proficiency Levels Unpacked*¹ (MPLs Unpacked) document.

Decoding skills are only applicable as part of the Minimum Proficiency Level (MPL) in reading for the end of lower primary (SDG4.1.1a). The current MPLs Unpacked descriptions of decoding at SDG4.1.1a are unnecessarily restrictive in terms of the kinds of assessments that might be used to measure decoding, as they imply that oral fluency is essential. This was unintended and presents some difficulties, especially for large-scale cross-national assessments.

ACER suggests that decoding can be comprehensively measured in various ways that do not have to include a direct measure of fluency. We recommend that the wording of the MPLs Unpacked for SDG4.1.1a allow flexibility to users as to how decoding skills are assessed, providing the minimum level of decoding skills required to demonstrate the level is evident. This document outlines and explains the reasons for the proposed changes to the MPLs Unpacked for Reading: End of lower primary (SDG4.1.1a).

Proposed changes for decoding

Expanded Statement

The current opening sentence is shown here with the text to be modified in red:

*In a short simple text of one or two sentences, students **read aloud** most words – including some unfamiliar words – **accurately but slowly and often word by word**.*

It is recommended that the words ‘read aloud’ are replaced with the more overarching term ‘decode’ and the words ‘accurately but slowly and often word by word’ are deleted so the method by which decoding is assessed is not prescribed. The revised text reads:

*In a short simple text of one or two sentences, students **decode** most words, including some unfamiliar words.*

The rest of the expanded statement refers to reading and listening comprehension and remains unchanged.

Domains constructs and descriptors: *Decoding*

The current full description is shown with the proposed additional text in red.

*In a short and simple connected text of one or two sentences, **decode** most words, including some unfamiliar words with familiar sound–symbol patterns (applies to*

¹ ACER (2019). Minimum Proficiency Levels: Described, unpacked and illustrated. GAML6/REF/2, https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2022/11/WG_GAML_4_MPLs-Unpacked_ACER.pdf,

alphabetic and alpha-syllabic languages only). Decoding skills can be demonstrated in a variety of ways, including through oral fluency.

The additional text makes it clear that the method of assessing decoding is not limited to fluency, providing the relevant decoding skills are addressed.

Decoding & alignment criteria for SDG4.1.1a

In support of our recommendation to replace fluency with the broader notion of decoding, we note that the *Policy Linking for Measuring Global Outcomes Toolkit* (Jan 2023)² currently specifies that alignment with SDG4.1.1a for reading can be achieved without assessing fluency.

The *Policy Linking Toolkit* provides the alignment criteria for End of Lower Primary (SDG4.1.1a) for Reading in relation to the GPF³ domains, constructs and sub-constructs (see Appendix A).

The Decoding domain of the GPF has two constructs: Precision (D1) and Fluency (D2) (see Appendix B). Precision has two subconstructs (D1.1 & D1.2) and Fluency has one subconstruct (D2.1). The role of Decoding in the alignment criteria for SDG4.1.1a is described here:

Strongly Aligned: No Decoding required. 10 score points for Reading Comprehension plus coverage of one of the two Reading Comprehension sub-constructs only.

Additionally Aligned: 10 score points for Decoding and 5 score points for Reading Comprehension plus coverage of at least three of the five sub-constructs (Decoding has three subconstructs and Reading Comprehension has two).

Minimally Aligned: 10 score points for Decoding and 5 score points for Comprehension of Aural and Signed Language plus coverage of at least four out of the seven sub-constructs (Decoding has three subconstructs and Comprehension of Aural and Signed Language has four subconstructs)

Strong alignment does not require coverage of decoding. Decoding coverage is required for ‘additionally aligned’ and ‘minimally aligned’ with coverage of at least one of the Decoding sub-constructs. As two of the three Decoding subconstructs relate to Precision (D1.1& D1.2), coverage of one or two of these subconstructs can be met by measuring Precision. It is not essential to measure Fluency to meet any of the levels of alignment.

² [Policy Linking for Measuring Global Learning Outcomes Toolkit \(unesco.org\)](#) viewed 8 November 2023.

³ [Global Proficiency Framework for Reading \(unesco.org\)](#) viewed 7 September 2023

Advantages of focussing on Precision

As well as the sufficiency of Precision to meet the SDG4.1.1a alignment criteria for additionally and minimally aligned, there are other benefits to measuring Precision rather than Fluency in large-scale international assessments.

Time and resource constraints can make measures of fluency impractical.

Objective measures of fluency are resource intensive, expensive and time-consuming to administer. A fluency assessment requires a one-to-one administration mode. At a minimum, a useful measure of fluency must include both accuracy and speed with prosody as optional. Simply measuring how many words a student reads aloud in one minute without recording accuracy is misleading. Fluency assessment administrators require training and an appropriate quality assurance regime to ensure scoring accuracy and reliability. This makes reliable, large-scale assessments of fluency unrealistic in many contexts with budget and time constraints where assessments must be administered to whole classes or groups. There are simpler, cheaper, alternative measures of decoding that address the skills in the two sub-constructs of Precision, and which can also be administered to a whole class and machine scored.

Reading with comprehension implies the ability to decode. Getting students to read aloud is an obvious method of measuring fluency, but it is not the only way of checking students' ability to decode. It can be assumed that students able to answer single word- and sentence-level reading comprehension items have sufficient decoding skill to support understanding of a word or a sentence, and that students who can correctly answer questions about a short text must have sufficient fluency to read both the text and the questions. Neither fluency nor decoding are ends in themselves: the goal is reading comprehension.

Standardised fluency measures are inappropriate for a multi-lingual assessment.

In the context of a multi-lingual international assessment administered in several languages, fluency measures can misrepresent students' readiness to read with comprehension. Reading for meaning is the goal of reading instruction. In languages with a shallow orthography (in which the correspondence between letters and sounds in the writing system is close to one-to-one), it is quite easy to teach students to decode and read aloud by 'barking at print'. Students can say written words aloud once they have mastered decoding, whether or not they know the meaning of many of the words they 'read'. This is especially relevant where the language of school instruction is not the students' first language. In these contexts it is a far more challenging task to improve students' oral language skills so they can *understand* the texts they are able to read aloud. In low-literacy, multi-lingual contexts, assessment of listening comprehension combined with single word, sentence and short text reading comprehension assessment items is likely to be a more reliable indicator of students' readiness to read with comprehension, than assessment of oral fluency.

Appendix C provides research evidence of the potential inappropriateness of fluency measures as a proxy for reading comprehension.

Appendix A

Reading Alignment Criteria

Reading Alignment Criteria for End of lower primary for minimally, additionally and strongly aligned are specified in the *Policy Linking for Measuring Global Outcomes Toolkit*.

The Reading Alignment Criteria for the End of Lower Primary are shown in Table 1.

Table 1: Reading Alignment Criteria for Grades 1-9

Level of Alignment	Category	End of lower primary	End of primary	End of lower secondary
Minimally Aligned	Test length	Min. total score of 20 if setting only 'meets' level Min. total score of 45 if setting 'partially meets' 'meets' and 'exceeds levels.		
	Domain/ Construct (depth)	D (min. ten score-points) C (min. five score-points)	R (min. ten score-points)	R (min. twenty score-points)
	Subconstructs (breadth)	Score-points covering at least 4 of the 7 of the D & C subconstructs	Score-points covering at least 4 of the 8 R subconstructs	Score-points covering at least 5 the 10 R subconstructs
Additionally Aligned	Test length	Min. total score of 20 if setting only 'meets' level Min. total score of 45 if setting 'partially meets' 'meets' and 'exceeds levels.		
	Domain/ Construct (depth)	D (min. ten score-points) R (min. five score-points)	N/A	B1 (min. five score-points) B2 (min. five score-points)
	Subconstructs (breadth)	Score-points covering at least 3 of the 5 D and R subconstructs	N/A	Score-points covering at least 5 of the 10 R subconstructs
Strongly Aligned	Test length	Min. total score of 20 if setting only 'meets' level Min. total score of 45 if setting 'partially meets' 'meets' and 'exceeds levels.		
	Domain/ Construct (depth)	R (min. ten score-points)	B1 (min. five score-points) B2 (min. five score-points)	B1 (min. five score-points) B2 (min. five score-points) B3 (min. five score-points)
	Subconstructs (breadth)	Score-points covering at least 1 of the 2 R subconstructs	Score points covering at least 4 of the 8 R sub-constructs	Score points covering at least 5 of the 10 R sub-constructs

Key:

D – Decoding

C – Comprehension of spoken or signed language

R – Reading comprehension

B1 – Retrieve information

B2 – Interpret information

B3 – Reflect on information

Appendix B

Structure of the GPF Decoding domain

Table 2 shows the structure of the GPF Decoding domain with the two Precision sub-constructs (D1.1 & D1.2) and the one Fluency sub-construct D2.1)

Table 2: Structure of the GPF Decoding domain

Decoding	D1	Precision	D1.1	Identify symbol-sound/fingerspelling and/or symbol-morpheme correspondences
			D1.2	Decode isolated words
	D2	Fluency	D2.1	Say or sign a grade-level continuous text at a pace and with accuracy

Appendix C

The relationship between fluency and comprehension

The 2013 national administration of EGRA in the Philippines⁴ showed that Grade 3 students had similar average oral reading fluency scores in English reported as ‘words correct per minute’ (wcpm) and Filipino. In English the average oral reading fluency was 67 wcpm; in Filipino it was 68 wcpm. These fluency rates are generally considered sufficient to support comprehension of the EGRA fluency passage of approximately 60 words. However, when students were asked the five comprehension questions about the text they had read aloud, the average score in Filipino was 3.7 out of 5 and the average score in English was 1.6 out of 5. That is, on average, students had excellent fluency, but very poor comprehension, especially in English. The national EGRA administration was repeated in 2019⁵ and showed slightly lower, but still sufficient, average fluency rates in English and Filipino and similarly poor levels of comprehension, especially in English.

Research findings by Dowd and Bartlett (2019)⁶ show that minimum fluency rates required to support comprehension of a passage of approximately 60 words are language specific and highly variable. Students’ fluency rates were compared with students’ ability to answer at least four of the five questions using an EGRA fluency text and questions that had been developed for use in 11 different languages by respective participating countries. Dowd and Barlett showed that in Malawi average fluency of 30 wcpm was sufficient to support comprehension but in Vietnam the average needed was 96 wcpm. Dowd and Bartlett conclude that fluency measured as words correct per minute ‘cannot be delimited with the precision required of a global metric; language-specific ranges are necessary in this field and targets may need to be differentiated for pupils learning to read in a second or third language’ (p203). They also suggest that while accuracy and speed contribute to comprehension, neither represents a viable proxy for comprehension.

⁴ 2013 PhilEd Data: Strengthening Information for Education, Policy, Planning and Management in the Philippines (Grade 3), Baseline Survey: Assessment Outcomes," Early Grade Reading Barometer, U.S. Agency for International Development, last modified January 5, 2022, <https://earlygradereadingbarometer.org/results/Philippines/National-2013/outcomes>.

⁵ "All Children Reading–Philippines (ACR-Philippines), 2019 National Early Grade Reading Assessment: Assessment Outcomes," Early Grade Reading Barometer, U.S. Agency for International Development, last modified January 5, 2022, <https://earlygradereadingbarometer.org/results/Philippines/ACR-Philippines-2019/outcomes>.

⁶ Dowd, A. J., Bartlett, L., (2019) The Need for Speed: Interrogating the Dominance of Oral Reading Fluency in International Reading Efforts. *Comparative Education Review* 63 (2).