

Development and Rationale of the Early Grade Reading and Mathematics Assessments

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Agenda

- Brief Introduction
- Early Grade Reading Assessment
- Q & A
- Early Grade Mathematics Assessments
- Q & A

Assess

- Generally, to evaluate the nature, quality, ability, extent, or significance of (something).
- In education, the process of documenting, **usually in measurable terms**, knowledge, skills, attitudes, and beliefs.

Assessment Type: Screening

- Brief assessment that focuses on critical skills strongly predictive of future growth and development
 - At the student level you can identify children likely to need extra instruction.
 - At the school level you can identify gaps in instruction.

Results

- Provide data to:
 - Intervene early and strategically during critical windows of development
 - Develop and promote a comprehensive system of instruction
 - Identify need, allocate resources, and design and modify instruction
 - Address academic failure and success from a school-wide, systematic perspective

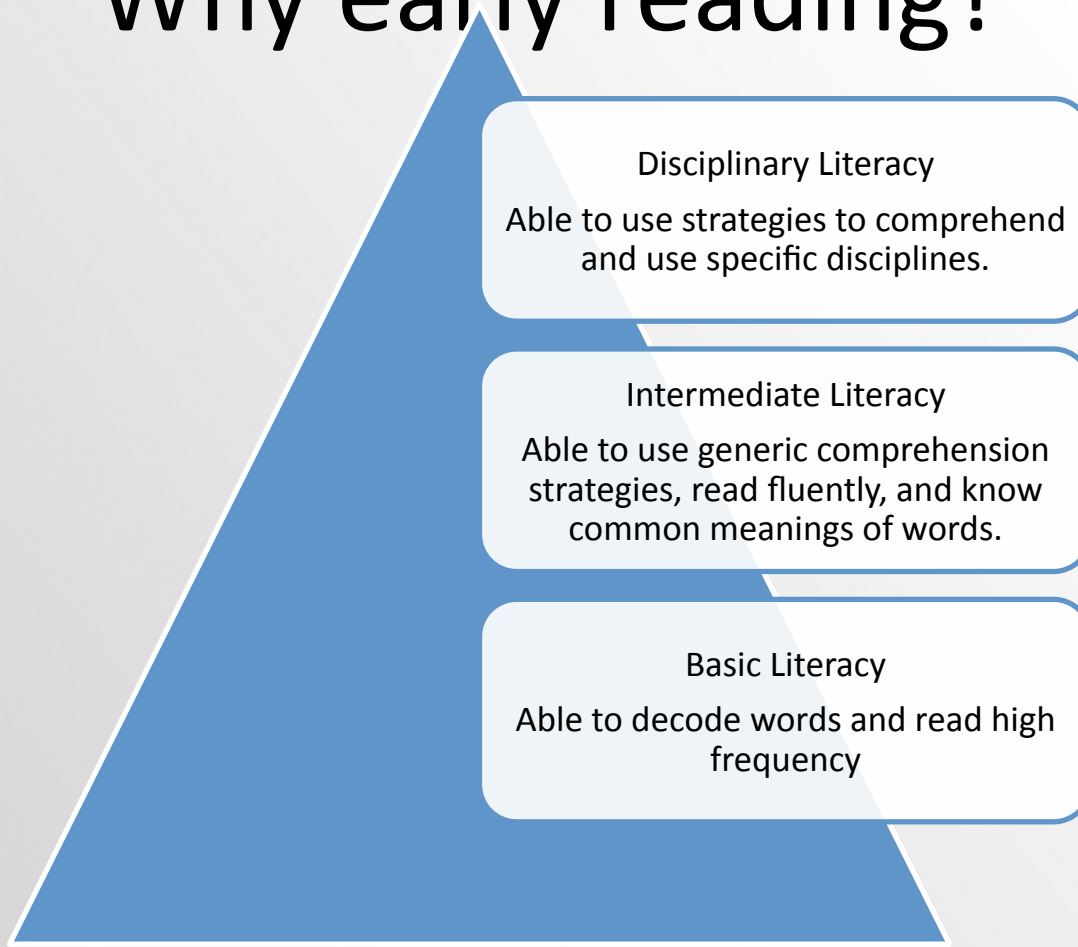
EGRA

Date

Why early reading?

- It is widely recognized that illiteracy can have a negative impact on the individual as well as his or her community.
- Absolute vs. functional illiteracy
- Literacy is more than learning to read and write but includes the acquisition of higher level competencies needed to become a social and productive member of society. (UNESCO, 2006).

Why early reading?



Why early reading?

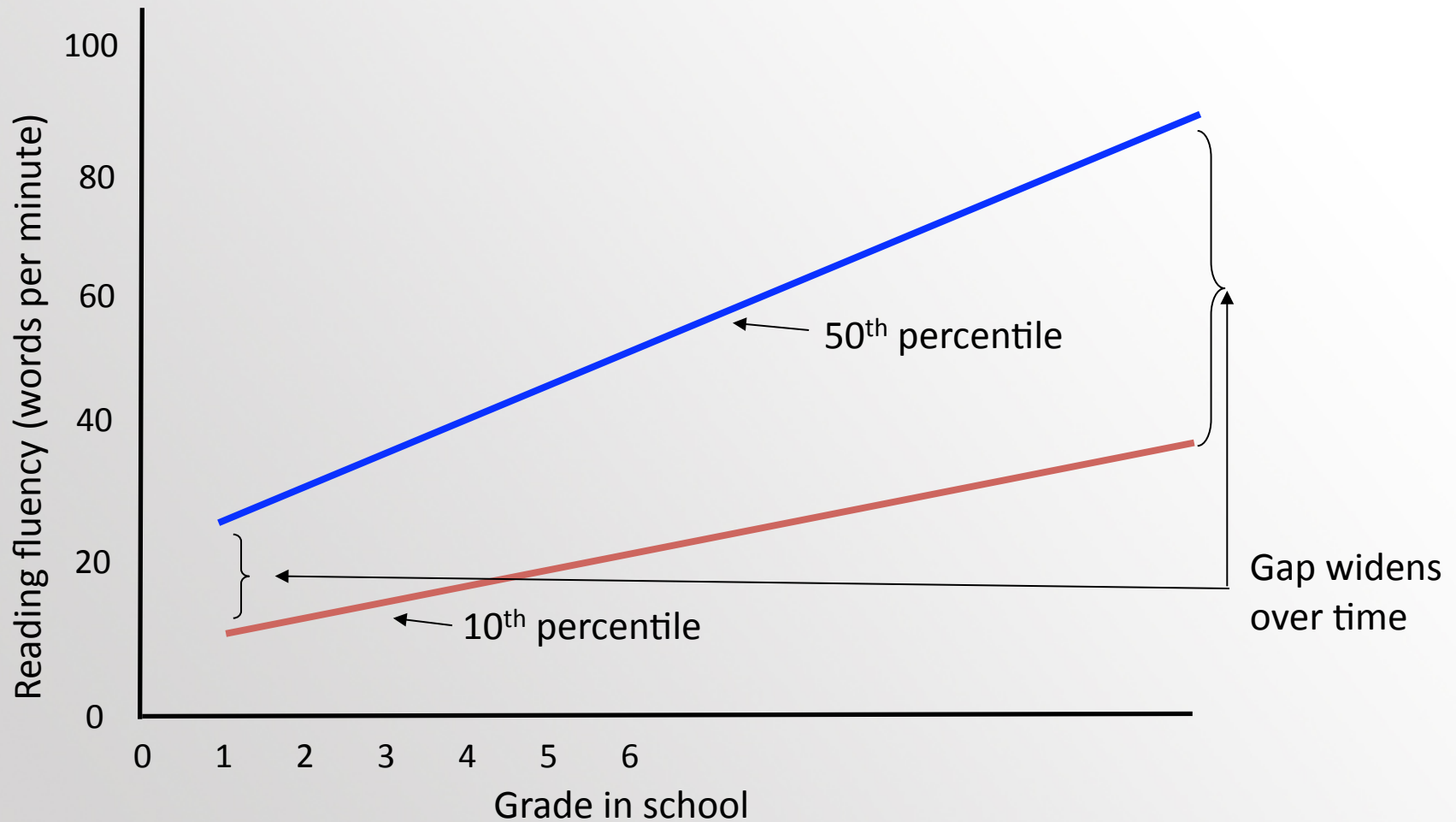
- Children begin to develop skills that help them develop literacy skills before formal schooling such as:
 - capacity to hear phonological distinctions,
 - phonological awareness from exposure to rhymes and song,
 - knowledge of letter shapes and names;
 - experiencing “reading” environmental print;
 - being in command of several thousand vocabulary words; and
 - understanding the grammar and discourse rules of the language/s they speak

Why early matters

- However, in developing countries students may not develop all of these skills prior to entering school.

In that case, what happens in school becomes vitally important!

Early matters.



(Source: Good, Simmons and Smith, 1998)

Early Matters

- Students fail to learn to read because of
 - limited early literacy experiences;
 - Insufficient instruction or practice; or
 - failure to master basic decoding skills because of poor phonemic awareness or alphabetic principle.

Reading components and EGRA Protocols

Component	Measure
Letter Recognition	Letter Naming Fluency Letter Sound Fluency
Phonological Awareness	Initial Sound Discrimination Initial Sound Identification
Alphabetic Principle	Syllable Sound Fluency Nonsense Word Fluency
Accuracy and Fluency with Text	Word Reading Fluency Oral Reading Fluency
Comprehension	Reading Comprehension

Why these areas?

- They are predictive of later reading difficulty.
- They are easily measured.
- Instruction in these areas has an impact on student outcomes.
- If these areas are addressed, we can change trajectories.

Why fluency?

- Fluency measures assess not only whether or not a child knows something, but whether they have integrated the knowledge, can process the information automatically, and can apply in different contexts.
- To be successful readers, basic reading competencies have to be automatic.

Measure Development

- For each measure:
 - Rules were followed for each measure.
 - Rules reflect orthography of language.
 - Level of difficulty was controlled.
 - Order of items does not progress from easier to more difficult.

Letter Knowledge

- Accuracy and fluency in naming letters
 - Letter naming
- Accuracy in identifying sounds of letters

Rules

- Letter naming
 - Have a mix of most common and less common letters.
 - The order does not progress from easier to more difficult.
 - Consider the font.

Alphabetic Principle

- Accuracy in mapping sounds to print
- Fluency in mapping sounds to print
 - Non-word reading

Rules

- Alphabetic principle
 - Use only letter combinations that are possible in the language
 - Follow orthography rules
 - Make sure words are not real words in another language children might know

Oral Reading Fluency

- Accuracy in reading decodable words and irregular words.
- Fluency is reading decodable and irregular words.

Word reading
Short passage

Word Level Reading

- Familiar Words

Word Level Reading

- Non-words

Passage Criteria

- Narrative passage
- 60-100 words
- Grade appropriate
- Universal theme

Comprehension

- Reading comprehension
 - Ability to answer literal questions
 - Ability to answer textually implicit

Levels of Questions

- Explicit (2)
 - Can be found in the text directly
- Textually implicit (2)
 - Can be found in the text but the reader will have to draw from more than one place
- Implicit (1)
 - Derived from the text and reader's knowledge

- Questions???
- Comments