Webinar 2: Handout 17
Text difficulty, readability and complexity: An overview

Text difficulty

Children who are learning to read need text that matches their skill level. Their ability to read content thus depends on the *level of difficulty of the text,* the *complexity of the text*, and various *design elements.*

Text difficulty refers to the "accessibility of text to the reader" (Fulcher, 1997). "Appropriate text difficulty" is text that can be read with satisfactory speed, accuracy and comprehension (Morris, 2005). Text difficulty is based on several elements, including:

- sentence complexity
- vocabulary
- organization of the text
- style
- subject matter content
- predictability

The level of text difficulty is important to consider when identifying, developing and selecting text for children. Text difficulty can be analyzed in terms of *quantitative* measures such as word length or frequency, text cohesion and sentence length, as well as *qualitative* measures including language structure, levels of meaning of a text, language conventions and clarity, and knowledge demands on the reader (Davidson, 2013).

> **Text difficulty: An example**
>
> In English, Text A contains short words and a low level of sentence complexity. It is less difficult than Text B, which contains longer words and a more complex sentence structure (Davidson, 2014).
>
> Text A: "The dog ran. He sat on a mat."
>
> Text B: "The dog ran while carrying a bone in its mouth."

This online readability analyzer can assist in identifying the level of difficulty of a text: https://datayze.com/readability-analyzer.php

Text readability

Developing early grade reading materials requires careful attention to design elements that affect **text readability** and ultimately the effectiveness of the materials developed. Key considerations include:

- **Font type:** Letters should have a shape (font) that may already be familiar to students. A sans-serif font is recommended for younger children.

- **Text size:** The font size should be large enough to be easily read. Use a larger font size when learners will need to read text independently than for text that will be read by a teacher (e.g., story read aloud).

- **Spacing between lines of text:** Lines should have enough space between them so children do not lose their place in the text. Single spacing is not recommended for text for beginning readers.

- **Text alignment:** Align text on the left for Latin scripts, and on the right for Arabic scripts. Do not justify text.

- **Organization of text on page:** Text should be orderly and attractive, without too many distracting elements.

- **Color:** Use of color may depend on budget available. Providing color can help attract learners to books. However, care should be taken to use color consistently and to not use so many colors that they become a distraction.

Text complexity

Some researchers have framed the issues of text difficulty and readability in a broader term called **text complexity** (Davidson, 2013). Text complexity includes a variety of factors that determine how challenging a given text is for a particular person.

Text complexity includes:
- Words, syntax and discourse structure
- Word length and sentence length
- Word frequency
- Language structure (sequence, pace and repetition in the text)
- Text cohesion
- Levels of meaning in a text
- Language conventions and clarity
- Knowledge demands on the reader

Measuring text complexity is more complicated than measuring text difficulty, but early grade reading programs should be aware of the factors that determine text complexity when developing materials for both teachers and students.

References

Davidson, M. (2014). Books that children CAN read: Decodable books and book leveling. JBS International. Available at https://www.globalreadingnetwork.net/publications-and-research/books-children-can-read-decodable-books-and-book-leveling

Fulcher, G. (1997). Text difficulty and accessibility: Reading formulae and expert judgment. *System*, (25) 4, pp. 497-513.

Morris, D. (2005). The Howard Street tutoring manual: Teaching at-risk readers in the primary grades (2nd ed.). New York: Guilford Press.

Readability Analyzer. Estimates the readability of a passage of text using the Flesch Reading Ease, Fog Scale Level, Flesch-Kincaid Grade Level, and other metrics. Available at https://datayze.com/readability-analyzer.php