



WHITE PAPER

Comprehension



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What is Comprehension?

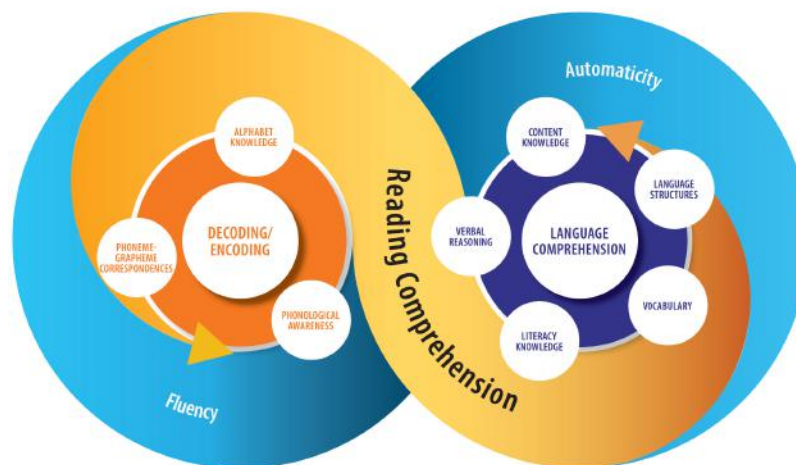
What is reading comprehension? A common misconception is that comprehension is a single skill that can be taught, mastered, and applied to any text. This view approaches comprehension much like swimming (Catts, 2022). Once the skill of swimming is taught and mastered, the child can apply that skill to any body of water. While that may be true for swimming, it is not the case for comprehension. In fact, the process of comprehension differs from text to text, and is highly dependent on topic-specific knowledge. The Rand Reading Study Group defines comprehension as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (Snow, 2002).

It is important to distinguish between the process and product of comprehension. The product of comprehension is an indicator of what the reader knows and understands after reading has occurred, while the process of comprehension involves the coordination of mental activities the reader engages in to arrive at the product. When students are asked to demonstrate comprehension (e.g., to summarize story events), their ability to do so depends on their implementation of specific processes (Hennessey, 2021). To arrive at the product of comprehension, there must be a focus on the processes leading up to it.



What are the Processes Involved in Comprehension?

The Simple View of Reading (Gough & Tunmer, 1986) presents reading comprehension as a product of two factors: word recognition and language comprehension. To comprehend a text, the reader needs to efficiently decode the words on the page and then make sense of these words, as well as the sentences that contain them, and the overall text. This requires the interaction of many different subcomponent. For reading comprehension to occur, all these components must be firmly in place.



Adapted from Gough, P. and Tunmer, W. (1986) and Scarborough, H. S. (2001)

Because reading comprehension is an active exchange between the reader and the text itself, a strong reader extracts and builds meaning by integrating ideas in the text with his or her own knowledge. This process of constructing meaning involves building a “mental model” of the situation described in text. The goal of instruction is to help facilitate students’ thinking processes during reading by supporting the construction of a coherent and complete mental model. Multiple factors play a role in how a reader develops a mental model of the text. The outcome is shaped by the interaction between the demands of the text, the nature of the task at hand, and the knowledge the reader brings (Snow, 2002). To comprehend, readers must implement multiple language processes that are shaped by these interactions between the text, the task, and the reader.

Language Comprehension

A common misconception is that comprehension instruction starts after students are able to decode fluently. However, the development of language comprehension is not dependent on decoding ability and should be supported both orally and through texts. In the primary years, when students are still working to solidify decoding skills, access to complex text often comes through teacher read-alouds, during which students learn to engage in listening comprehension processes. As decoding skills increase, readers should be challenged to comprehend more difficult texts independently, even in the primary grades. The following components of language comprehension are critical for extracting and constructing meaning from oral language and from text.

→ Content Knowledge

One significant factor influencing reading comprehension is content knowledge (Catts, 2022). Prior knowledge of a topic gives the reader a mental framework into which new information can be integrated. Supporting and expanding a reader's knowledge base is critical to building a mental model of the text.

→ Vocabulary

Vocabulary knowledge is also an important influence on reading comprehension (Adlof & Perfetti, 2014). To comprehend text, the reader must decode and identify the meaning of individual words, making vocabulary knowledge a key contributor to skilled reading (Cain & Oakhill, 2007). Promoting a deep understanding of words helps the reader access meanings quickly, building and updating their mental model as new information is introduced.

→ Language Structures

Language structures, or syntax, refers to the way that words, phrases, and clauses are sequenced. While individual words serve as the building blocks of meaning, they live within the context of the sentence; therefore, interpretation of sentences is critical to comprehension of whole texts (Scott, 2009). Developing sentence-level understanding within a complex text is essential to supporting the reader's extraction and construction of meaning.

→ Verbal Reasoning

Reading comprehension has been described as "thinking guided by print" (Perfetti, 1985). Creating a mental model of the text requires the reader to integrate information across the text and use background knowledge to fill in what is not explicitly stated in the text (Kendeou et al., 2014). Making connections at critical junctures in the text promotes deeper levels of understanding for the reader.

→ Literacy Knowledge

Familiarity with the structural features of different text types can help a reader anticipate, organize, and recall textual information (Gillis and Eberhardt, 2020). Instruction around the purpose, structures, and features of narrative and expository texts improves the reader's efficiency when developing a coherent mental model.



How Do We Support Comprehension Through Instruction?

Because of the complex nature of comprehension, it is not possible to simply “teach” reading comprehension as a single skill. However, teachers can bring about the conditions that allow a student to comprehend (Catts, 2022). The role of the teacher is to facilitate thinking before, during, and after reading so that students can build an accurate mental model of the text. Instruction should focus on the processes necessary for comprehension using an evidence-based framework in which teachers:

- Build topic-specific content knowledge
- Use text sets with appropriately complex and meaningful texts
- Explicitly teach challenging vocabulary from the text
- Build from sentence-level comprehension to text-level comprehension
- Teach students to use text structure to summarize and recall information from the text
- Stop at strategic points in the text to ask intentionally-sequenced questions, support students’ reasoning, and model comprehension monitoring strategies
- Evaluate and assess comprehension

How Do We Assess Comprehension?

The complex nature of comprehension makes it challenging to assess. While many tests seek to measure reading comprehension, it is common for students to score very differently on different comprehension assessments (Keenan & Meenan, 2014). This is because a reader's comprehension ability is very text-dependent (Catts, 2022). It relies on the reader's content knowledge of the topic, understanding of the meanings of the words on the page, and ability to decode those words. Comprehension also depends on the demands of a particular task. It is important never to rely on one assessment to make determinations about a student's reading comprehension.

Students who are not able to read words accurately and fluently have difficulty with reading comprehension, even when their listening comprehension is average or above (Keenan, Betjemann, & Olson, 2008). If a student does not demonstrate proficiency on a reading comprehension assessment, it is important to determine if the student has an underlying difficulty in decoding or fluency and with which subcomponent skills within those domains.

It is important to connect comprehension assessment to a content-rich curriculum and the texts covered in that curriculum. Instead of analyzing student performance on questions testing students' ability to perform isolated skills, teachers should interpret student results by considering students' familiarity with the topic, the complexity of the text, and the text structure (Shanahan, 2019). These insights allow teachers to identify components of comprehension that may need further support during instruction. Providing explicit instruction in these components using a content-rich curriculum creates the conditions necessary for students to develop and strengthen comprehension processes.



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