

Building Knowledge Can Help Build Comprehension Success

What key factors contribute to comprehension?

The ultimate goal of reading is comprehension. However, the ability to read with comprehension begins with accurately identifying words, which requires decoding skills along with morphological understanding (usage and meanings of base elements, prefixes and suffixes.) At the most basic level, students must be able to read the words in a text to understand it.

Furthermore, to facilitate understanding of the meaning conveyed by a text, this process must occur with fluency, that is, at a sufficient rate and with appropriate mental grouping of words into meaningful phrases. Fluency has been called the bridge between decoding and comprehension.

Many factors influence reading comprehension, including the ability to fluently read words and sentences, vocabulary, listening comprehension skills, and familiarity with the syntax and the conventions of written language. In addition, there is a central factor that is too often overlooked and under addressed: subject-matter knowledge related to the topic of the text. Subject-matter knowledge is an essential key to comprehension in many situations.

What is the role of background knowledge in building comprehension?

In general, we draw on our prior knowledge to make sense of almost anything we read, especially nonfiction. This is because authors do not explain every term they use or provide the context for everything they are describing; doing so would make the text tedious. They constantly make assumptions about what readers will know. Prior knowledge includes familiarity with vocabulary that will facilitate comprehension in a given text. Comprehension also requires an awareness of the context of a passage. (If you read the words “They felt it was all too cold,” that would mean different things if the context were a description of a meal, a trip down a river, or the atmosphere in a room after a hurtful remark.) In some situations, understanding the context itself may also be dependent on background knowledge.

Building background knowledge can improve comprehension of text. A body of evidence shows that prior knowledge of a topic is a factor in the ability of readers to understand, absorb, and analyze information. Furthermore, new knowledge is more easily built on the scaffold of prior related knowledge, which assists with new vocabulary learning. Knowledge-building, then, is an important element of on-going comprehension instruction that can anchor the many contributing factors to student comprehension success.

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Although directly teaching comprehension strategies is important for students with dyslexia, teachers need to know how to work within the context of content-focused instruction to help students begin to apply those strategies.

What can schools do to enhance background knowledge and boost reading comprehension for all students, including those with dyslexia?

Because prior knowledge plays a key role in comprehension, it is important to optimize instruction to build content knowledge. Several things are recommended:

- **Select texts that are focused on building knowledge**

To acquire knowledge and the vocabulary that goes with it, children need to be exposed to similar concepts and words repeatedly. Along with building knowledge, children with emerging word recognition skills can improve their accuracy and fluency when they encounter the same words across texts. To provide enough exposure to the same concepts and words, instruction should be organized around a series of books or texts on the same general topic, supplementing the standard reading textbook with additional material if necessary. To become better readers, struggling students in particular need exposure to texts containing vocabulary and syntactic structures that may be above their individual reading levels. Some texts can be read to students, while others can be selected for students to read either independently or interactively with a teacher's guidance. In addition to learning more about a selected topic, exposure to the same words across a variety of texts helps students further solidify automatic recognition and comprehension of words. Repetition and overlap of words from one passage to another may aid their ability to read more challenging texts.

- **Provide listening opportunities**

In the early elementary years and even beyond, texts at grade level or above should be read aloud. Children are often able to take in more sophisticated content through listening and discussion than through their own reading—a concept that holds true, on average, through middle school.

This approach enables all students (including those with dyslexia) to acquire the kind of information and vocabulary they will need to read complex text independently in years to come. It also supports the development of subject-matter knowledge and vocabulary, independent of decoding ability, which is important for all students but especially for those who struggle with decoding. Reading a complex text with a teacher's assistance

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also helps familiarize students with the conventions of written language, which provides additional support for comprehension. As students become more fluent decoders, teachers can then guide the class through collective reading of texts.

- **Engage in classroom discussions of text**

Classroom discussions are crucial to helping students understand the information presented in texts and acquire knowledge and vocabulary. Rather than placing a specific comprehension skill or strategy at the forefront of instruction, teachers should start by focusing on the content of a text. After ensuring that students have a basic understanding of the content, teachers can then bring in strategies to help students further think about and analyze the text.

For example, after reading a portion of a text together or independently, a teacher might ask students a question grounded in the content of the text that *requires* them to make an inference, rather than simply asking students to “make an inference” from the text—a standard approach.

During the interactive dialogue that follows, students should be taught directly and then encouraged to use strategies to achieve deeper, rather than surface-level, comprehension. This instruction can be implemented through modeling, explicit instruction, and guided application. Since formulating questions with a strategy in the foreground can impose an additional cognitive burden on students, when teachers explicitly refer back to learned strategies, the discussion should be focused on the richness and meaning of the text, rather than on the strategy itself.

- **Select texts for independent reading**

Students need the opportunity to employ various strategies when they independently read with a goal of understanding. Students who are still acquiring basic decoding skills will benefit from reading decodable text. Those whose decoding skills are more advanced need opportunities to experience reading varied kinds of text. They need opportunities to read for pleasure as well as to read to learn new information. Once students are familiar with a topic through read-alouds, collective reading, and class discussion, they often not only choose to read more on that topic but are better prepared to independently access additional texts on that topic. All students should have the opportunity for independent reading of books and articles on subjects for which they have background knowledge;

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they may well be able to independently read and understand such texts at a higher “level” than the one that would ordinarily be assigned to them.

- **Select school-wide curriculum focused on building knowledge**

Beyond individual teachers, entire school districts can evaluate curriculum choices to provide knowledge-building across all grade levels. Because building knowledge is a gradual, cumulative process that extends across grade levels, the most effective way to boost reading comprehension is through a coherent content-focused curriculum adopted by a school or district.

In recent years, several elementary literacy curricula have been developed that focus on topics in social studies, science, literature, and the arts, with at least a couple of weeks spent on each topic. This is in response to the concern that subject-matter instruction has often declined in favor of reading and math instruction. Since information learned while studying other subjects directly supports comprehension, dedicated time allocated to subject-matter instruction is essential. Students who have reading difficulties should not be pulled out of class during knowledge-building activities; if they are, their reading comprehension is likely to suffer.

- **Incorporate explicit writing instruction**

Integrating writing instruction with knowledge-building further develops students’ skills. Explicitly teaching students to write about the content they are learning can build and expand students’ knowledge and familiarity with the topic, which supports their comprehension. An added benefit is that explicit writing instruction deepens students’ familiarity with the conventions of written language, which can also support their comprehension while reading. Since writing is an extremely difficult task, instruction should begin at the sentence level. Direct and explicit instruction in use of written language conventions (e.g., punctuation, capitalization) in the context of students’ own writing has the potential to improve students’ understanding of the ways in which these conventions affect the meaning of a sentence and why they are needed to communicate clearly in writing. Once students understand the how and why—and begin to intentionally use conventions of written language in their own writing—they are more likely to notice them and understand their purpose when they encounter them during reading.

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What are the key take-aways?

Many things feed into the comprehension of text. Explicit instruction in comprehension strategies is essential, but a teacher should be selective. Rather than focusing on isolated skills, teach and then apply strategies that encourage student engagement using varied texts organized around specific topics. Within the context of building knowledge, a teacher can greatly improve students' comprehension by engaging in rich discussions, developing students' vocabulary, background knowledge and familiarity with the conventions of written language, and by modeling and practicing the application of strategies for success.

Further Reading

Fall 2019 *Perspectives on Language and Literacy*

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The International Dyslexia Association (IDA) thanks Natalie Wexler, M.A., J.D., for her assistance in the preparation of this fact sheet.

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