

National Reading Panel Findings on Comprehension

Comprehension is the reason for reading. If readers can read the words but do not understand what they read, they are not really reading. As they read, good readers are both purposeful and active.

Good readers are purposeful. Good readers have a purpose for reading. They may read to find out how to use a food processor, read a guidebook to gather information about national parks, read a textbook to satisfy course requirements, read a magazine for entertainment, or read a classic novel to experience the pleasures of great literature.

Good readers are active. Good readers think actively as they read. To make sense of what they read, good readers engage in a complicated process. Using their experiences and knowledge of the world, their knowledge of vocabulary and language structure, and their knowledge of reading strategies (or plans), good readers make sense of the text and know how to get the most out of it. They know when they have problems with understanding and how to resolve these problems as they occur.

What does scientifically-based research tell us about effective text comprehension instruction?

Thirty years of research has shown that instruction in comprehension can help students understand what they read, remember what they read, and communicate with others about what they read.

⇒ **Text comprehension can be improved by instruction that helps readers use specific comprehension strategies.**

Comprehension strategies are conscious plans—sets of steps that good readers use to make sense of text. Comprehension strategy instruction helps students become purposeful, active readers who are in control of their own reading comprehension. The following six strategies appear to have a firm scientific basis for improving text comprehension.

Monitoring comprehension. Students who monitor their comprehension well know when they understand what they read and when they do not. They have strategies to “fix up” problems in their understanding as problems arise. Research shows that instruction, even in early grades, can help students become better at monitoring their comprehension.

Using graphic and semantic organizers. Graphic organizers illustrate concepts and interrelationships among concepts in a text, using diagrams or other pictorial devices. They can help readers focus on concepts and how they relate to other concepts.

Graphic organizers can:

- Help students focus on text structure as they read;
- Provide students with tools they can use to examine and visually represent relationships in a text; and
- Help students write well-organized summaries of a text.

Answering questions. Teachers have long used questions to guide and monitor students' learning. Research shows that teacher questioning strongly supports and advances students' learning from reading. Questions appear to be effective for improving learning from reading because they:

- Give students a reading purpose;
- Focus students' attention on what they are to learn;
- Help students think actively as they read;
- Encourage students to monitor their comprehension; and
- Help students review content and relate what they have learned to what they already know.

Generating questions. Teaching students to ask their own questions improves their active processing of text and their comprehension. By generating questions, students become aware of whether they can answer the questions and if they understand what they are reading. Students learn to ask themselves questions that require them to integrate information from different segments of text.

Recognizing story structure. Students who can recognize story structure have greater appreciation, understanding, and memory for stories. In story structure instruction, students learn to identify the categories of content (i.e., setting, initiating events, internal reactions, goals, attempts, outcomes) and how this content is organized into a plot.

Summarizing. Summarizing requires students to determine what is important in what they read, to condense this information, and to put it into their own words. Instruction in summarizing helps students:

- Identify or generate main ideas;
- Connect the main or central ideas;
- Eliminate redundant and unnecessary information; and
- Remember what they read.

⇒ **Students can be taught to use comprehension strategies.**

Effective comprehension strategy instruction is explicit, or direct. Research shows that explicit teaching techniques are particularly effective for comprehension strategy instruction. In explicit instruction, teachers tell readers why and when they should use strategies, what strategies to use, and how to apply them. The steps of explicit instruction typically include direct explanation, teacher modeling ("thinking aloud"), guided practice, and application.

Effective comprehension strategy instruction can be accomplished through cooperative learning. Cooperative learning instruction has been used successfully to teach comprehension strategies in content area subjects. Students work together to understand content area texts, helping each other learn and apply comprehension strategies.

Effective instruction helps readers use comprehension strategies flexibly and in combination. Although it can be helpful to provide students with instruction in individual comprehension strategies, good readers coordinate and adjust several strategies to assist comprehension. Multiple-strategy instruction teaches students to use strategies flexibly as they are needed to assist their comprehension.

The six strategies described have received the strongest scientific support. The following strategies, however, have received some research support.

Drawing on prior knowledge. Good readers draw on prior knowledge and experience to help them understand what they read.

Using mental imagery. Good readers often form mental pictures, or images, as they read. Readers (especially younger readers) who visualize during reading understand and remember what they read better than readers who do not visualize.

Comprehension strategies are not ends in themselves; they are means to help students understand what they read. Students need to learn to use comprehension strategies in natural learning situations. When students discover that using comprehension strategies can help them learn, they are more likely to be motivated and involved actively in learning.