



The Art and Science of Teaching

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Summarizing to Comprehend

As the most cherished skill in the world of language arts, comprehension is also crucial to understanding texts in every other subject area. Although the process of comprehension is complex, at its core, comprehension is based on summarizing—restating content in a succinct manner that highlights the most crucial information. During the mid-1970s and early 1980s, the work of cognitive psychologists (see Kintsch, 1974; van Dijk, 1980; van Dijk & Kintsch, 1983) made this clear.

In a series of studies with teachers, we determined that summarizing strategies have a substantial average effect on student understanding of academic content. Across 17 experimental/control studies that teachers conducted, we found that using summarizing strategies, on average, increased students' understanding of content by 19 percentile points (see Haystead & Marzano, 2009).

Summarizing Strategies That Work

As with all instructional strategies, however, we found that some approaches to summarizing are more effective than others. Five strategies appear to influence students' ability to comprehend text.

Strategy #1: Clarify what's important.

Summarizing strategies that do not emphasize text structure have the least powerful effect. Some summarizing strategies simply ask students to sort content into information that is either important or extraneous. The problem with this approach is that it provides no guidance as to how students might differentiate important from unimportant information.

To be effective, a summarizing strategy should help students discern the inherent structures in a text. For example, a story has a structure: There are main characters; there is rising and falling

action; there are events that take place in certain locations, and so on. If students are aware that these elements are important aspects of stories, they are more likely to identify them and, consequently, more likely to comprehend the stories they read.

Strategy #2: Familiarize students with multiple text structures.

The story structure is familiar to students because they experience stories early on in their lives and because teachers typically teach story structures as a regular part of language arts instruction. Throughout their schooling, however, students will encounter many other kinds of text structures that are more expository in nature. Unless students recognize these structures, they may be less successful at comprehending the expository content in their textbooks and related readings. Important expository text structures include

- **Description structures**, which describe characteristics of a particular person, place, or thing.
- **Generalization structures**, which begin with a general statement like, "There are a wide variety of consequences for breaking federal rules regarding carry-on baggage on commercial airplanes." Examples illustrating the generalization follow.
- **Argument structures**, which begin with a statement that must be proven or supported. Proof or evidence follows the statement. Sometimes qualifiers identify exceptions to the proof or evidence provided. For example, an argument supporting global warming might list pieces of evidence that make the argument valid.
- **Definition Structures**, which begin by identifying a specific term and then describing the general category to which the term belongs, along with specific characteristics of the term that distinguish it from other terms within the category. For example, a text structure might articulate the characteristics of the process of commensalism, first explaining that it is a type





of symbiosis and then showing how it is different from other types of symbiosis.

■ **Comparison structures**, which identify two elements, such as commensalism and mutualism, and list how those elements are similar and dissimilar.

■ **Problem/solution structures**, which begin by describing a problem such as "The problem of the divide in wealth between the upper 10 percent of people in the United States and everyone else can be addressed in a number of ways." Possible solutions follow.

Strategy #3: Help students recognize layers.

Such expository structures will help students comprehend relatively short passages. However, long expository texts have structures layered within structures, and each layer represents a unique comprehension task.

For example, a section of text might start with a general statement and then provide specific examples of that gener-

alization. But the discussion might also include a description of a person, place, or thing or a definition of a specific term.

Knowing that texts have many layers of structures is crucial to unlocking the meaning of extended expository discourse. Without this awareness, students might assume that one structure should organize the content; the presence of multiple structures may confuse them.

Strategy #4: Encourage graphic representations.

Along with identifying text structures, it is helpful for students to represent those structures graphically. For example, a student might represent a description structure graphically by drawing a circle that contains the element described, with spokes emanating from the circle noting the various characteristics describing that element. A student might represent a generalization structure by stating the generalization

at the top of a chart, with the examples indented underneath to the right. The more subordinate an example is to the generalization, the farther the student would indent it to the right.

Strategy #5: Review essential terminology.

Even if a student recognizes that a section of a science text is organized as a generalization pattern about relationships in nature, she will have little chance of comprehending that section if she does not understand important terms used in the text, such as *meiosis*, *mitosis*, *symbiosis* and the like. Teachers should carefully preview texts and ensure that students have at least a basic understanding of important terms.

Making Sense of the Text

Comprehension is crucial to learning—and effective comprehension depends on one's ability to recognize the structures inherent in a text. Spending more time and energy teaching text structures to students and then helping them recognize these structures in their reading can enhance students' ability to comprehend a wide variety of texts. **EL**

References

- Haystead, M. W., & Marzano, R. J. (2009). *Meta-analytic synthesis of studies conducted at Marzano Research Laboratory on instructional strategies*. Englewood, CO: Marzano Research Laboratory.
- Kintsch, W. (1974). *The representation of meaning in memory*. Hillsdale, NJ: Erlbaum.
- van Dijk, T. A. (1980). *Macrostructures*. Hillsdale, NJ: Erlbaum.
- van Dijk, T. A., & Kintsch, W. (1983). *Strategies of discourse comprehension*. Hillsdale, NJ: Erlbaum.

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