

CHAPTER 1

*Reading Comprehension:
Definitions, Research,
and Considerations*



2

CHAPTER 1

*Reading
Comprehension:
Definitions,
Research, and
Considerations*

In defining any literacy-related term, perhaps the first place to look is the *Literacy Dictionary* (Harris & Hodges, 1995). The entry for *comprehension* is one of the longest in the book. Multiple definitions are offered. One deals with the reconstructing of the message of a text. Another focuses on the understanding of individual words; still another deals with the symbolic meaning of an experience. We feel that the following definition offers the most comprehensive and instructionally useful definition of *reading comprehension*:

[Reading comprehension is] the construction of the meaning of a written or spoken communication through a reciprocal, holistic interchange of ideas between the interpreter and the message. . . . The presumption here is that meaning resides in the intentional problem-solving, thinking processes of the interpreter, . . . that the content of the meaning is influenced by that person's prior knowledge and experience. (Harris & Hodges, 1995, p. 39)

Noteworthy in this definition is the word *construction*. Reading comprehension is not simply the recall or regurgitation of information encountered in text. *Reciprocal* implies that the reader brings something to reading comprehension—it's not just the information in the text; the information that the reader already possesses also influences the construction of meaning. And *problem-solving, thinking processes* suggest that the reader is actively involved in attempting to construct meaning. This also insinuates that the interpretation or understanding that a reader may construct may not be the same understanding constructed by another reader of the same text. Readers filter the text through their own background knowledge, biases, and other predispositions that affect how they interpret text.

Indeed, this is the reason that every four years, voters across the United States can hear the very same speeches, read the same editorials, and examine the same analyses by experts and yet be nearly equally divided in their vote for president. They filter all that information through their own existing knowledge, experiences, biases, and other predispositions to come to quite different interpretations on who should be the next leader of the country.

Background Knowledge

The definition presented suggests that a key component of comprehension is the background or prior knowledge that a reader brings to the reading task. That background knowledge can include knowledge of the format and conventions of reading and the printed page, it can include an understanding of the purpose for the reading, and, perhaps most especially, it needs to include some knowledge of the content of the material to be read. Have you ever tried reading a passage for which you either have little background knowledge or are not aware that you should be using it? Understanding that passage can be quite a daunting task.

The importance of background knowledge in reading has been demonstrated in a program of study and research termed *schema theory* (Anderson & Pearson, 1984; Rumelhart, 1980). According to schema theory, comprehension is not only a bottom-up process driven by sensory input of letters, words, and text; it is also a top-down process in which the reader brings his or her own knowledge on a topic and problem-solving skills to the task of making meaning from text. Many studies have demonstrated that readers' background knowledge profoundly affects how well they comprehend what they read (e.g., Adams & Bertram, 1980; Durkin, 1981; Pearson et al., 1979). Moreover, background knowledge is particularly important for inferential comprehension, which involves constructing understandings of information that is not directly stated in the passage but implied. This is because the reader is able to relate the implied information to his or her own background knowledge and prior experiences. Take, for example, the following sentence:

Carefully the shadowy character walked down the deserted alley.

For this sentence create a mental image and answer the following questions: What time of day is it? Is the person who is walking down the alley male or female? What is the age of the person walking? Why is he or she walking down the alley? What is this person feeling? What does the alley look like? What do you see when you look to the left and right? Red brick walls? Do you see a metal fire escape hanging from one of the walls? Is the alley made up of broken concrete? Are there puddles of water on the ground? Are there any smells? Are there any noises you hear?

4

CHAPTER 1

*Reading
Comprehension:
Definitions,
Research, and
Considerations*

You probably did not find it difficult to respond to these questions. Where did you get the information to make your responses? Most likely you pulled that information from your background knowledge. You probably have a schema in your mind for walking down a deserted alley—maybe it comes from actually experiencing such an event or perhaps it comes from watching movies in which a scene such as that is portrayed. No matter how you developed your schema, you used it to infer (or make an educated guess about) information that was directly stated in the sentence. The meaning you have created, even if some of the meaning turns out later to be incorrect, is much more elaborate than the meaning of a reader who only passively read the sentence and went no further than understanding the words themselves.

Clearly, comprehension is more than a matter of reading the words. It needs to involve the reader in actively making decisions, solving problems, and using background knowledge in an attempt to make sense of the passage.

Comprehension Strategies

The reader and what the reader brings to the reading task are important for comprehension. But let's face it—the reader has to be reading something for reading comprehension to occur. The text and the information in the text are also important. Readers need to process the information in the text. This is done, to some extent, through the fluent decoding and understanding of words in the text. These are the bottom-up processes that are driven primarily by one's visual and auditory senses.

In our view, both processes are important, and an interaction between the bottom-up and top-down processes provides the optimal conditions for comprehension to actually take place. A common description of reading comprehension states that comprehension is the process of making connections between the new information in the text and the known information in the reader's head. This description implies that there are strategies that readers use to make the connections (or interact) between the text and their own background knowledge or schemata. These interactions lead to the new schemata (adding to one's background knowledge) or to greater elaborations of existing schemata (making modifications to what one already knows). When schemata are built or altered as a result of these in-

teractive comprehension processes, new learning or comprehension takes place.

These interactive processes that make connections between what the reader knows and the information presented in a text are what we call *comprehension processes*. Your own process of comprehending while you read is so well developed and automatic that you may not be fully aware of the fact that you are actively using your own comprehension strategies while reading. But the fact of the matter is that if you are a good comprehender, you are using strategies to help make sense of what you read.

If you created a mental image while you read the sentence about walking down the alley, you put a comprehension strategy to work. Have you ever read something and said to yourself, "I've had an experience like that in my own life," or "This reminds me of something that I read about a few days ago." Those are both comprehension strategies. Do you ever find yourself thinking about what may happen in the next chapter or part of text? That is a comprehension strategy. Have you ever found yourself retelling or summarizing a passage to a spouse or friend or colleague? When reading an information book, has the passage ever led to you to ask questions that you would like to answer? Or have you ever jotted questions or comments in the margin of a book while reading? Those are all comprehension strategies. And, have you ever come to the point in reading where you discover that you are not understanding the passage as well as you think you should and you decide to reread the passage or to look up some words in the passage for which you are not quite sure of the meaning? That, too, is a comprehension strategy. Indeed, there are many strategies that readers use to help create meaning to texts. Some strategies are used more often than others—some are used with particular kinds of texts, and some are used with all texts. But the fact of the matter is that reading is an active process of constructing meaning that goes well beyond simply reading the words and knowing what the words mean. It is an elaborate dance between the reader and the text in which the reader attempts to filter (or mold) the information from the text through (using) his or her own background knowledge so that the new information can fit within the existing knowledge structures or schema that the reader has in place.

In recent years literacy scholars have attempted to identify comprehension strategies that have been shown through research to facilitate comprehension. In particular, the National Reading Panel (2000) has identified a set of set of research-validated strategies.

6

CHAPTER 1

*Reading
Comprehension:
Definitions,
Research, and
Considerations*

These include mental imagery, comprehension monitoring, cooperative learning, graphic organizers and story structure, question generation and answering, and summarization. Other scientific reviews of the comprehension and learning research have identified other promising strategies for promoting textual understanding. In particular, Marzano, Pickering, and Pollock (2001) noted that identifying similarities and differences, constructing nonlinguistic representations, and generating and testing hypotheses have strong potential for improving students' learning through text. In their research into effective reading instruction, Pressley and Wharton-McDonald (2002) noted several additional strategies they call transactional in nature that have been shown to improve comprehension. In addition to the ones previously mentioned, they identified responding to texts based on prior knowledge and interpreting text. In Chapter 2 we provide a more detailed explanation of each of these processes and suggestions for making these strategies come to life in the classroom.

Levels of Comprehension

Comprehension is indeed a complex process, and there are many ways to examine comprehension. One helpful way to look at comprehension is through the levels or types of comprehension readers do when reading. Thomas Barrett (Clymer, 1968) developed a simple three-level taxonomy that is useful in understanding how readers comprehend. The first level is *literal or factual comprehension*. This refers to the simple understanding of the information that is explicitly stated in the text. In the sentence, *The dog chased the three children across the field*, the literal comprehension involves knowing that it was a dog that was chasing, that the dog was chasing three children, and that the chase occurred in a field. Applying the definition of comprehension presented earlier in this chapter, literal comprehension is heavily reliant on the information presented in the text.

Barrett's second level, *inferential comprehension*, refers to information that relies on information that is implied, or not explicitly stated in the text. In the sentence example, inferential comprehension allows the reader to infer or guess what kind of dog was chasing the children, if the dog was barking or not, the ages and gender of the children, and the nature of the field that the children and dog were

crossing. These pieces of information were not explicitly stated in the text; however, the reader could call up his or her background knowledge about dogs chasing children to make reasonable guesses about the scene. These are inferences that most readers can agree on. Most readers, for example, would agree that the dog was barking and that the children were running. From the definition of comprehension presented earlier, inferential comprehension can be seen as relying significantly on both the text and the reader.

Barrett's third level, *critical or evaluative comprehension*, involves the reader making judgments about various aspects of the text—the literary quality of the text, the competency of the author, the righteousness of the characters and their actions, and so on. This level of comprehension obviously relies on the text, but to an even greater extent, it requires the reader to make personal judgments about the text. In a sense, these are inferences also, but they are highly dependent on the individual and unique background of the reader. One reader may love the passage, and another may have disliked it intensely. Who is correct in their judgment? We'd have to say both readers. A fine example of critical comprehension is the presidential election that we referred to earlier. Although the positions, backgrounds, and expert opinions may be known by the entire electorate, the decision or judgment made by the voters is usually widely split—never unanimous.

All three levels of comprehension are important and need to be fostered. In the past, however, literal comprehension was the primary focus of instruction. Perhaps that is because literal comprehension is easier for a teacher to deal with—the facts are indisputable, and questions that focus on literal comprehension are simple to develop and evaluate. Literal comprehension, however, requires little in the way of engaged thinking and problem solving on the part of the reader.

It is the second and third levels of comprehension, inferential and critical, that challenge the reader to actively engage his or her background knowledge and reasoning skills to construct meaning—meaning that is not simply stated in the written text but meaning that can be discussed and debated. These are the levels that make reading comprehension a thinking task rather than simply a recall task. Research into effective classroom instruction in reading has found that effective teachers are more likely to focus on inferential and critical comprehension, the higher levels of comprehension, than less effective teachers.

7

CHAPTER 1

*Reading
Comprehension:
Definitions,
Research, and
Considerations*

8

CHAPTER 1

*Reading
Comprehension:
Definitions,
Research, and
Considerations*

Text Types

The nature of the text students are asked to read also needs to be given consideration for comprehension instruction. First, teachers should ensure that the text is readable for students—it must be written at a level that is commensurate with students' reading skills. Teachers also need to make sure that the general content of the passage is appropriate for students, and that the general format (font, print size, headings, graphics, etc.) is within students' ability to handle.

Perhaps most important, teachers need to be sensitive to the general type or genre of text given to students to read. Elementary classrooms tend to have stories or narrative as the predominant genre. This is usually followed by informational or expository text. Bringing up the rear are other forms of text such as poetry, rhetoric, scripts, song lyrics, jokes and riddles, and so on. Each of these genres poses different comprehension demands on the reader. For example, the structure of texts varies by genre—narratives tend to be linear and chronological in their structure; informational texts tend to be hierarchical and logical in their structure. Poetry can have a different structure than the previous two. Students expecting to read narrative but who are given informational material may have considerable difficulty in making meaning.

Optimal reading instruction provides students with exposure to a wide variety of text types and genre. The job of the teacher, then, is to help students work through the variety of text types and structures they may encounter, from the large and obvious differences between texts to the more subtle and nuanced variations that may still have a profound impact on if and how a reader comprehends a text.

Teaching Comprehension

As you can probably infer from the previous presentation, the teaching of comprehension can be quite involved and complex. Teachers need to ensure that students have basic prerequisite decoding and fluency skills and sufficient vocabulary and background knowledge for the text to be read; they need to choose texts appropriately—the right level of difficulty and a good balance between narrative, informational, and other genres; and they need to choose and be knowl-

edgeable about various comprehension strategies. Beyond these, however, teachers need to be aware of the appropriate level of support or scaffolding students need in the process of reading and learning to use various comprehension strategies.

Pearson and Gallagher (1983) propose a model of instructional support, called the Gradual Release of Responsibility Model, that we find very compelling and that we hope you will seriously consider in your own approach to instruction. The model proposes three levels or phases of teacher–student responsibility in any sort of learning, but in particular learning to comprehend from text. In the initial phase, the teacher takes on the bulk of the responsibility for the lesson as she or he models for students the processes and strategies that students are to learn. In practice, this is done by the teacher describing the process or strategy, presenting analogies of the process from other tasks with which students are familiar, and implementing and displaying the process for students to view on their own. Throughout this modeling, the teacher often comments on his or her own implementation—in other words, what the teacher is doing and what he or she is thinking. In this process, often called *think aloud*, the teacher takes that which is normally invisible and makes it visible through actions and verbalizations. The teacher may have to model the process in this way several times over the course of several days.

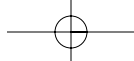
The second phase of the model is joint responsibility, where both the teacher and students take responsibility for task implementation. They may do the task together or do different portions of the task. Or students may engage in the task under the watchful eye of the teacher who observes, gives feedback and evaluation, and encourages student work. Again, the guided practice may require a number of attempts over several days. Throughout the second phase of the model, the teacher is slowly pulling away from the task, allowing the students to take more and more responsibility.

The third and final phase has the students in complete control of the implementation of the process. They work independently with minimal support from the teacher, unless requested. The goal for the students is to develop skill and fluency in the implementation of a particular strategy and integrate it into their own repertoire of reading strategies. At this point, the students have developed ownership of that strategy and should be able to apply whenever they feel necessary.

Comprehension is not something that happens automatically in the mind of the reader as he or she engages with print, even

*Reading
Comprehension:
Definitions,
Research, and
Considerations*

though it may seem that way to adult proficient readers. Reading comprehension is an active, thoughtful, strategic, and multidimensional process that readers employ to take in new meaning from the written text and fit (or file) it into their existing knowledge structures (files). It is a process by which human beings learn. It is the job of teachers to help students become aware of, or acquire, and employ this process in their own reading.



Professional Development Suggestions



ACED: Analysis, Clarification, Extension, Discussion

I. REFLECTION (10 to 15 minutes)

ANALYSIS:

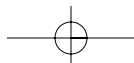
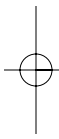
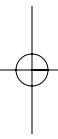
- What, for you, were the most interesting and/or important ideas in this introduction to reading comprehension?

- What information was new to you (or different from your own prior knowledge about reading comprehension)?

CLARIFICATION:

- Did anything surprise you? Confuse you? Cause you to stop and reflect?

- Was there anything missing from or overlooked in this presentation on reading comprehension?



12

CHAPTER 1

*Reading
Comprehension:
Definitions,
Research, and
Considerations*

EXTENSION:

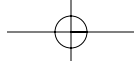
- What new questions or wonderings do you have about reading comprehension?

- Can you relate any information presented in this chapter to your own previous teaching experiences or to students you have taught in the past?

- What new insights do you have about reading comprehension that you developed as a result of reading this chapter?

II. DISCUSSION (20 minutes)

- Form groups of 4 to 6 members.
- Appoint a *facilitator (timer)* and *recorder*.
- Share responses. Make sure that each person has shared his or her responses to each category (Analysis/Clarification/Extension).
- Help each other with any areas of confusion.



- Answer and/or discuss questions raised by group members.
- On chart paper, the recorder should summarize the main discussion points and identify issues or questions the group would like to raise for general discussion.

III. APPLICATION (10 minutes)

- Based on your reflection and discussion, how might you apply what you have learned from this introduction to reading comprehension?

