

Reader's Handbook Research Base

by April D. Nauman, Ph.D.

Students in the elementary grades face new challenges in reading. In the fourth through fifth grades, the amount of assigned reading increases. Students must comprehend and remember information in content area textbooks packed with new concepts and vocabulary. In addition, students must make the transition from reading children's books to studying classic adult literature, which contains more complex story structures, characters, and themes. Students must accomplish all this with less direct classroom reading instruction, working more independently than in the past. As the tasks of reading become more difficult, a strong grasp of reading and study strategies becomes essential to academic achievement.

Current research shows that good reading is strategic reading: Successful readers use a variety of strategies to construct the meaning of the text (Pearson, Roehler, Dole, & Duffy, 1992). These strategies include connecting what is read to prior knowledge, monitoring understanding, distinguishing important from less important information, self-questioning, and making inferences during and after reading. Less successful readers often lack knowledge of or control over such strategies, not quite understanding when or how to use them to learn from text (Vacca & Vacca, 2002). Fortunately, research also shows that less capable readers can be taught these strategies, resulting in better reading comprehension (e.g., Pressley, 2000).

The *Reader's Handbook* for grades 4–5 is a student resource full of reading and study strategies endorsed by researchers, teacher educators, and classroom teachers. Some of the strategies included have been used successfully for years; others are new, groundbreaking approaches that enhance critical reading of and student engagement in text. The strategies given are applied to a wide range of genres, from textbooks to popular media to literature. Because it can be used without constant teacher guidance, the *Reader's Handbook* promotes student independence and responsibility for gaining control of the reading and study strategies needed to succeed in school.

Pearson, P. D., Roehler, L. R., Dole, J. A., & Duffy, G. G. (1992). Developing expertise in reading comprehension. In S. J. Samuels & A. E. Farstrup (Eds.), *What research has to say about reading instruction*. Newark, DE: International Reading Association.

Pressley, M. (2000). Comprehension instruction in elementary school: A quarter-century of research progress. In B. M. Taylor, F. F. Graves, and P. van den Broek (Eds.), *Reading for meaning: Fostering comprehension in the middle grades*. Newark, DE: International Reading Association.

Vacca, R. T., & Vacca, J. L. (2002). *Content area reading: Literacy and learning across the curriculum* (7th ed.). Boston: Allyn & Bacon.

Introduction

Chapter 1 introduces the reading process. To help students better understand what happens when they read, they are instructed to visualize their own reading process and draw it in a series of pictograms. This visualization activity elicits students' thoughts and feelings about the process of reading (Lifford, Byron, Eckblad, & Ziemian, 2000).

In a study of sixth graders, Lifford and her colleagues (2000) found that students' drawings not only provided teachers with insight into how their students read but also helped the students become more aware of their own mental processes during reading. These sixth graders portrayed a wide range of reading strategies, including rereading, using context to infer the meanings of unknown words, using the dictionary, note-taking, and responding in journals. In accord with previous research (e.g., Vacca & Vacca, 2002), Lifford and her colleagues found that the more successful readers depicted more strategies than the less capable readers did. Some of the sixth graders in the study relied on a narrow range of strategies. By becoming more aware of their own reading processes, students can see what they need to do to improve.

To increase students' understanding of the reading process, the *Reader's Handbook* likens it to the writing process. The writing process is the most common way of teaching writing in schools today. Initially popularized by Donald Graves (1991, 1994), Lucy Calkins (1994), and others (e.g., Hillocks, 1987), this approach is endorsed by virtually all major modern-day teacher educators and researchers (e.g., Cooper, 2000). The writing process approach enables children to gain control of the complex task of writing by identifying the stages that expert writers go through while working. The complex task of reading can be simplified in much the same way.

Calkins, L. M. (1994). *The art of teaching writing*. Portsmouth, NH: Heinemann.

Cooper, J. D. (2000). *Literacy: Helping children construct meaning* (4th ed.). Boston: Houghton Mifflin.

Graves, D. H. (1991). *Build a literate classroom*. Portsmouth, NH: Heinemann.

Graves, D. H. (1994). *A fresh look at writing*. Portsmouth, NH: Heinemann.

Hillocks, G., Jr. (1987). Synthesis of research on teaching writing. *Educational Leadership*, 44, 71–82.

Lifford, J., Byron, B., Eckblad, J., & Ziemian, C. (2000). Reading, responding, reflecting. *English Journal*, 89, 46–57.

Vacca, R. T., & Vacca, J. L. (2002). *Content area reading: Literacy and learning across the curriculum* (7th ed.). Boston: Allyn & Bacon.

The Reading Process

Chapter 2 of the *Reader's Handbook* more fully elaborates the reading process. Before reading, students are to set a purpose, preview, and plan. During reading, students read with a purpose and connect with the text. After reading, students pause and reflect, reread, and remember. Research shows that purpose setting and previewing a text before reading can help less capable readers become skilled, strategic readers (Heilman, Blair, & Rupley, 2002; Paris, Lipson, & Wilson, 1994). Purpose setting, previewing, and planning enable students to apply reading strategies better during and after reading (Heilman et al., 2002). For example, the student who determines his or her purpose before reading can then use that purpose to identify and focus on the most important information in the text.

Connecting with text—a strategy to use during reading—promotes student engagement with the material. Successful readers connect with or relate to texts in a variety of ways, whereas less capable readers do not (Wilhelm, 1997). Making connections to personal experiences, other texts, and other subjects is the route to activating prior knowledge, and comprehension relies on linking what is read to what is already known (Ruddell & Ruddell, 1994).

After reading, students are to pause and reflect, reread, and remember. Educators and researchers have long recognized the need for students to look back at the text to reread or review what they did not understand during reading (Heilman et al., 2002). Rereading is especially important for learning from content area textbooks (Anderson & Armbruster, 1984) and for struggling readers (Vacca & Vacca, 2002). The Pause and Reflect step after reading is integral to comprehension and strategic reading, as students must consider whether they met their purpose for reading. Students also identify parts of the text that were confusing and need to be reread.

Anderson, T. H., & Armbruster, B. B. (1984). Studying. In P. D. Pearson, R. Barr, M. L. Kamil, & P. Mosenthal (Eds.), *Handbook of reading research* (pp. 657–679). New York: Longman.

Heilman, A. W., Blair, T. R., & Rupley, W. H. (2002). *Principles and practices of teaching reading* (10th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

Paris, S. G., Lipson, M. Y., & Wilson, K. K. (1994). Becoming a strategic reader. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical models and process of reading* (4th ed.). (pp. 788–810). Newark, DE: International Reading Association.

Ruddell, R. B., & Ruddell, M. R. (1994). Language acquisition and literacy process. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading*, (4th ed.). (pp. 448–468). Newark, DE: International Reading Association.

Vacca, R. T., & Vacca, J. L. (2002). *Content area reading: Literacy and learning across the curriculum* (7th ed.). Boston: Allyn & Bacon.

Wilhelm, J. (1997). *“You gotta BE the book”*: Teaching engaged and reflective reading with adolescents. New York: Teachers College Press.

Reading Know-how

Chapter 3, “Reading Know-how,” explains key skills that students need to construct meaning while reading. Making inferences, reading actively, and finding the main idea are essential to constructing meaning (e.g., Cooper, 2000).

Research shows that readers must have inferential and reasoning skills to connect information in the text to relevant prior knowledge (van den Broek & Kremer, 2000). Prior knowledge alone is not enough; students must be able to infer—to use their prior knowledge to “fill in the gaps” in the text. Instruction in making inferences enhances reading comprehension (e.g., Vacca & Vacca, 2002). Drawing conclusions, comparing and contrasting, and evaluating are other components of reading know-how.

In the *Reader’s Handbook*, six ways are suggested for reading actively: marking the text, asking questions, making predictions, reacting or connecting to reading, visualizing, and clarifying, all techniques used by expert readers (Pearson, Roehler, Dole, & Duffy, 1992). Making predictions during reading is especially important for students because it keeps them interested and engaged in increasingly difficult texts. Predicting is one of a set of strategies recommended for students who struggle with reading (Dana, 1989).

Questioning during reading also promotes engagement with the text and improves meaning construction (Davey & McBride, 1986; Singer & Donlan, 1982). Questioning and predicting while reading enable students to make essential connections to prior knowledge. “Reading Know-how” also includes the important skill of finding the main idea. Research shows that

knowledge of text structure helps students identify important information in a reading (Dole, Duffy, Roehler, & Pearson, 1991). Almost all teachers recognize the value of teaching text structure to improve comprehension and retention (e.g., Cooper, 2000). Accordingly, the *Reader's Handbook* defines and gives examples of different paragraph and text structures, which will help students develop an awareness of text patterns (Horowitz, 1985). This, in turn, will enhance their ability to identify important information and improve their comprehension.

Cooper, J. D. (2000). *Literacy: Helping children construct meaning* (4th ed.). Boston: Houghton Mifflin.

Dana, C. (1989). Strategy families for disabled readers. *Journal of Reading*, 33, 30–35.

Davey, B., & McBride, S. (1986). Effects of question generating training on reading comprehension. *Journal of Educational Psychology*, 78, 256–262.

Dole, J. A., Duffy, G. G., Roehler, L. R., & Pearson, P. D. (1991). Moving from the old to the new: Research on reading comprehension instruction. *Review of Educational Research*, 61, 239–264.

Horowitz, R. (1985). Text patterns. *Journal of Reading*, 28, 448–454.

Pearson, P. D., Roehler, L. R., Dole, J. A., & Duffy, G. G. (1992). Developing expertise in reading comprehension. In S. J. Samuels and A. E. Farstrup (Eds.), *What research has to say about reading instruction*. Newark, DE: International Reading Association.

Singer, H., & Donlan, D. (1982). Active comprehension: Problem-solving schema with question generation for comprehension of complex short stories. *Reading Research Quarterly*, 17, 166–186.

Vacca, R. T., & Vacca, J. L. (2002). *Content area reading: Literacy and learning across the curriculum* (7th ed.). Boston: Allyn & Bacon.

van den Broek, P., & Kremer, K. E. (2000). The mind in action: What it means to comprehend during reading. In B. M. Taylor, M. F. Graves, & P. van den Broek (Eds.), *Reading for meaning: Fostering comprehension in the middle grades* (pp. 1–31). New York: Teachers College Press.

Reading Textbooks

Reading content area textbooks is hard for most elementary school students. Chapter 4, “Reading Textbooks,” provides important strategies to effectively learn from these books, including an array of note-taking techniques.

Research shows that most students’ difficulty with textbooks results from a lack of knowledge about expository text structures (Cheek, Flippo, & Lindsey, 1997). Expository text structure varies more widely than narrative text structure (Cooper, 2000). Students’ general reading ability does not necessarily indicate how well they will comprehend texts in the content areas (Leal & Moss, 1999). According to Heilman and colleagues (2002), learning from textbooks requires specific skills and strategies for reading in different subjects; study skills; and skills and strategies for collecting, analyzing, and evaluating data.

Note-taking is widely acknowledged as a valuable way to learn from textbooks (e.g., Vacca & Vacca, 2002). The *Reader's Handbook's* “structured note” techniques, which require students to take notes using different graphic organizers, enable students to identify important ideas and organize the information (Smith & Tompkins, 1988). Structured note-taking techniques are more effective than simply jotting down isolated facts because students must think about the text and decide what information and ideas most important (Alvermann & Moore, 1991; Anderson & Armbruster, 1984).

- Alvermann, D. E., & Moore, D. W. (1991). Secondary schools. In R. Barr, M. L. Kamil, P. B. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. 2). (pp. 951–983). New York: Longman.
- Anderson, T. H., & Armbruster, B. B. (1984). Studying. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 657–679). New York: Longman.
- Cheek, E. H., Flippo, R. F., & Lindsey, J. D. (1997). *Reading for success in elementary schools*. Dubuque, IA: Brown & Benchmark.
- Cooper, J. D. (2000). *Literacy: Helping children construct meaning* (4th ed.). Boston: Houghton Mifflin.
- Heilman, A. W., Blair, T. R., & Rupley, W. H. (2002). *Principles and practices of teaching reading* (10th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Leal, D., & Moss, B. (1999). Encounters with information text: Perceptions and insights from four gifted readers. *Reading Horizons, 40*, 15–22.
- Smith, P. L., & Tompkins, G. E. (1988). Structured note taking: A new strategy for content area readers. *Journal of Reading, 32*, 46–53.
- Vacca, R. T., & Vacca, J. L. (2002). *Content area reading: Literacy and learning across the curriculum* (7th ed.). Boston: Allyn & Bacon.

Reading Nonfiction

Chapter 5 presents strategies for understanding other nonfiction, such as essays, biographies, news stories, and magazine articles. Summarizing, reading critically, and questioning the author are defined and illustrated.

Summarizing requires readers to reduce a text to its main ideas, which necessitates reflection on and interaction with the text. Readers who can summarize are able to differentiate important from less important information (Heilman, Blair, & Rupley, 2002). Less capable readers can learn this strategy and improve comprehension (Brown & Day, 1983).

Critical reading involves reflecting on what is being read, suspending judgment, reading with an open mind, and then deciding what to believe or do (Ennis, 1989). Critical readers can identify the author’s purpose and point of view, as well as distinguish fact from opinion (Roe, Stoodt, & Burns, 1998). Critical reading raises students’ awareness that all texts are written by ordinary people with their own attitudes and understandings of the world. Through reading critically, students question and challenge the author and deepen engagement in the text.

Questioning the author also raises students’ awareness of the writer behind the text. Using this approach, students continually ask themselves, “What does the author mean?” (Beck, McKeown, Hamilton, & Kucan, 1997; Beck, McKeown, Worthy, Sandora, & Kucan, 1996). Hypotheses about the text are a reader’s updates as reading progresses. The interactions that occur between reader and text enhance engagement and comprehension.

Beck, I. L., McKeown, M. G., Hamilton, R., & Kucan, L. (1997). *Questioning the author: An approach for enhancing student engagement with text*. Newark, DE: International Reading Association.

Beck, I. L., McKeown, M. G., Worthy, J., Sandora, C. A., & Kucan, L. (1996). Question the author: A year long classroom implementation to engage students with text. *Elementary School Journal, 96*, 385–414.

- Brown, A. L., & Day, J. D. (1983). Macro rules for summarizing texts: The development of expertise. *Journal of Verbal Learning and Verbal Behavior*, 22, 1–14.
- Dana, C. (1989). Strategy families for disabled readers. *Journal of Reading*, 33, 30–35.
- Ennis, R. (1989). Critical thinking and subject specificity: Clarification and needed research. *Educational Researcher*, 18, 4–10.
- Heilman, A. W., Blair, T. R., & Rupley, W. H. (2002). *Principles and practices of teaching reading* (10th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Roe, B. D., Stoodt, B. D., & Burns, P. C. (1998). *The content areas* (6th ed.). Boston: Houghton Mifflin.

Reading Fiction

Chapter 6 provides strategies for understanding folktales and novels that can help elementary school students successfully transition to the more demanding study of classical adult literature. To be successful comprehenders of classic literature, students need a good grasp of theme, characterization, setting, and story structure.

Understanding the basic form and variations of story structure enables students to comprehend and recall stories. Basic story structure consists of a setting, a problem, an attempt to resolve the problem, and an outcome (Freedle, 1979). When readers use their knowledge of story structure, they are better able to retain information in their memory until it makes sense and to add information as they read (Gordon & Braun, 1983).

Graphic organizers are widely used to reinforce students' comprehension of basic story structure as well as help them analyze particular stories (e.g., Cooper, 2000). As with expository texts, using graphic organizers focuses students' attention on the most important aspects of narratives. Simple graphic organizers, such as the Story Organizer or Storyboard, help students sort and organize key events. Other popular graphic organizers for literature are the Character Map, Inference Chart, Setting Chart, Theme Diagram, Plot Diagram, and Timeline.

Synthesizing is another essential strategy for reading literature successfully. This strategy involves gathering up all the important parts of a work of literature and fitting them together, like a puzzle, to show the “big picture.” Synthesizing enables students to make reasonable hypotheses about themes in literature, a skill that becomes increasingly important in higher-level literature classes (Phelan, 1989).

- Cooper, J. D. (2000). *Literacy: Helping children construct meaning* (4th ed.). Boston: Houghton Mifflin.
- Freedle, R. P. (1979). *New directions in discourse processing*. Hillsdale, NJ: Lawrence Erlbaum.
- Gordon, C. J., & Braun, C. (1983). Using story schema as an aid to reading and writing. *The Reading Teacher*, 2, 116–121.
- Phelan, J. (1989). *Reading people, reading plots: Character, progression, and the interpretation of narrative*. Chicago: University of Chicago Press.

Reading Poetry

Most elementary school students find reading and interpreting poetry difficult, even frustrating. As in the preceding chapter, the strategies in Chapter 7 will facilitate students' transition to the more demanding study of poetry in the higher grades.

Poetry, like other forms of literature, is meant to evoke personal feelings and thoughts in readers. Valuing students' personal responses to poetry and other literature is essential for fostering an appreciation of and interest in literature. Reader response theory, especially as elaborated by Louise Rosenblatt (1978), has legitimized the role of individual, subjective thoughts and feelings in the study of poetry and literature.

Though the reader's subjective responses are an essential part of literary interpretation (Rosenblatt, 1978), this does not mean that "anything goes." Careful attention to the words, images, patterns, and structure of a poem is also essential. The *Reader's Handbook* presents the strategy of close reading to scaffold students' careful readings of a poem. Students are instructed not only to read "word by word and line by line" but also to read the poem three or four times to facilitate close reading.

The *Reader's Handbook* unites reader response and close reading in the Double-entry Journal tool (Berthoff, 1981). In this organizer, a notebook page is divided into two columns, and students record quotations from the poem in the first and their thoughts and feelings about the quotations in the second. Double-entry Journals are effective with all students, including those at risk (Coley & Hoffman, 1990).

Paraphrasing is especially helpful for students' understanding of poetry, which more often than not seems cryptic to them and unconnected to anything real. When students rewrite lines of a poem in their own words, they begin to see action and characterization. Paraphrasing is one of several activities that encourages student response to literature (Roe, Stoodt, & Burns, 1998).

Berthoff, A. E. (1981). *The making of meaning*. Montclair, NJ: Boynton/Cook.

Coley, J. D., & Hoffman, D. M. (1990). Overcoming learned helplessness in at-risk readers. *Journal of Reading*, 33, 497–502.

Roe, B. D., Stoodt, B. D., & Burns, P. C. (1998). *The content areas* (6th ed.). Boston: Houghton Mifflin.

Rosenblatt, L. M. (1978). *The reader, the text, the poem: The transactional theory of the literary work*. Carbondale, IL: Southern Illinois University Press.

Reading Drama

Reading drama can also be difficult for elementary school students. Chapter 8 provides strategies and tools for keeping track of the characters, action, and meaning.

Drama has several features that make it different from other literary forms and difficult to read (Roe, Stoodt, & Burns, 1998). For example, plays include no detailed narrative descriptions of characters or setting. The story is conveyed solely through dialogue. A unique textual feature in plays is the stage directions—often in italics and parentheses—which must be read and comprehended to understand character motivation and plot.

Students must also attend to the character name printed at the beginning of the lines so they don't lose track of who is speaking and what is going on. Plays with many characters, such as those of Shakespeare, can be quite confusing.

Summarizing while reading a play enables students to keep track of the characters and action. Summarizing—pulling together the main elements in a text—is a key strategy of effective readers (Cooper, 2000). Providing guidelines can help students develop this strategy (Brown & Day, 1983). The Web graphic organizer presented in the *Reader's Handbook* provides the structure necessary for students to develop summarizing abilities.

Brown, A. L., & Day, J. D. (1983). Macro rules for summarizing texts: The development of expertise. *Journal of Verbal Learning and Verbal Behavior*, 22, 1–14.

Cooper, J. D. (2000). *Literacy: Helping children construct meaning* (4th ed.). Boston: Houghton Mifflin.

Roe, B. D., Stoodt, B. D., & Burns, P. C. (1998). *The content areas* (6th ed.). Boston: Houghton Mifflin.

Reading on the Internet

Chapter 9 provides strategies to help students read on the Internet. Though the Internet is a valuable source of information for students (Troutner, 2000), Internet reading poses challenges that many educators do not yet fully appreciate. For example, though reading email usually does not differ greatly from reading a letter on paper, reading a website is extremely different from reading a book chapter. In website reading, the eye jumps from one spot to another in any direction. Readers can easily get lost or sidetracked while reading a website.

Students who are first learning about the Internet can experience “information overload” (Hawes, 1998). Instruction in how to analyze the information found on the Internet is necessary. Hawes (1998) recommends a list of questions, including questions about the authors' points of view, authors' purposes, and authors' proofs for their viewpoints, all of which promote critical reading.

Ryder and Graves (1997) concur that critical thinking is an essential skill for successful Internet use. The Internet's vast amount of readily accessible information is an advantage but comes at the cost of being largely unrestricted. The challenge is to “make qualitative judgments about the accuracy and reliability” of this information (Ryder & Graves, 1997).

The *Reader's Handbook* stresses the need for critical reading of information on the Internet. Critical reading is the ability to evaluate the material for accuracy, bias, and reliability. Reflecting, suspending judgment initially, and deciding what to believe are essential components (Ennis, 1989). Students who read critically are alert to the author's purpose and distinguish between fact and opinion (Roe, Stoodt, & Burns, 1998). The *Reader's Handbook* scaffolds students' ability to critically read Internet material.

Ennis, R. (1989). Critical thinking and subject specificity: Clarification and needed research. *Educational Researcher*, 18, 4–10.

Hawes, K. S. (1998). Reading the Internet: Conducting research for the virtual classroom. *Journal of Adolescent and Adult Literacy*, 41, 563–566.

Roe, B. D., Stoodt, B. D., & Burns, P. C. (1998). *The content areas* (6th ed.). Boston: Houghton Mifflin.

Ryder, R. J., & Graves, M. F. (1997). Using the Internet to enhance students' reading, writing, and information-gathering skills. *Journal of Adolescent and Adult Literacy*, 40, 244–254.

Troutner, J. (2000). Web wonders. *Teacher Librarian*, 27, 39–42.

Reading Graphics

The ability to read graphics is important in learning from textbooks. Helping students learn to read graphics is an important goal in literacy instruction (Fry, 1981). Chapter 10 provides strategies that enable middle school students to read charts, graphs, tables, and diagrams.

A variety of graphics is used in different content area textbooks (Roe, Stoodt, & Burns, 1998). Because graphics are abstract and often oversimplify or appear to distort information (Roe et al., 1998), deciphering them can be confusing. However, the need to read graphics accurately is likely to become increasingly important.

Paraphrasing is a useful strategy for reading graphics. This skill requires students to think about the information in the graphics and translate it into their own words. Research shows that paraphrasing increases students' comprehension and recall of content area material and improves vocabulary (Shugarman & Hurst, 1986). Students need support, as is provided in the *Reader's Handbook*, to learn this skill (Roe et al., 1998).

Fry, E. (1981). Graphical literacy. *Journal of Reading*, 24, 383–390.

Roe, B. D., Stoodt, B. D., & Burns, P. C. (1998). *The content areas* (6th ed.). Boston: Houghton Mifflin.

Shugarman, S. L., & Hurst, J. B. (1986). Purposeful paraphrasing: Promoting a nontrivial pursuit for meaning. *Journal of Reading*, 29, 396–399.

Reading for Tests

Test reading presents a unique set of challenges for elementary school students. Chapter 11 shows students how to prepare for tests and provides useful strategies for helping them read tests successfully.

Challenges to reading tests include students' own feelings of anxiety, which is distracting and a hindrance to comprehension. No matter what type of test the student is taking, time is limited. Precision in understanding what the questions are asking is essential. Some tests require students to read, comprehend, and answer questions on new material. On multiple-choice tests, all possible answers must be read and understood. In addition, question types vary from one test to another, as do instructions on how to answer the questions.

The *Reader's Handbook* presents the strategy of Question-Answer Relationships (QAR) to help students tackle the challenges of test reading. QAR enables students to identify where they may find the answers to certain questions (Pearson & Johnson, 1978; Raphael, 1986). Students learn that some answers will be directly in the text, while others will be implicitly in the text, requiring students to think and search. Still other questions require students to draw more from their prior knowledge. Raphael (1982, 1984, and 1986) has termed these

question types “right there,” “think and search,” “author and you,” and “on your own.” Research shows that understanding the relationship between questions and answers increases student achievement (Vacca & Vacca, 2002).

Pearson, P. D., & Johnson, D. (1978). *Teaching reading comprehension*. Fort Worth, TX: Holt, Rinehart, & Winston.

Raphael, T. E. (1982). Question-answering strategies for children. *Reading Teacher*, 36, 186–191.

Raphael, T. E. (1984). Teaching learners about sources of information for answering comprehension questions. *Journal of Reading*, 27, 303–311.

Raphael, T. E. (1986). Teaching question-answer relationships. *Reading Teacher*, 39, 516–520.

Vacca, R. T., & Vacca, J. L. (2002). *Content area reading: Literacy and learning across the curriculum* (7th ed.). Boston: Allyn & Bacon.

Improving Vocabulary

Chapter 12 focuses on ways for students to increase their vocabulary knowledge. Knowledge of word meanings is strongly associated with reading comprehension (Anderson & Freebody, 1981; Davis, 1971). However, improving vocabulary knowledge and comprehension requires much more than simply teaching a few words from the material before a reading (Nagy, 1988).

Research on how children acquire vocabulary is extensive (Beck & McKeown, 1991). Findings show that children develop vocabulary knowledge through wide reading (Fielding, Wilson, & Anderson, 1986; Nagy & Herman, 1987); that students benefit from instruction on how to use context clues to infer word meanings (Jenkins, Stein, & Wysocki, 1984; Sternberg, 1987); and that, because context clues are often not helpful, dictionary skills are needed (Schatz & Baldwin, 1986).

The *Reader’s Handbook* encourages students to become active word learners. The *Reader’s Handbook* explains how to become a “context clue expert,” in accord with research showing that children need to learn strategies for independently inferring word meanings from context (e.g., Graves, 1987). The *Reader’s Handbook* provides authentic text examples of context clues, rather than contrived passages that can give students an unrealistic idea that this process is easy. The examples given demonstrate different types of context clues: definitions or synonyms, concrete examples, contrast clues, description clues, words or phrases that modify, conjunctions that show relationships and connect ideas, repeating words, and implied meanings.

Because learning how to use context clues alone is not adequate to build vocabulary (Schatz & Baldwin, 1986), the *Reader’s Handbook* also covers dictionary skills. Other approaches found to be beneficial and included in the *Reader’s Handbook* are word analysis into roots and affixes (e.g., Rupley & Blair, 1988) and graphic organizers for word learning (e.g., Cooper, 2000).

- Anderson, R. C., & Freebody, P. (1981). Vocabulary knowledge. In J. T. Guthrie (Ed.), *Comprehension and teaching: Research reviews*. Newark, DE: International Reading Association.
- Beck, I. L., & McKeown, M. G. (1991). Conditions of vocabulary acquisition. In R. Barr, M. L. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. 2). (pp. 789–814). New York: Longman.
- Cooper, J. D. (2000). *Literacy: Helping children construct meaning* (4th ed.). Boston: Houghton Mifflin.
- Davis, F. (1971). Psychometric research in reading comprehension. In F. Davis (Ed.), *Literature of research in reading with emphasis on models*. Brunswick, NJ: Rutgers University Press.
- Fielding, L. G., Wilson, P. T., & Anderson, R. C. (1986). A new focus on free reading: The role of trade books in reading instruction. In T. E. Raphael (Ed.), *Contexts of school-based literacy* (pp. 149–160). New York: Random House.
- Graves, M. F. (1987). The roles of instruction in fostering vocabulary development. In M. G. McKeown & M. E. Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 165–184). Hillsdale, NJ: Lawrence Erlbaum.
- Jenkins, J. R., Stein, M., & Wysocki, K. (1984). Learning vocabulary through reading. *American Education Research Journal*, 21, 767–788.
- Nagy, W. E. (1988). *Teaching vocabulary to improve reading comprehension*. Newark, DE: International Reading Association.
- Nagy, W. E., & Herman, P. A. (1987). Breadth and depth of vocabulary knowledge: Implications for acquisition and instruction. In M. G. McKeown & M. E. Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 19–35), Hillsdale, NJ: Lawrence Erlbaum.
- Rupley, W. H., Logan, J. W., & Nichols, W. D. (1999). Vocabulary instruction in a balanced reading program. *The Reading Teacher*, 52, 338–347.
- Schatz, E. K., & Baldwin, R. S. (1986). Context clues are unreliable predictors of word meanings. *Reading Research Quarterly*, 21, 439–453.
- Sternberg, R. J. (1987). Most vocabulary is learned from context. In M. G. McKeown & M. E. Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 89–105). Hillsdale, NJ: Lawrence Erlbaum.

Reader’s Almanac

The *Reader’s Handbook* ends with a Reader’s Almanac, which reviews the strategies and their uses and includes an extensive list of root words, prefixes, and suffixes for vocabulary development. With concise definitions and explanations of when to use the strategies, the Almanac serves as a useful quick reference, enabling students to independently review key strategies.

In addition to the strategy review, the Almanac provides a list and review of “reading tools”—different types of graphic organizers and note-taking techniques that scaffold students’ comprehension and ability to analyze, evaluate, and recall the information they read. These tools include research-supported methods, such as K-W-L (Ogle, 1986, 1989), Storyboards (Tompkins, 1998), Double-entry Journals (Berthoff, 1981), and Webs (Bromley, 1996).

Research shows that good comprehenders are strategic readers who adjust their reading according to purpose and text type (Anderson, Hiebert, Scott, & Wilkinson, 1985). Expert readers use a variety of strategies to construct meaning before, during, and after reading (Paris, Wasik, & Turner, 1991). Students who lack knowledge of or ability to use strategies—who feel unable to overcome problems encountered while reading—are at risk for low achievement (Vacca & Padak, 1990). To succeed in reading, elementary school students need a good grasp of a variety of strategies to help them learn from text. With the *Reader’s Handbook*, key strategies are within the reach of all elementary school students.

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