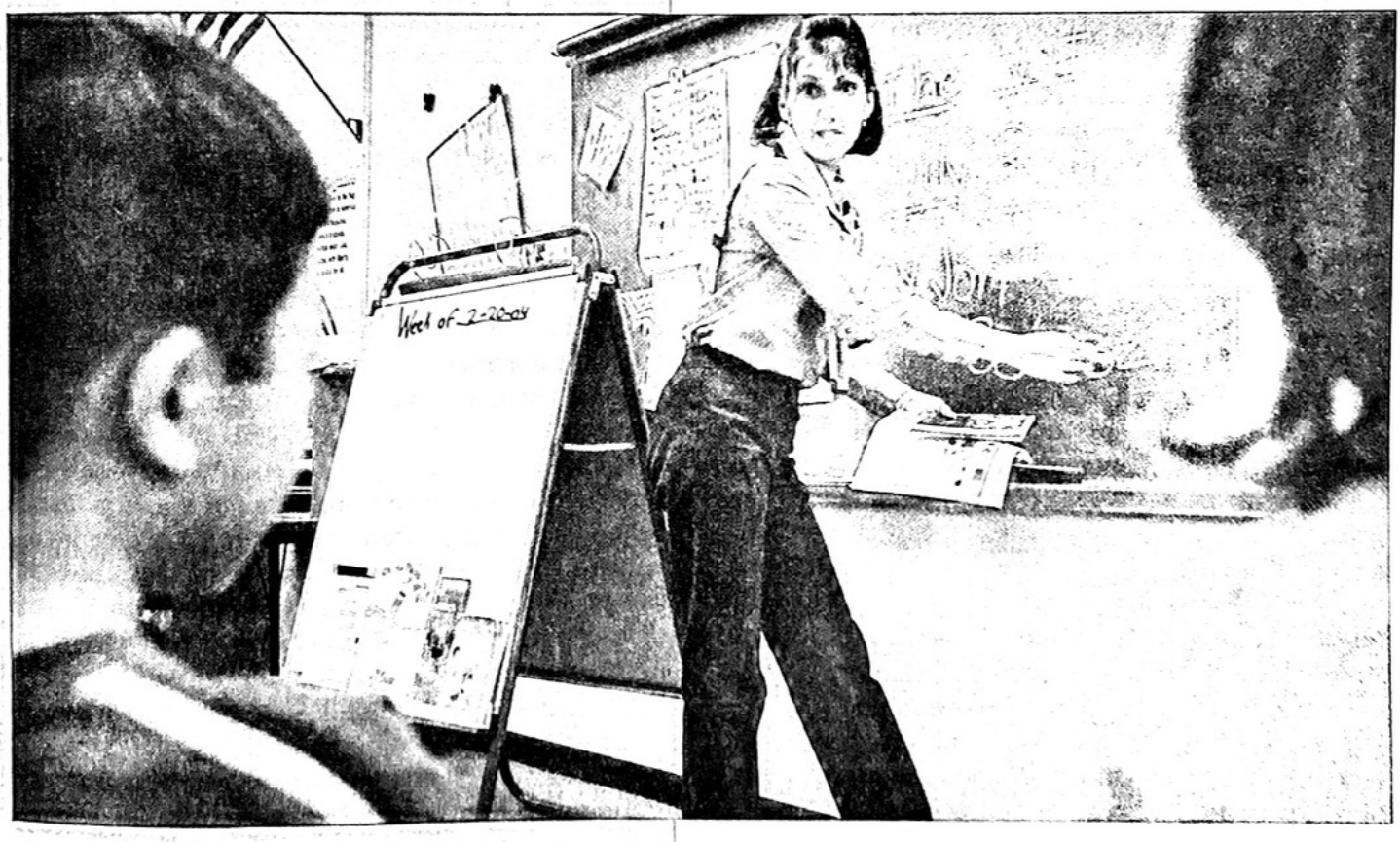
CHAPTER

# 6

# Reading: Comprehension



## OBJECTIVES

Upon completion of this chapter, the reader should be able to:

1. Identify the nature of reading comprehension; the types of challenges faced by students with reading disabilities; the principal components of comprehension; the levels of comprehension; the nature of text structures; phases in which the reader engages in order to comprehend text; and evidence-based practices.
2. Identify formal and informal measures for assessing reading comprehension.
3. Describe specific word knowledge strategies that can be used to build vocabulary to strengthen students' reading skills.
4. Identify the importance of reading comprehension strategies, the process of teaching such strategies, and specific examples of comprehension strategies.
5. Understand the specific challenges experienced by middle and secondary school students with reading disabilities and identify strategies for appropriate instruction.

Although word analysis and word recognition are clearly important basic skills, they are not the primary goal of an instructional reading program. The goal of reading is comprehension—obtaining meaning from printed material. This chapter addresses both word knowledge and reading comprehension in general.

## NATURE OF READING COMPREHENSION

Mastropieri and Scruggs (1997) defined comprehension as "a process of constructing meaning from written texts, based on a complex coordination of a number of interrelated sources of information" (p. 197). The authors of the RAND Reading Study Group (2002) defined it as "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (p. 11). Both definitions convey the complexity of this skill and also suggest the complexities associated with effective instruction.

A strong argument can be made that comprehension is the most important academic skill that is taught in school. Reading comprehension is required throughout the school experience and it must be applied to a variety of types of textual material (e.g., narrative and expository materials). Further, reading continues to be an important focus regarding the demands of adult living (i.e., lifelong learning). The ability to understand written material involves two facets of comprehension: word knowledge and text comprehension. The first facet relates to the development of an adequate and functional vocabulary. The second facet relates to the ability to acquire meaning—understanding, figuring out, and remembering what is read (M. J. Shanahan, 2003)—from interacting with a variety of textual materials.

### Comprehension Difficulties

Reading comprehension is problematic for many students. A combination of key factors associated with the student, the textual material, and the reading comprehension process contribute to the difficulties that some students have. Key areas of difficulty include failing to use background knowledge, inability to develop or use strategies to monitor reading, lack of metacognition about the reading process, vocabulary deficits, unfamiliarity with text structures such as expository or narrative text, and difficulties with fluency (see Chapter 5) (Berkeley, Scruggs, & Mastropieri, 2010).

Students with special needs commonly encounter problems for many reasons, ranging from decoding words to monitoring their understanding of what is read (Vaughn & Edmonds, 2006). Often they lack the background and experiences that contribute to making sense out of text. Dealing with abstract constructs and complex concepts poses significant challenges to some students. The nature of the textual material itself (e.g., the way it is organized, the type of textual material) further contributes to the problems of some students. When engaging printed text, strategic behaviors are needed and many students with special needs do not produce these strategies without systematic and explicit instruction.

The National Joint Committee on Learning Disabilities (NJCLD, 2008) noted that students with learning disabilities experienced difficulty with one or more of the following skill areas: "literal understanding of what is read; ability to identify specific

aspects of the text that reflect overall meaning; extension of the ideas in the text by making simple inferences; and drawing conclusions based on the text" (p. 211).

Comparing good readers with poor readers provides a way to conceptualize the problems that poor readers present within classrooms. D. P. Bryant, Ugel, Thompson, and Hamff (1999) noted the characteristics of good and poor readers before, during, and after the reading process. Before reading, good readers consider what they know about the topic while poor readers generally lack motivation and don't consider the background knowledge. During reading, good readers are able to use strategies to facilitate the reading such as using context clues and word identification strategies. Further, they also noted that good readers monitor their reading using fix-up strategies whereas poor readers lack strategies to figure out new words and fix comprehension problems. After reading, good readers summarize and reflect on important points, whereas poor readers may fail to summarize and reflect on content.

An important area of concern is what is occurring in the classroom in terms of comprehension instruction. Klingner, Urbach, Golos, Brownell, and Menon (2010) reported on an observational study of special education teachers working at the elementary school level. During their 124 observations, no comprehension instruction occurred in 42 of the lessons while in 30 of them, the only comprehension activity was to ask students questions about their reading, via primarily factual questions. Otherwise, when additional comprehension instruction was provided to the remaining lessons, it was typically through prompting students to use a strategy rather than via the provision of explicit and systematic instruction. They concluded that "teachers continued the practice of mentioning skills and provided opportunities to practice but neglected to offer explicit instruction in the skill" (p. 73).

## Reading Comprehension Considerations

Comprehension involves far more than being able to answer questions after one has read some type of printed material. The importance of comprehension is evident not only in most school contexts but also in most life contexts, as the demand of being able to comprehend oral and written information on a daily basis is apparent.

The fact that reading comprehension is a higher-level skill has led to analyses of key contributors to successful comprehension. One model holds that reading comprehension can be evaluated as a function of *decoding by listening* comprehension, given the fact that these two skills make a significant contribution to the variance of readers in the area of comprehension (Georgiou, Das, & Hayward, 2009).

A number of key concepts associated with comprehension are addressed prior to the subsequent discussions of assessment and intervention. These topics include the principal components and levels of comprehension (inclusion of work and text comprehension skills); types of text structures; specific phases of the reading process; and the instructional implications of contemporary research.

**Principal Components and Levels.** The two main components of comprehension as discussed here are word knowledge (vocabulary) and text comprehension. Word knowledge simply means that students understand the meaning of words and word variations such as with figurative language. Clearly a difference exists between word identification and recognition (see Chapter 5) and word knowledge. Text comprehension means that students are able to make sense out of passages of varying lengths and to use this information in a variety of specific ways.

Reading comprehension skills can be conceptualized as including three semidistinct levels: literal, inferential, and critical. Students need to become proficient in each of these areas.

- **Literal comprehension**—refers to information as printed in text. Attention to literal recall includes comprehension for details, sequence of events, and major characters in the story. Most reading programs have traditionally addressed literal comprehension as their primary concern.
- **Inferential comprehension**—requires the reader to move beyond the literal information to infer the meaning of text. Although it is often mistakenly referred to as a lower-level skill, deriving the main idea from text is a good example of inferential comprehension. In this case, students are required to consider what they have read and infer the primary focus of the author.
- **Critical comprehension**—requires the reader to analyze and evaluate the information that has been read, typically to develop new

perspectives relative to the content. All comprehension draws on prior knowledge, but critical comprehension in particular asks the reader to use new information, for example, to compare and contrast it with other information learned at a prior time or to make judgments related to what was read.

To complement this model of comprehension levels, Idol (1997) provided a parallel way to look at text comprehension, as follows:

- **Text explicit**—This type of comprehension is text dependent in that the answer is explicitly stated in the text (passage or picture).
- **Text implicit**—This type of comprehension is implied within the text (or pictures). The derivation of this type of information is based upon two or more nonexplicitly connected details of the passage or picture.
- **Script implicit**—This type of comprehension requires integration of prior knowledge about the subject being read with one or more details from the passage or picture. (p. 112)

**Types of Text Structure.** To fully recognize the complexities of reading comprehension, it is necessary to recognize that different types of textual material exist, and that they present different demands to the reader. As a result, students need to recognize differences in text structure and use appropriate strategies for the type of material they are reading. Two major forms of text structure are narrative and expository.

**Narrative text** is related to storytelling. It is manifest in material such as short stories, legends, science fiction, and other types of fiction. Narrative structure typically includes clear story elements, or *story grammar*, including characters, setting, themes, a central problem or conflict, a sequence of events that forms the story line, and a resolution to the conflict.

**Expository text** relates to material that is factual. Examples of expository text include textbooks, biographies, newspapers, magazines, catalogs, and other nonfiction materials. Expository text will not have the story grammar elements associated with narrative text but is likely to have other types of structures that students must be able to master (e.g., cause-and-effect or compare/contrast features). In addition, expository text (such as illustrated with this text) typically will incorporate headings and graphics into the textual material.

Malmgren and Trezek (2009) provided a clear description of the process of helping students understand and respond to text structures. They noted: "text structures vary dramatically between narrative (fiction) and expository (nonfiction) texts and should be taught as distinct skills. Familiarizing students with story grammar elements directing them to identify elements such as character, setting, conflict, resolution, have been shown to increase their comprehension of narrative texts. Although story grammar elements are typically part of the elementary language arts curriculum, struggling adolescent readers still benefit from instruction in this area" (p. 7). Similarly, foci should include understanding expository text structures.

**Phases of the Reading Process.** Reading comprehension also can be examined across three phases of the reading process: before, during, and after reading. The following features characterize each of these phases:.

**Before Reading**
- Adequate and dependable reading vocabulary in place (or activated)
- Purpose and motivation for reading established
- Awareness of types of text structure

**During Reading**
- Awareness of one's reading by monitoring comprehension
- Words, phrases, and sentences read accurately and quickly
- Connections made between/among sentences/statements
- Questions generated and answered about what is being read
- Background experiences called upon to make predictions and establish relevance to content encountered
- Selectivity applied to what is and is not read
- Content that is of central importance, that is supportive or supplemental, and that is not important can be identified
- Visualizations (e.g., character, setting) can be created to help understand what is being read
- Inferences made in regard to topics presented

**After Reading**
- Reflections made on what has been read
- Summarization of what was read

- Main idea and key points identified
- Connections made from what was read to new situations

**General Instructional Implications.** The literature on reading comprehension instruction has been consistent in recommending that instruction for students with difficulties must be systematic, explicit, and intensive. These attributes are general examples of *evidence-based practices* or *empirically validated* approaches to teaching reading. *Systematic instruction* requires that teachers focus on instruction of carefully selected and useful set of skills and that those skills are organized into logical sequence for instruction. Students consequently know what is expected and why it is important. *Explicit instruction* provides a clear purpose for learning accompanied by clear and understandable directions and explanations. Explicit instruction focuses on the skills and strategies that are needed by students. Further, it includes a process that addresses the importance of modeling and demonstration, guided practice, independent practice, maintenance activities, and provisions for generalization. *Intensive instruction* suggests that sufficient time is allocated to comprehension. Moreover, intensive instruction includes a broad scope and sequence, incorporating the active participation of the student in the lessons. Lessons should include many opportunities for the students to try out what they have learned and should also include ample feedback to the students. For students who are experiencing reading problems, teachers should anticipate the need to provide complete, explicit, systematic, and intensive instruction to increase the likelihood that reading skills and strategies will be acquired.

The National Reading Panel (NRP; 2000), after reviewing 203 text comprehension studies, identified eight specific evidence-supported successful instructional techniques:

- Comprehension monitoring
- Cooperative learning
- Graphic and semantic organizers
- Story structure
- Question answering
- Question generation
- Summarization
- Multiple strategy teaching

Building on, and extending from, the NRP report, Pressley and Fingeret (2005) recommended that teachers:

- Teach a small battery of strategies: prediction, summary, questioning, imagery
- Explain and model these strategies
- Encourage students to use them until they begin to self-regulate (p. 50)

## ASSESSING READING COMPREHENSION

This section focuses on other procedures specifically assessing comprehension. The assessment of reading skills in general was covered in Chapter 5. Many of the techniques discussed in the previous chapter included subtests or methods for obtaining information about proficiency in certain aspects of reading comprehension. The main point of this section is reflected in Blachowicz and Ogle's (2001) summary of the purposes for assessing comprehension:

> Assessment helps us to make informed decisions regarding the level of materials our students can handle. But knowing *what* they can read is only the first step. We also need to know how they read, so we can build on strong strategies and introduce new ones. Assessment thus both alerts us to the ways in which our students are capable comprehenders and strategy users, and helps us to see their instructional needs. (p. 62)

The assessment of reading comprehension must go beyond merely asking questions to determine whether the examinee was able to obtain literal meaning from what he or she has read. Assessment must look at vocabulary (word knowledge) as well as some of the more complex areas of comprehension (e.g., inferential and critical aspects). Furthermore, assessment must include analysis of the strategic behaviors that are required during the reading process as well.

### Formal Instruments

Formal measures provide results that allow for comparisons with other students of similar age or grade level. Typically, the results are reported as percentiles, grade or age equivalents, or standard scores. The diagnostic value of the results from formal tests varies depending on the test and how responses can be analyzed. Examples of formal instruments are highlighted in Table 6–1.

**TABLE 6–1** Formal assessment instruments

| *Test Name (Reference)* | *Areas of Focus* | *Applicable Ages* |
|---|---|---|
| Gray Oral Reading Tests—4e (GORT-4) (Wiederholt & Bryant, 2001) | Taps comprehension by asking examinee to answer five questions after reading short passages orally. | 6–0 to 18–11 |
| Gray Diagnostic Reading Tests—2e (GDRT-2) (B. R. Bryant, Wiederholt, & Bryant, 2004) | Includes two subtests that provide information related to comprehension: Reading Vocabulary and Meaningful Reading. | 6–0 to 13–11 |
| Gray Silent Reading Tests (GSRT) (B. Bryant & Blalock, 2000) | Examinees read sequenced reading passages silently and five comprehension questions follow each passage in a multiple-choice format. | 7–0 to 25–0 |
| Woodcock Reading Mastery Tests—Revised—Normative Update (WRMT-R-NU) (Woodcock, 1998). | Includes six tests, with two on comprehension: Word Comprehension measures reading vocabulary at several levels of cognitive processing and consists of three subtests (antonyms, synonyms, analogies). Passage Comprehension measures ability to identify keyword omitted from a passage. | 5–0 to 75+ |
| Test of Reading Comprehension—4e (TORC-4) (V. L. Brown, Wiederholt, & Hammill, 2009). | Includes five subtests: Relational Vocabulary, Paragraph Construction, Sentence Completion, Text Comprehension, and Contextual Fluency. | |

## Informal Measures

A wide range of informal techniques can be used to obtain information on how well a student comprehends words and text. Assessment techniques can be incorporated in ongoing reading materials or can be accomplished through the use of related, but different, materials. The majority of these measures would be classified as curriculum-based measures (CBMs).

Vail (1999) suggested that the proficiency and comprehension of students who are reading at lower grade levels can be assessed informally using the following procedure, which encompasses the key elements of informal reading inventories, described in Chapter 5.

1. Find two short, grade-normed passages in a basal reader, a reading test, or other reliable source.
2. Photocopy them and put one on a card marked "Oral," and the other on a card marked "Silent."
3. Devise 10 questions for each, two apiece in the following five categories:
   a. Fact retrieval
   b. Sequence
   c. Vocabulary
   d. Main idea
   e. Inference (p. 26)

Many other informal techniques can generate useful information on present levels of performance in the comprehension area and on which individualized education program (IEP) goals can be developed and appropriate instruction implemented. Table 6–2 describes frequently used informal techniques for assessing reading comprehension. For many struggling readers, the techniques highlighted in Table 6–2 must be used to determine the nature of their reading difficulties and thus lead to powerful and explicit instruction.

A final type of informal technique represents various types of instruments that are part of commercially available materials. An example of this assessment option is the rating scale included within *Practical Ideas That Really Work for Students with Dyslexia and Other Reading Disorders* (Higgins, McConnell, Patton, & Ryser, 2003). The instrument includes 23 items and rates student competence in three areas: vocabulary, text comprehension, and content areas reading skills. A portion of the instrument is depicted in Figure 6–1. A key feature is that it is tied to intervention, based on the results derived from completing the scale. For those items for which a student "frequently" or "almost always" displays difficulties, a number of specific intervention ideas from the manual can be identified using the "Idea Matrix."

# WORD KNOWLEDGE STRATEGIES: BUILDING VOCABULARY

Vocabulary knowledge includes both oral and reading vocabulary. Our focus in this chapter is on the latter. However, frequently, struggling

**TABLE 6–2** Informal assessment techniques

| *Technique* | *Key Features* |
|---|---|
| Classroom Fluency Snapshot | • Allows for a quick "snapshot" of how well students can deal with the word level of the grade-level material and the fluency demands of the text.<br>• Should be considered a supplemental technique to other assessment procedures. |
| Running Record | • Requires the student to read from text of a known readability level.<br>• Used to determine reading instructional level.<br>• Criteria are applied to oral reading performance. |
| Informal Reading Inventories | • Sets of graded word lists and oral and silent reading passages with questions.<br>• Used to determine independent, instructional, and frustrational reading levels. |
| Cloze Passages | • Used to match students with appropriate materials.<br>• Students read passage and use context cues to supply a missing word.<br>• System for developing materials and scoring performance are utilized. |
| Selection Map | • System for generating good questions to ask during instruction. |
| Retellings | • Procedure involves allowing students to freely recall what they have read.<br>• Teacher asks students to retell the selection they have read.<br>• Use of a retelling checklist enables data to be collected. |
| Think-Alouds | • Technique provides information on both what students understand and how they understand the material they read.<br>• Students share their thoughts before, during, and after reading a selection—thus, allowing insight to the process of understanding text. |
| Comprehension Rubrics | • More general formats for looking at how well students are comprehending text.<br>• Rubrics can include holistic-oriented approaches or more skill-oriented systems. |

*Source:* Information based on *Reading Comprehension: Strategies for Independent Learners*, by C. Blachowicz and D. Ogle, 2001, New York: Guilford Press.

readers experience difficulty when attempting to read words that may not be part of their working oral vocabulary. Consequently, instruction in the development of word vocabulary (see Chapter 5) can also have a positive impact on reading vocabulary (Malmgren & Trezek, 2009). Much of what happens in classrooms on a daily basis is associated with vocabulary acquisition. Blachowicz and Ogle (2001) remarked that "vocabulary is a reflection of our knowledge and experience and of our social interactions" (p. 164). As Carnine, Silbert, Kame'enui, and Tarver (2004) noted, most vocabulary is learned indirectly from everyday encounters.

The report of the NRP (2000) contained the following findings related to vocabulary instruction:

- Vocabulary instruction leads to gains in comprehension.
- Computers can be effective in vocabulary development.
- Learning words prior to reading textual material is helpful.
- Certain techniques such as task restructuring and repeated exposure enhance vocabulary development.
- Substituting easy words for more difficult ones can be helpful to low-achieving readers.

Pressley and Fingeret (2005) further noted the following research-validated approaches to vocabulary development:

- Expose students to a variety of new vocabulary.
- Repeat new words over a number of days.
- Provide word definitions but also highlight nuances not obvious from a short dictionary definition.
- Give students the chance to practice new words and use them in a variety of ways. (p. 49)

Pressley and Fingeret (2005) elaborated that "students acquire vocabulary from exposure to

**Rating Scale**

DIRECTIONS

- In your opinion, to what degree do the behaviors listed interfere with the student's success in school? Use the following scale to circle the appropriate number:

0 = Not at all like the student so it never interferes with success in school.
1 = Somewhat like the student so it sometimes interferes with success in school.
2 = Very much like the student so it frequently interferes with success in school.
3 = Exactly like the student so it almost always interferes with success in school.

- Put a check in the appropriate box for items with a score of 2 or 3.
- For items with a score of 2 or 3, select up to three intervention ideas from the ideas matrix on page 4. Write the idea numbers in the blanks provided in the last column.

| BEHAVIOR | RATING (Never / Sometimes / Regularly / Almost Always) | SCORE OF 2 | SCORE OF 3 | IDEA NUMBERS |
|---|---|---|---|---|
| **Vocabulary/Word Recognition** | | | | |
| 1. Has limited sight word vocabulary | 0 1 2 3 | ☐ | ☐ | ___ ___ ___ |
| 2. Has limited oral vocabulary | 0 1 2 3 | ☐ | ☐ | ___ ___ ___ |
| 3. Is slow/hesitant, and makes frequent errors when reading orally | 0 1 2 3 | ☐ | ☐ | ___ ___ ___ |
| 4. Learns to recognize word during one instructional period, but cannot recall word at a later time | 0 1 2 3 | ☐ | ☐ | ___ ___ ___ |
| 5. Lacks specialized vocabulary necessary for understanding grade level material | 0 1 2 3 | ☐ | ☐ | ___ ___ ___ |
| 6. Lacks specialized vocabulary necessary for understanding content area material | 0 1 2 3 | ☐ | ☐ | ___ ___ ___ |
| 7. Has limited vocabulary due to lack of experience or prior exposure | 0 1 2 3 | ☐ | ☐ | ___ ___ ___ |
| **Comprehension** | | | | |
| 1. Has difficulty answering factual questions about a reading passage | 0 1 2 3 | ☐ | ☐ | ___ ___ ___ |
| 2. Has difficulty making predictions about what might occur next in a passage | 0 1 2 3 | ☐ | ☐ | ___ ___ ___ |
| 3. Is unable to identify main idea of reading passage | 0 1 2 3 | ☐ | ☐ | ___ ___ ___ |
| 4. Is unable to summarize or retell information read in passage | 0 1 2 3 | ☐ | ☐ | ___ ___ ___ |

**FIGURE 6–1** Example of an Informal Rating Scale

*Source:* From *Practical Ideas That Really Work for Students with Dyslexia and Other Reading Disorders*, by J. Higgins, K. McConnell, J. Patton, and G. Ryser, 2003, Austin, TX: PRO-ED.

vocabulary, for example, in texts that they read, with repeated encounters with vocabulary increasing learning. Even so, learning vocabulary words from text context is never certain, nor is it certain that vocabulary will be learned well even if students are provided the definitions for newly encountered vocabulary words. A promising form of instruction involves long-term use of new vocabulary, with students thinking about the meanings of the new words as they do challenging activities with them . . . ; this approach is known as rich vocabulary instruction" (p. 20). These researchers further recommended that teachers "flood" students with vocabulary exposure by making sure

## CULTURALLY RESPONSIVE CLASSROOM *Tips*

**Laura Smolkin** is a professor of elementary education in the University of Virginia's Curry School of Education:

Proficiency in English makes a large difference in students' reading comprehension abilities (August & Shanahan, 2006). Children's English vocabulary knowledge and English oral language proficiency are directly related to their success in English reading comprehension.

Research has shown that vocabulary knowledge is highly correlated with reading comprehension. Given that an average English-speaking kindergarten child comes to school knowing between 5,000 and 7,000 words, the challenge for English language learners (ELLs) is great indeed. Therefore, intensive efforts at enhancing children's vocabulary knowledge must begin as soon as the ELL arrives at school.

In the primary grades, teachers can use various approaches to preteach vocabulary prior to working with students' own reading materials or in preparation for read alouds. Teachers can take sentences from the text that contain new vocabulary and paraphrase those sentences with simpler vocabulary. They can also provide quick demonstrations of a word's meaning.

Effective support of students' comprehension does not end with an introduction to new words prior to the reading event. Teachers' questioning during the reading event must reflect an awareness of words that have multiple meanings. If a geographical text says, "A river runs through that valley," teachers must, through questioning, assist students in determining the meaning of *runs* in that particular sentence.

Multiple exposures to a word are essential for a child's developing knowledge of that word. In addition to supporting understanding through the visual modes mentioned, teachers of upper elementary, middle, and high school students can encourage ELLs to supply definitions in their own words. Teachers can additionally make use of peer teaching for new vocabulary.

One area of particular importance is the vocabulary that provides cohesion to a text. Words such as *whereas* or *while* are difficult to present through pictures or demonstrations, but they are critical in determining the meaning of a sentence and can impact understanding of text.

Teachers should create opportunities for students to talk as well as to listen. Opportunities for discussion and use of new vocabulary can be found in small-group work in content studies such as math, science, and social studies, where new vocabulary is linked and reinforced thematically.

In the area of comprehension, there are two issues critical to work with ELLs. First is the nature of the material; the second concerns how students are taught to approach a text. Background knowledge is critical to text comprehension; therefore, it makes sense that there can be cultural influences on comprehension.

Finally, teachers of ELLs can make use of comprehension strategy instruction typically recommended as part of a balanced literacy program. When using cognitive strategies such as predicting or summarizing, teachers should keep in mind that continuing work on English language learners' oral English abilities cannot be neglected.

that new lessons are replete with opportunities for students to be immersed in an environment with new words.

It is important to identify and provide instruction for new words that are *important* (i.e., critical to understanding); *useful* (i.e., useful in a variety of contexts), and *difficult* for the students (Carnine et al., 2004). Key considerations to help plan vocabulary instruction are presented in Figure 6–2. A graphic organizer to facilitate word learning as part of a vocabulary instructional program is presented in Figure 6–3.

Blachowicz and Ogle (2001) provided suggested strategies for developing word knowledge. They organized instructional strategies around four major goals of vocabulary instruction: developing word awareness, developing general vocabulary knowledge, developing content vocabulary, and developing independent strategies. Table 6–3 presents a variety of instructional ideas accompanied by a brief description of how each technique works. Attending to the development of word knowledge through both indirect and direct means is essential to enhancing a student's ability to comprehend textual material.

Students with reading difficulties are often challenged by the complexity of vocabulary. For example, particular problems can include confusion

**FIGURE 6–2** Considerations to Guide Vocabulary Instruction

- importance of the words to text understanding
- frequency of the word's appearance in text
- possible multiple meanings
- grouping words to facilitate conceptual understanding
- repeated exposure to specific words to promote fluency
- use of words in multiple contexts
- linkage to prior reading, experiential opportunities
- similarity of meaning to other known words
- opposite in meaning to other known words

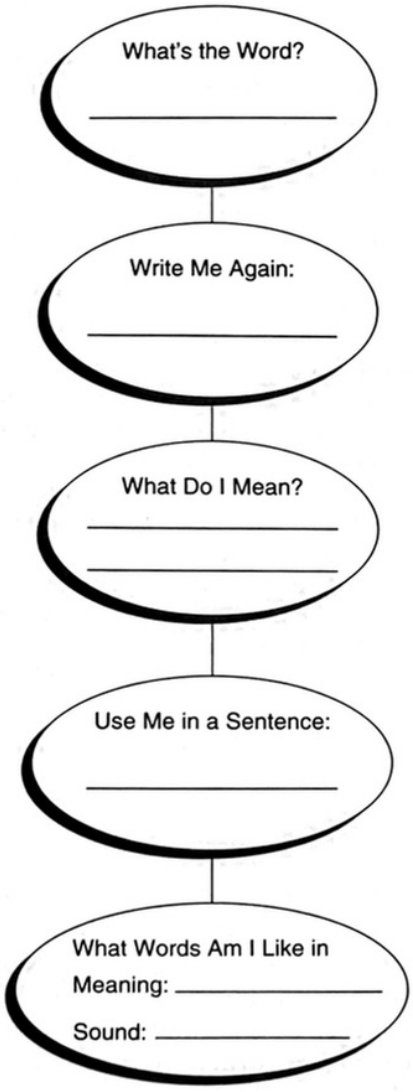



**FIGURE 6–3** Vocabulary Development

*Source:* From *Models in Education* (p. 5), by E. A. Polloway and A. L. Meade, 2009, unpublished manuscript, Lynchburg College, Lynchburg, VA.

with homophones (i.e., words that sound the same but are spelled differently) and words with multiple meanings. Table 6–4 presents a list of the latter.

**TABLE 6–3** Instructional suggestions for vocabulary development

| *Primary Goal* | *Instructional Strategies* |
|---|---|
| Developing word awareness | • Using classroom labeling<br>• Providing opportunities to read<br>• Using technology<br>• Using humor and word play<br>• Using riddles, jokes, and puns<br>• Using word games (e.g., card games) |
| Developing general vocabulary knowledge | • Using logs<br>• Using peer teaching<br>• Sharing personal words |
| Developing content vocabulary | • Learning new words for known concepts<br>• Learning new words for new concepts<br>• Building and retaining content specific vocabularies (e.g., personal dictionaries)<br>• Learning textbook vocabulary (e.g., semantic mapping) |
| Developing independent | • Understanding word parts and generative word parts (prefixes and suffixes) |
| Strategies | • Using dictionaries—print and electronic<br>• Figuring out new words from context (e.g., context instruction, cloze procedure) |

*Source:* Information based on *Reading Comprehension: Strategies for Independent Learners*, by C. Blachowicz and D. Ogle, 2001, New York: Guilford Press.

## READING COMPREHENSION STRATEGIES

The key focus of instruction is the provision of systematic and explicit instruction on strategies that allow students to better engage textual material. The strategies that are discussed in this section provide

**TABLE 6–4** Common words with more than five meanings

| | | | | | |
|---|---|---|---|---|---|
| act | drive | lay | place | set | strike |
| air | dry | leave | plant | sharp | stroke |
| away | dull | line | plate | shine | strong |
| bad | eye | low | play | shoot | stuff |
| bar | face | make | point | short | sweep |
| base | fail | man | post | side | sweet |
| black | fair | mark | print | sight | swing |
| blow | fall | mind | quiet | sign | take |
| boat | fast | mine | rain | sing | thick |
| break | fire | natural | raise | sink | thing |
| carry | fly | new | range | slip | think |
| case | good | nose | rear | small | throw |
| catch | green | note | rest | sound | tie |
| change | hand | now | return | spin | tight |
| charge | have | off | rich | spread | time |
| check | head | open | ride | spring | touch |
| clear | heel | out | right | square | tough |
| color | high | paper | ring | stamp | train |
| count | hold | part | rise | star | trip |
| cover | hot | pass | roll | stay | turn |
| crack | house | pay | rule | step | under |
| cross | keep | pick | run | stick | up |
| crown | key | picture | scale | stiff | watch |
| cut | knock | piece | score | stock | way |
| draw | know | pitch | serve | stop | wear |

*Source:* Tompkins, Gail E. (2006). *Literacy for the 21st Century: A Balanced Approach*, 4th Edition, © 2006, p. 201. Reprinted by permission of Pearson Education, Inc., Upper Saddle River, NJ.

several ways to enhance comprehension that can be adapted for varied purposes. Pressley and Fingeret (2005) cautioned that teachers are well advised to use a small repertoire of strategies (e.g., to promote prediction, summarizing, and questioning). Further, teachers should monitor the effectiveness of these strategies in enabling students to achieve success on identified comprehension skills. Particular emphasis also should be placed on making sure that students can read for the main idea, a critical school-based skill that will be also significant in high-stakes tests as well as in the postsecondary environment.

The teacher's task is to ensure that appropriate attention is given to different levels of comprehension based on the learning needs of individual students. Through effective teaching, instructors can work with groups of students and incorporate a concurrent focus on literal, inferential, and critical comprehension questions within the same lesson. Such an approach enhances inclusion efforts for students with special needs when they are participating in larger group instruction with other students whose cognitive abilities may be significantly greater.

The strategies discussed in this section are organized into four areas: **teacher-directed questioning** strategies; student-directed questioning strategies; peer-mediated strategies; and graphic-aid strategies. Figure 6–4 graphically illustrates the major topical areas along with the related area of fluency, which was discussed in Chapter 5.

## Teacher-Directed Questioning Strategies

Questioning by teachers is the instructional strategy used most often in teaching comprehension. As a general approach, this has frequently been found to be effective, particularly when students are taught to ask themselves questions before, during, and after the reading process. Questioning permeates the reading process. Factual, inferential, and analytical questions are all essential for comprehension development.

Frequently the majority of questions that teachers ask are factual, and the answers are directly stated in the text, requiring no higher-level thinking by students. Teachers can stimulate students to begin inferential and critical thinking through higher-level questioning. Students who can decode the material adequately can, with guidance and practice, become critical readers. If properly guided and questioned, slow learners as well as gifted students can learn to make inferences from the material they have read. Questions that stimulate thought and motivate students to higher levels of comprehension can be asked on material at any readability level. Evaluative and interpretive questions also apply to every level of readability.

Comprehension requires connecting what is read with prior knowledge of the topic. The printed material provides new information; to understand it, readers use various information sources within their own memories. Thus, each reader's background of concepts directly influences the comprehension of

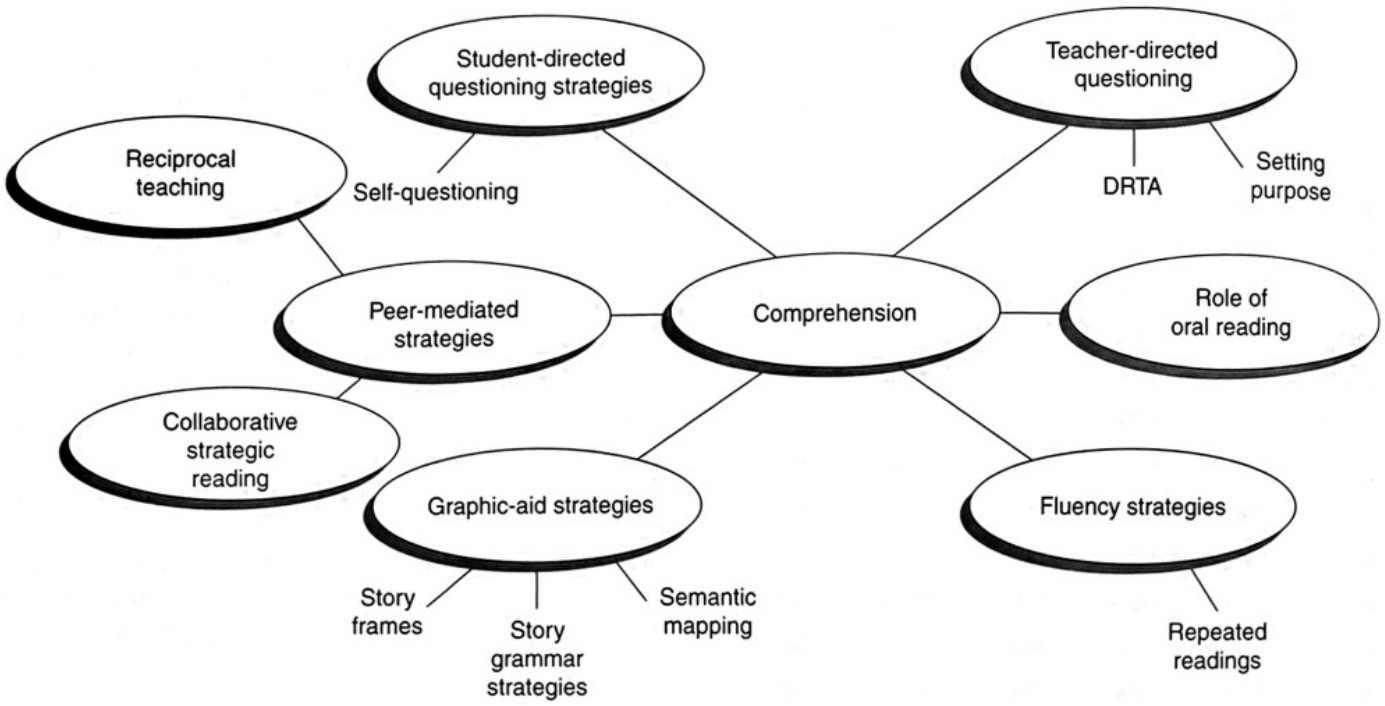



**FIGURE 6–4** Graphic Overview of Text Comprehension Strategies

passages read. Most instruction therefore should be initiated prior to reading the material. The teacher must stimulate students' thinking about the topic before oral or silent reading begins. Strategies include setting the purpose for reading to arouse students' prior knowledge and the use of the directed reading/thinking activity.

*Setting the purpose* in advance of reading is one way to stimulate students' prior knowledge. A teacher can introduce a selection by saying, "As you read, think about what you would do if you were caught in a flood as Van is in this story." Immediately, students' prior knowledge (or lack of it) concerning floods comes to mind and thus helps prepare them for the passage to be read.

One of the most useful questioning techniques to teach comprehension of content or expository material is the **directed reading/thinking activity (DRTA)**. Although originally developed in the 1960s, DRTA remains an effective teacher-directed strategy to develop metacognition and enhance comprehension (Unrau, 2004). In this activity students are taught to make predictions about what they are going to read before they begin reading the text. While reading, the students test and refine the predictions they made in advance. These predictions generate divergent questions and stimulate expanded thinking. DRTA teaches students to verify and defend their predictions and gives them guidelines for reading to learn. The following procedures comprise the DRTA technique:

1. Students examine the story title, pictures, and subheadings.
2. Individually or in a group, students list information they anticipate finding in the selection.
3. Students read the selection.
4. Students then look at each prediction on their list and decide whether it was correct or incorrect.
5. When uncertainty or disagreement occurs, students defend their positions by locating validating information in the text.

DRTA stimulates students to generate their own questions. Their predictions become questions when they search the text for supportive information.

Traditionally, many teachers have taught comprehension solely by asking students questions after they have read a specific passage. Thus, instructional lessons might typically include questions such as the following after a reading sample:

- What is the main idea?
- What are the sequential events that took place in the story?
- Who are the main characters?
- What do you conclude about the story?

General questions such as these provide a basis for evaluating whether students have understood the passage they have completed.

However, such an approach continually tests students' comprehension without necessarily directing or instructing them in comprehension strategies, and thus fails to provide students with what Coyne, Zipoli, and Ruby (2006) referred to as *conspicuous instruction*—that is, teaching in a direct and explicit fashion. Consequently, the second key focus of comprehension instruction is teaching students how to direct their own reading.

## Student-Directed Questioning Strategies

Teacher questioning is certainly a staple of reading comprehension instruction. However, as noted, it also is essential that students learn to ask themselves questions in order to become more effective and independent readers and develop self-efficacy as readers (see also the nearby Teacher Tips).

The critical aspect related to success is the effective use of comprehension strategies. Berkeley et al. (2010) noted that "systematically employing strategies is very likely to improve students' ability to construct meaning from text" (p. 433). Reading comprehension strategies have been referred to as being "among the most thoroughly researched interventions in special education" (Brigham, Berkeley, Simpkins, & Brigham, 2007, p. 3). As Brigham et al. (2007) noted, comprehension strategies require students to ask themselves questions and answer those questions about textual material prior to, during, and following the reading process. Strategies that can help students be more effective in reading text fall under the general focus of directly teaching students strategies for monitoring their own reading (referred to as comprehension monitoring, self-monitoring of reading, or metacomprehension).

In emphasizing the use of comprehension monitoring approaches, Mastropieri and Scruggs (1997) reported that several common features of strategies and strategy instruction help promote enhanced reading comprehension:

- [giving] clear, explicit instruction in a strategy associated with enhancing reading comprehension
- [using] detailed self-monitoring procedures containing cards that require students to mark off steps as they proceed
- informing students about the purpose of the strategy instruction
- attributing success to controllable factors (e.g., reminding students that the use of a strategy would be beneficial to them and would influence success) (p. 205)

A key focus is the use of comprehension monitoring through the development of *self-generated questions*. The lack of metacognitive skills or, in other words, inability to monitor their comprehension (e.g., self-monitoring, predicting, and controlling one's own attempts to study and learn) limits students' success in learning to read (B. Y. L. Wong, 1982). Self-questioning is one way to stimulate development of the poor reader's metacognitive skills and to improve comprehension monitoring that has proved to be effective for enhancing achievement (P. N. Swanson & de la Paz, 1998). As

**TEACHER *Tips*** **Elementary Level**

### Self-Efficacy in Reading

Ferrara (2005) identified specific ways to achieve self-efficacy in young readers:

- Provide appropriate-level reading materials.
- Give students a choice of reading materials.
- Activate prior knowledge.
- Introduce new vocabulary.
- Encourage learners to set a purpose for reading.
- Teach students to select their own books for independent reading.
- Encourage use of imagery to remember details.
- Model how to find the answers to literal and inferential questions.
- Anticipate author's questions and answers in a passage.
- Increase reading speed and focus on comprehension.
- Maintain and communicate high expectations for success.
- Help students set goals.

M. T. Bryant (2001) noted, a key goal is to "teach them when and how to use effective comprehension monitoring strategies before, during, and after reading so they can 'repair' comprehension problems and understand text" (p. 1).

Consistent with effective practices in strategy instruction in general, student usage of specific comprehension strategies must follow an intensive instructional period where teachers model the strategy, students practice it with teacher guidance, and then learn to use it independently.

To facilitate a strategy of using self-generated questions, students can first be trained in question phrasing or writing. This orientation includes identification of good and poor questions, discrimination between questions and statements, and awareness of question words. Students are then instructed to read the story, describe what it is about, and generate two questions. Finally, students answer their own questions or exchange questions with peers. Teachers can further enhance students' metacognitive skills by directly teaching and modeling comprehension processing. Students can be instructed to perform the following self-questioning tasks (Schewel & Waddell, 1986):

1. Identify the main idea of a paragraph and underline it.
2. Develop questions related to the main idea and write them where they can be referred to easily.
3. Check those questions with the teacher's models to be certain that they are correctly stated.
4. Read the passage, answer the questions, and learn the answers.
5. Continually look back over the questions and answers to note the accumulation of information.

Jitendra, Hoppes, and Xin (2000) recommended the use of a *main idea prompt card* to help students find the central theme of the paragraph or passage. Students can be given a series of printed prompts to consider to help them determine the main idea:

- Who (or what) is the subject?
- What is the action?
- Why (or where, when) did something occur?
- How was something done (or how did it look)?

Several learning (or study) strategies can also be used to help with thinking while reading. A key one to use for paraphrasing and summarizing is RAP (Schumaker, Deshler, & Denton, 1984, cited in Ellis & Sabornie, 1986), which was developed as part of the Kansas Institute for Research on Learning Disabilities and which has since been further evaluated for classroom usage (e.g., Hagaman & Reid, 2008). With the RAP strategy, students are instructed to:

- **R**ead a paragraph or passage.
- **A**sk yourself: who/what it is about? What is happening?
- **P**ut the main idea in your own words.

Successful use of RAP can facilitate students' paragraph-by-paragraph reading of text by using a self monitoring strategy to continue to think about what is being read. Hagaman, Luschen, and Reid (2010) provided a detailed discussion of the use of RAP with third-grade students. These students learned the strategy in approximately four or five lessons consisting of 20 to 30 minutes of direct instruction, using a self-regulated strategy development (SRSD) model (see Chapter 7). Instruction in the use of the strategy was systematic and explicit and the results were positive in terms of enhanced comprehension skills. They concluded: "The RAP strategy . . . can be extremely effective for improving reading comprehension. The strategy is flexible and can be used for elementary, middle, and high school students across many different content areas" (pp. 27–28).

The series of steps that facilitate student use of a variety of comprehension strategies using RAP are as follows: describe the strategy to the student, model or demonstrate it, provide verbal rehearsal opportunities as guided practice, provide independent practice, review for mastery and recall, and plan for collaboration.

One concluding note of importance relates to the generalization of skills and strategies in reading. NJCLD (2009) noted for struggling learners, particularly those with learning disabilities, it is not sufficient to simply teach and learn strategies; continued support for the use and generalization of strategies is required for real change to occur" (p. 215).

## Peer-Mediated Strategies

Peer-mediated strategies involve the participation of other students in the reading comprehension process.

A strategy that involves questioning and additional activities to activate comprehension and that commonly includes both student-generated questions and peer mediation is **reciprocal teaching (RT)**. This approach is based on the assumption that comprehension is enhanced when students read a text and then take turns leading small-group discussions with their peers. RT includes four specific strategies: *questioning* about the content read, *summarizing* the most important information, *clarifying* concepts that are unclear, and *predicting* what is occurring. RT was developed by Palincsar and Brown (1984) and was originally used with middle school readers who were struggling to achieve (Unrau, 2004).

The key to the effectiveness of RT is that the approach enables students to learn specific strategies that foster their comprehension rather than simply asking them questions about what they have read. By using this approach, a variety of questions can be modeled, practiced, and used in an active fashion. The planned outcome is that students can then generate appropriate questions themselves while reading. Further information is presented later in the chapter in the section that focuses on adolescent learners.

Another example of a successful peer-mediated technique is the Collaborative Strategic Reading (CSR) (Klingner, Vaughn, Arguellas, Hughes, & Leftwich 2004; Vaughn & Edmonds, 2006). This technique includes four specific strategies: Preview, Click and Clunk, Get the Gist, and Wrap-Up. These strategies are taught to the whole class using expository texts and then cooperative groups implement their roles (Leader, Clunk Expert, Gist Expert, Announcer) and the techniques. Specific procedures for the four strategies are highlighted in Figure 6–5.

## Graphic-Aid Strategies

These strategies use visual formats to assist students in organizing information for better comprehension. Several graphic aids apply well to teaching students who struggle with reading comprehension. The use of graphic aids provides a way to enhance the teacher-directed and student-directed questioning strategies that are being used to build comprehension skills. Graphic aids provide systems where students can organize their thoughts and make notes on what they are going to read or have read; they also recall and provide a basis for further study. They also frequently serve as advanced organizers that provide an introduction to or an overview of the passage to be read.

Kim, Vaughn, Wanzek, and Wei (2004) summarized the extant research on the effects of graphic organizers on the reading comprehension of students with learning disabilities. They concluded, "Our findings support the use of semantic organizers, cognitive maps with and without mnemonics, and framed outlines to promote [comprehension]. . . . When students were taught to use graphic organizers, large effect sizes were demonstrated on reading comprehension. . . . Visual displays of information . . . enhance reading comprehension, by helping them organize the verbal information and thereby improve their recall" (p. 116).

Several other graphic-aid strategies are discussed in the following text. Collectively they represent effective strategies to enable students to develop "maps" of stories and are associated with enhanced comprehension (P. N. Swanson & de la Paz, 1998).

**Semantic mapping** is based on schema theory, which postulates that new information is learned and understood when it is integrated with prior knowledge. When a student is introduced to new information through reading or other experiences, the new knowledge is learned as it is stored in the brain with similar schemata.

The teacher's role is twofold: to continually work on building students' knowledge background through experiences, discussion, and literature and to teach students to stimulate their own schemata about a topic before beginning to read a passage. The teacher might instruct students in the use of self-questioning (e.g., "What do I already know about the Civil War?") or prediction strategies. Students with disabilities often have limited experiential backgrounds and need additional guidance in gaining knowledge from the experiences they encounter.

Brainstorming is an essential element in the mapping process. The student's active participation in this activity stimulates prior knowledge and encourages students to associate new information with what is already part of their schemata (Schewel, 1989).

Semantic mapping is a method of promoting comprehension that stimulates prior knowledge of the topic. Semantic maps are diagrams developed by students and teacher before students read an assigned selection. The maps can be reused after

**FIGURE 6–5** Strategies and Steps in Collaborative Strategic Reading

**Preview**

We preview before reading. Previewing has two steps:

- Brainstorming. Think about what you already know about the topic.
- Predicting. Find clues in the title, subheadings, or pictures about what you will learn. Skim the text for keywords that might give you hints.

**Click and Clunk**

We find clicks and clunks while we are reading. When we understand what we read, everything "clicks" along smoothly. But when we don't understand, "clunk," we stop. When we get a clunk, we use the following fix-up strategies to figure out what the clunk means:

- Reread the sentence with the clunk and the sentences before or after the clunk, looking for clues.
- Reread the sentence without the word. Think about what would make sense.
- Look for a prefix or suffix in the word.
- Break the word apart and look for smaller words.
- Use a picture.
- Ask for help.

**Get the Gist**

We get the gist after reading each paragraph or section of a passage. To get the gist means to summarize or restate the most important idea. Do not include the supporting details. State the gist in your own words using the following cues:

- Decide who or what the paragraph is mostly about (the topic).
- Name the most important idea about the topic.

**Wrap-Up**

We wrap up after finishing the day's reading assignment. Wrap-up includes:

- Asking (teacher-like) questions about the passage.
- Reviewing by thinking about what was important that you learned from the day's reading assignment.

*Source:* From *Strategies for Teaching Students with Learning and Behavior Problems* (p. 214, Figure 5.16), by C. S. Bos and S. Vaughn, 1998. Boston: Allyn & Bacon. Copyright © 1998 by Allyn & Bacon. Reprinted with permission.

reading to further stimulate comprehension. The procedure is as follows:

1. The teacher presents a stimulus word or a core question related to the story to be read.
2. Students generate words related to the stimulus word or predict answers to the question, all of which the teacher lists on the board.
3. With the teacher's help, students then put related words or answers in groups, drawing connecting lines between the topics to form a semantic map.
4. After reading the selection, students and the teacher discuss the categories and rearrange or add to the map.

Semantic mapping can appear in various forms. Figure 6–6 presents an example of a semantic map.

**Story grammar strategies** also can enhance the reading and writing skills of students with special needs; the concept builds on many of the previously mentioned strategies. Story grammar strategies are included here, although they can complement a variety of graphic and nongraphic approaches to promoting comprehension. Hagood (1997) outlined a series of strategies that provide ways to enhance learning for students:

- Teach students to use self-questioning techniques to increase their comprehension of a narrative text.
- Teach students to use story maps to organize a story's components (i.e., use visual organizers to

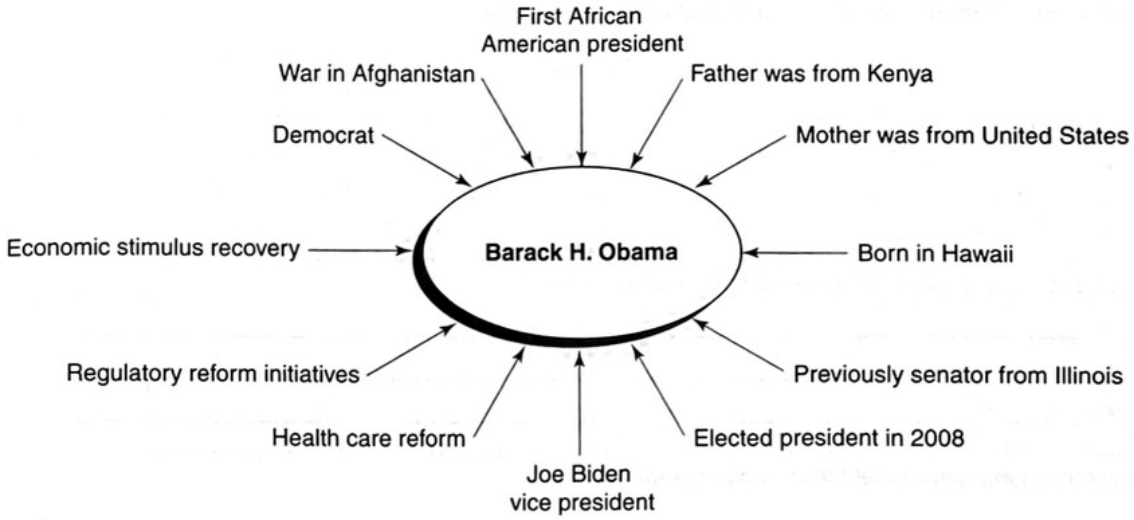



**FIGURE 6–6** Example of a Semantic Map (Wheel)

enable students to enhance their understanding; see Figure 6–7).

- Develop group narrative dramatizations through the use of visual, auditory, and kinesthetic learning channels.
- Teach students to analyze and critically compare the elements of two similar stories (e.g., use graphic organizers to discuss similarities and differences between stories).
- Teach students to manipulate and analyze the components of story grammar (e.g., rewrite stories by changing the setting of a story and modifying other elements that necessarily change when the setting does).

A key reading comprehension skills is summarizing. In Figure 6–8, a graphic organizer is presented that provides strategies for assisting students in summarizing the information they learned from their reading assignment.

## Reading Sources: Elementary-Level Emphasis

The following examples illustrate some options that teachers have for source material for reading. The focus here is primarily on elementary-level learners; in a subsequent section, considerations for middle and secondary school students are addressed.

**Basal Readers.** Basal reading programs are used in the vast majority of elementary schools; consequently, such materials are readily available. They usually contain a series of books or stories written at different difficulty levels, with most beginning at preprimer and primer levels and progressing through upper elementary levels. Most readers also have workbooks that allow students to practice specific skills.

Comprehensive, highly structured teacher manuals that completely outline each lesson typically accompany most basal readers. They provide skill

**FIGURE 6–7** Using a Story Map: *Snow White*

| *Questions* | *Examples* |
|---|---|
| **Who** are the characters? | • Snow White<br>• Seven Dwarfs<br>• Wicked Queen<br>• Prince Charming<br>• Magic Mirror |
| **Where** does it take place? | A faraway land |
| **When** does it begin? | Once Upon a Time |
| **What** is the problem? | Snow White is in an enchanted sleep due to a poison apple. |
| **What** is the goal? | To awaken Snow White with true love's kiss. |
| **What** are the events? | • Magic Mirror reveals Snow White is the fairest in the land.<br>• Wicked Queen tries to have Snow White killed.<br>• Snow White escapes and meets Dwarfs.<br>• Snow White eats poison apple.<br>• Prince Charming kisses Snow White. |
| **What** is the final result? | The Prince and Snow White live happily ever after. |

*Source:* From *Models in Education* (p. 6), by E. A. Polloway and A. L. Meade, 2009, unpublished manuscript, Lynchburg College, Lynchburg, VA.

**FIGURE 6–8** Summarizing: A Graphic Organizer Strategy

| *Summarizing* |
|---|
| *What do I know after reading?*<br>• <br>• <br>• |
| *What questions/answers do I have for my buddy (partner)?*<br>• _____<br>• _____<br>• _____ |
| *How can I summarize what I read in one paragraph?*<br>_____<br>_____<br>_____<br>_____<br>_____ |

*Source:* From *Models in Education* (p. 7), by E. A. Polloway and A. L. Meade, 2009, unpublished manuscript, Lynchburg College, Lynchburg, VA.

objectives, new vocabulary, suggested motivational activities, verbatim questions to check comprehension on each page of text, and lesson activities. The lessons follow a hierarchy of specific reading skills.

A basal program exposes students to a basic vocabulary that provides for repetition. Although structured in format, basal programs can be modified to meet individual needs while following a sequential developmental pattern of skill building. They have often been used to assess a student's reading level and subsequent placement in an appropriate reading group. As long as the basal meets students' needs and falls within their interests and abilities, such placement may be temporarily adequate. Basal programs will not meet all needs, however, so the teacher must be prepared to revise and supplement the program.

**Language Experience Approach.** The Language Experience Approach (LEA) encourages students to verbalize their thoughts and experiences, which are then written down by the teacher or the student and can be read. These stories are reread by the student and by other students as the program progresses. Word lists are made from the words used in the stories to develop word-recognition skills and a working vocabulary.

Tompkins (2005) outlined the formal stages for using LEA as follows:

1. **Provide an experience.** A meaningful experience is identified to serve as the stimulus for writing. . . .
2. **Talk about the experience.** Students and teacher discuss the experience prior to writing. The purpose of the talk is to generate words and review the experience so that the children's dictation will be more interesting and complete. . . .
3. **Record the dictation.** Teachers write down the child's dictation. Texts for individual children are written on sheets of writing paper or in small booklets, and group texts are written on chart paper. . . .
4. **Read the text.** After the text has been dictated, the teacher reads it aloud, pointing to each word. This reading reminds children of the content of the text and demonstrates how to read it aloud with appropriate intonation. Then children join in the reading. (p. 187)

Beginning readers may be introduced to LEA as a class. The teacher can establish a common interest, such as a class animal, field trip, or television program. As students tell about their experiences, the teacher needs to assist them in transcribing the

words on paper. Students then receive copies of the stories for their books. Word lists and seatwork activities are made from the stories. Independent reading books are also made available and should be encouraged. The transition from student-written material must be made at some point. Commercial materials should be presented early in the program, but it must be well within the student's independent level to ensure success.

**Whole Language Approach.** E. A. Polloway and colleagues (2012) provided the following summary of the concepts underlining a whole language approach:

- Speaking, listening, reading, and writing develop interdependently and within a social context.
- Students learn to read using authentic books rather than just basals.
- Students learn to write by actually engaging in the writing process.
- Teachers serve as mediators, providing support but not interfering with the learning process.
- Students become involved in reading and writing connected to their own lives.
- Students are immersed in an environment filled with language materials and activities, including high-interest reading materials and text they have helped produce.
- Students are encouraged to share their experiences through literature.

**Literature-Based Program.** A program based on whole language provides an emphasis on reading authentic texts rather than the contrived stories that may often appear in basal readers. Thus, a key aspect is the reliance on *literature* (including novels, stories, magazines, and trade books) as the source of content for reading opportunities.

Units based on literature selections are often used as key elements in comprehension programs. When such a focus becomes the core of the program, a number of key features emerge including:

- Teachers develop units using the reading process.
- Teachers choose picture-book and chapter-book stories or informational books for units.
- Teachers scaffold reading instruction as they read with the whole class or small groups.
- Teachers teach minilessons on reading skills and strategies.
- Students explore vocabulary and literary language.
- Students develop projects to extend their reading. (Tompkins, 2006, p. 32)

The challenges for such an approach with students with special needs include, in particular, the difficulty of the reading material and the less explicit focus on teaching strategies for comprehension.

To complement a literature-based approach to comprehension instruction, teachers can avail themselves of texts and supplemental books that promote diversity. Curriculum can be designed to reflect cultural, religious, ethnic, social class, and gender variance (T. S. Jones, 2005).

**Predictable Books.** One attractive option is the use of *predictable books*, children's books or stories that use repetition, as in *Brown Bear, Brown Bear, What Do You See?* (B. Martin, 1983); a cumulative pattern, as demonstrated in the familiar story of the gingerbread man; or familiar day, month, or time sequences, as found in Maurice Sendak's (1962) *Chicken Soup with Rice*. These three types of predictable stories—through the use of rhythm, rhyme, and redundancy—give semantic and syntactic language cues that stimulate fluent reading for children with disabilities and that can enhance sight-word recognition.

To use predictable books as a strategy for promoting reading, the teacher first reads the story aloud to children, using an enlarged version or distributing multiple copies of the material so that children can read along for most of the story. After this, group and individual activities are developed by the teacher to teach and reinforce the sight words and phonics generalizations that are used in the predictable book (McClure, 1985).

## SPECIAL INSTRUCTIONAL CONSIDERATIONS: MIDDLE AND SECONDARY SCHOOL

It is not surprising that the most significant problem faced by adolescent learners is their ability to read effectively. The challenge for teachers is that students' specific problems vary greatly and are likely to reflect years of failure experiences in schools. Hock et al. (2009) noted that "many students will need instruction in all reading components (word identification, fluency, comprehension, vocabulary), but at different levels of intensity" and that

"secondary schools must develop ways to provide an array of instructional alternatives that address students' reading needs, especially for students with learning disabilities" (p. 35). Reading comprehension is a key area of concern.

The problems that adolescent learners face, consistent with challenges in the area of reading comprehension, have been aptly summarized by NJCLD (2008). It noted that the increased academic demands on students in secondary school included more complex reading tasks; a greater volume of information; exposure to more complex linguistic forms; the consequences of universal reliance on high-stakes tests and the implications of such tests for graduation; a greater reliance on print as the medium of learning; the challenges of vocabulary particularly within expository text structures in the content areas; and higher demands for students to achieve more within time limitations.

In Chapter 5, the concept of the Matthew effects in reading achievement was discussed. The graph in Figure 5–2 clearly illustrated this concept. Schumaker et al. (2006) explained the consequences of the achievement gap for older students with disabilities as follows:

> Over time, this gap grows larger and larger, and it is especially exacerbated in the later grades when the academic growth of students with disabilities plateaus. As a result of this performance gap, these students are unable to "access the general education curriculum" and meet the demands of required courses for graduation from high school. Their resulting failure leads to discouragement and disengagement from school, and, for too many, this disengagement manifests itself in dropping out of school altogether. (p. 64)

The Alliance for Excellent Education (2005) further observed:

> Most older struggling readers can read words accurately, but they do not comprehend what they read, for a variety of reasons. For some, the problem is that they do not yet read words with enough fluency to facilitate comprehension. Others can read accurately and quickly enough for comprehension to take place, but they lack the strategies to help them comprehend what they read. Such strategies include the ability to grasp the gist of a text, to notice and repair misinterpretations, and to change tactics based on the purposes of reading. Other struggling readers may have learned these strategies but have difficulty using them because they have only practiced using them with a limited range of texts and in a limited range of circumstances. (p. 2)

The adolescent who struggles with reading is likely to have experienced considerable frustration and failure in past efforts to learn or improve reading skills. Thus, the teacher must overcome not only skill deficits, but also problems in attitude, motivation, and fear related to failure expectancy. A positive, reinforcing manner and realistic expectations should underlie any approach to reading instruction with older students.

In responding to these challenges, the Alliance for Excellent Education (2005) identified core elements in a comprehension reading program for secondary school students. Those particularly apt to this chapter include the following:

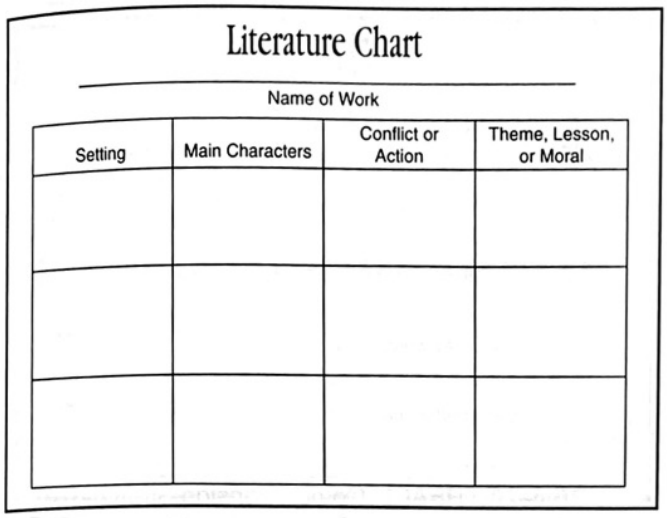
- Direct, explicit comprehension instruction
- Effective instructional principles embedded in context
- Motivation and self-directed learning
- Text-based collaborative learning
- Strategic tutoring
- Diverse texts
- Intensive writing
- Ongoing formative and summative assessment of students
- Extended time for literacy (pp. 1–10)

The discussion of instructional strategies presented earlier in the chapter for elementary-level students included approaches that are also often useful with older students. This section extends that by providing further considerations applicable to older students. Discussion includes the use of diverse texts, such as high-interest, low-vocabulary books, literature-based instruction, strategy training, and reciprocal teaching.

## Text Considerations

Both narrative and expository text material are important foci for adolescent learners. With regard to the former, a key focus is the use of *literature* in reading programs. Particularly for special educators who may be working with English teachers in a cooperative teaching venture, popular works of literature taught in schools may be of interest. To use textual material, teachers should assess the content to be assigned.

Earlier in the chapter, principles for using a literature-based approach were presented. In Figure 6–9,



Literature Chart

Name of Work

| Setting | Main Characters | Conflict or Action | Theme, Lesson, or Moral |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

**FIGURE 6–9** Literature Chart

*Source:* From Higgins, J., McConnell, K., Patton, J. R., and Ryser, G. (2003). *Practical Ideas That Really Work for Students with Dyslexia and Other Reading Disorders* (p. 133). Austin, TX: PRO-ED. Reprinted with permission.

a graphic organizer to facilitate this process for older learners is provided; it can complement efforts for students to work independently with peers in identifying and studying key textural information.

With regard to expository text, Klingner, et al. (2004) indicated key reasons why students need strategies to understand such text: This type of writing is more common in general education classes and it creates significant demands to read and to learn from textual material. In addition, areas in which expository text are common, such as science and social studies, may also be class periods in which supported instruction provided by special education professionals may not be present. Malmgren and Trezek (2009) further noted that "text structures that apply to expository text are less often examined by researchers than those addressing narrative texts, even though strategies to aid the comprehension of expository texts are arguably more important for adolescents who are asked to process content text daily in secondary classrooms" (p. 7).

There are a number of ways in which expository text structures can be conceptualized. Four examples from Misquitta (2009) that can be used to assist students in graphically organizing key information include compare and contrast, enumeration, causation, and problem solution.

A related consideration is the use of diverse texts as core elements in adolescent literacy programs. The Alliance for Excellent Education (2005) noted:

> Texts must be below students' frustration level, but must also be interesting; that is, they should be high interest and low readability. Given the wide range of reading and writing abilities present in almost any middle or high school classroom, this means having books available from a wide range of levels on the same topic. The term "diverse texts" is also used to indicate that the material should represent a wide range of topics. . . . The range of topics should include a wide variety of cultural, linguistic, and demographic groups. Students should be able to find representatives of themselves in the available books, but they should also be able to find representatives of others about whom they wish to learn. High-interest, low-difficulty texts play a significant role in an adolescent literacy program and are critical for fostering the reading skills of struggling readers and the engagement of all students.

Similarly, teachers should consider the use of *high-interest, low-difficulty (HILD) books*. These books are designed for students who read at reading levels well below their interest level. For example, a teacher might recommend the book *Specter* (published by Globe Fearon), which is about weird events and psychic phenomena, to a 15-year-old interested in such topics but who reads at a much lower level.

## Instructional Strategies

*Strategy instruction* is another critical element of instruction. Strategies for comprehension provide vehicles for students to monitor their comprehension as they are learning new words and concepts presented in texts (Vaughn & Edmonds, 2006). The critical importance of strategies was noted earlier.

NJCLD (2008) recommended teaching middle and secondary school students with learning disabilities "strategies within the context of content-area material and discipline-specific literacy. Adolescents are asked to read volumes of materials from primary to secondary source texts that relate to various topics in the social, physical, and life sciences and in mathematics. . . . Starting literacy instruction in specific disciplines can facilitate student's development of competence in reading content-area texts and writing to communicate ideas associated with a content area" (p. 215).

As a key aspect of student-centered strategies for learning, students are taught to develop their own "inner voice" as instructional responsibility moves from teacher-directed to self-directed learning. It forms the basis for self-regulation and learning strategy training. To be successful, students must

become active learners, which commonly refers to students who are goal directed, problem solvers, reflective, responsible for their work, are aware of their thinking and related thinking strategies, and are able to adapt to variant task demands. These skills are critical for adolescent learners.

For older students who are struggling readers, reading an entire text chapter can be time-consuming and often does not lead to high levels of comprehension. One option is to have students attack the chapter through a series of structured stages that can familiarize them with the context and enhance focus on key information. Numerous strategies are available; the approaches discussed earlier in the chapter under self-directed questioning and graphic strategies are also appropriate for older students. In addition, Figure 6–10 presents one such example for use with older students (i.e., REACH).

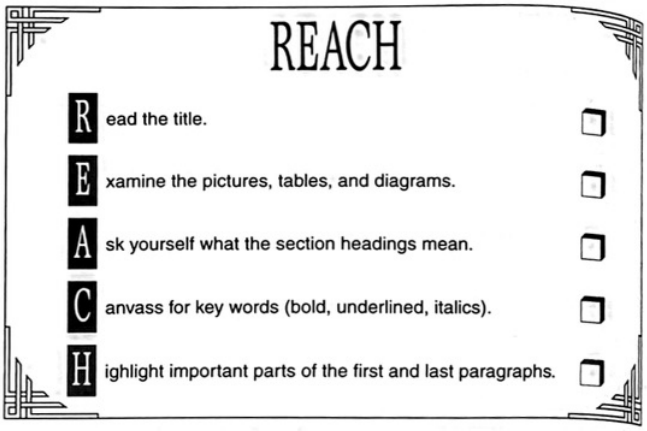



**FIGURE 6–10** REACH Comprehension Strategy

*Source:* From Higgins, J., McConnell, K., Patton, J. R., and Ryser, G. (2003). *Practical Ideas That Really Work for Students with Dyslexia and Other Reading Disorders* (p. 46). Austin, TX: PRO-ED. Reprinted with permission.

Another important approach for older students is *reciprocal teaching,* which also was introduced earlier in the chapter. The Teacher Tips focuses on the use of this approach in terms of its applicability for adolescent students. When used with students at the middle and secondary school level, this approach can be expanded to enable students to develop advanced reading skills.

**TEACHER *Tips*** **Secondary Level**

## Reciprocal Teaching

Reciprocal teaching (RT) is a scaffolded procedure originally intended for middle school readers experiencing difficulty. Tompkins (2006) outlined the stages as follows:

1. **Teach with comprehension strategies.** Teachers teach students to predict, question, clarify, and summarize as they read stories and informational books. They model how to use each strategy, and they think aloud to show students their thinking.
2. **Introduce RT.** Teachers explain RT is a way to get more involved in the reading experience and to understand the big ideas better. They use shared reading to model how to use the four strategies as they read aloud a short text, stopping often to share their thinking. While thinking aloud, teachers make predictions, ask questions, clarify confusing words and ideas, and summarize what they have read. Afterward, they discuss what they have read and how each strategy enhanced their comprehension of the text.
3. **Practice teacher-led groups.** Students practice RT in guided reading groups. Teachers scaffold students as they read short sections of text and use the four comprehension strategies. Students often begin by making predictions and then reading silently. They pause partway through the text to modify the predictions they made earlier, ask questions and clarify the meanings of unfamiliar words and other confusions. After they finish reading, they summarize, ask additional questions, and clarify any confusions. The order in which students use strategies varies depending on them and the text.
4. **Practice student-led groups.** Students form small groups to use the procedure to read novels, chapters in content-area textbooks, or other texts. Students use self-stick notes to track their strategy use, or they can make strategy charts by dividing a sheet of paper or a page in their reading logs into four sections where they record their predictions in one section, and their questions, clarifications, and summaries in the other sections. After reading, students discuss their strategy use and share the notes they made or charts they created.
5. **Continue to use RT with longer texts.** After students become proficient at reading and comprehending short sections of text, teachers have them use RT to read increasingly longer sections of text. (adapted from pp. 495–496)

**FIGURE 6–11** Reciprocal Teaching Question Log

1. Reader reads section aloud to partner. Reader asks an on-the-surface question. Partner repeats the question and then answers. Partner records question on log.
2. Partner asks an under-the-surface question. Reader repeats the question and answer. Reader records question on log. Switch roles and go on.

| ***On-the-surface question*** (When, Where, What, Who) | ***Under-the-surface question*** (Why, How, Would, Should, Could) |
|---|---|
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |

*Source:* From Unrau, N. *Content Area Reading and Writing: Fostering Literacies in Middle and High School Cultures*, © 2004, p. 232. Reprinted by permission of Pearson Education Inc., Upper Saddle River, NJ.

Peer strategies can be extended to enhance reading opportunities and skills. Unrau (2004) illustrated how students could develop literal skills (or *on-the-surface* reading through retelling and summarizing) as well as inferential and comprehension skills (or *under-the-surface* reading, focused on the meaning of passage and its connections to the reader's experience and inclusive of clarifying, evaluating, and making predictions). Figure 6–11 provides an example of a chart for reading partners to complete according to these levels.

Finally in considering reading comprehension instruction, it is informative to consider the summative findings of Fagella-Luby and Deshler (2008), who noted in their review of research that comprehension is more likely to improve significantly if students learn text structures, use comprehension strategies, and also learn word meanings; that those strategies that are remembered best and also used the most include self-monitoring (comprehension monitoring), strategies for summarization, and story grammar strategies; and that overt, explicit instruction related to learning strategies and using strategies is necessary and effective and will provide the best predictor in terms of the possible magnitude of reading achievement outcomes.

## SUMMARY

This chapter focused on enhancing reading comprehension in students. It began with the identification of the problems that students who are struggling in reading typically present in classroom situations. Next, the chapter focused on reading comprehension and the major components associated with this skill area. Strategies for developing vocabulary and word knowledge were discussed. The chapter then provided information on a variety of specific strategies related to teacher-directed questioning, student-directed questioning, peer-mediated strategies, and graphic-aid strategies. The chapter concluded with attention to several special considerations for adolescent learners.

## ACTIVITIES

The following activities relate to specific aspects of enhanced reading comprehension.

### Elementary Level

1. Have students read to remember something they can share with their peers. When they finish, have them volunteer information to the class and write their statements on the board. At first begin with three pieces of information from each student. Write these statements on the board and have the students place them in the sequence in which they occurred in the story. As students improve, more statements can be required and/or the remembered information can be written (Harden, 1987).
2. Have students complete follow-up activities.
   - Write a letter to a main character in the book suggesting other ways the character might have solved the problem or acted in the situation.

- Write sentences from the story that show that someone was excited, sad, happy, or ashamed.
- Draw a picture of something in the story that indicates the setting is past, present, or future.
- Find three pictures in magazines that remind you of the main characters in the story. Under each picture write your reasons for selection.
- Draw a picture of one of the memorable scenes from the story, showing as many details as possible.
- Make a poster advertising your book.

3. Students can motivate others to read by sharing a book they have enjoyed. Some creative ways for them to share are listed here.
   - Publish a book review column for the school paper with short reviews and reactions to books read.
   - After reading a biography or book of fiction, describe the main characters and their common problems. Tell how these problems were or were not solved.
   - Prepare a collection of something the class has read about (e.g., rocks, coins, stamps), with appropriate information for an exhibit.
   - Make a poster (either flat or three-dimensional) showing a scene or stimulating interest in a book.
   - Make and decorate a book jacket; write an advertisement to accompany the book.
   - Write a letter to a friend or a librarian recommending a book you especially liked.
   - Dress as one of the characters in a book and tell about yourself.
4. T. S. Jones (2005) encouraged the use of the Internet and print magazines (e.g., *National Geographic*), which can provide an intentional perspective by focusing, for example, on variations in housing.
   - Use active reading strategies so students will comprehend and retain information better.
   - Always give students a purpose for reading and gradually train them to set their own purposes.
   - Teach them to make predictions about content before beginning to read.
   - After reading, have students defend or reject their predictions.
   - Encourage students to ask themselves after each paragraph, "What is the main idea?"
5. Exaggerate events, characters, and behaviors in stories. A big, old, near-sighted owl that lost its spectacles in the stream is certainly more interesting than just a wise, old owl. Likewise, a little girl who makes many friends because she is kind and generous (something she learned from her grandmother, who lives in a one-room apartment) is more interesting than a little girl who makes a lot of friends because she is nice (H. E. Buck, 2008).
6. Have students work in small groups to shape and highlight the sounds of interesting poems with vocal inflection, coloring, and orchestration. Have them generalize these behaviors to their own spontaneous storytelling (H. E. Buck, 2008).

## Middle and Secondary Level

1. Journal writing can be used to enhance comprehension. In character journals, students can comment on a story they have read in the voice of one of the characters. In this way, they may think more about what they are reading. Further, when students do not agree with a character's actions or attitudes, they may come away with an improved sense of their own identity (Gartland, 1994).
2. In groups, have students write and produce a videotaped commercial advertising a novel they have read. Each student will serve on his or her group's "ad committee," which will determine the type of commercial to be produced (e.g., public service announcement, testimonials) and how the information will be presented. The goal of each group should be to create an informative, entertaining commercial about their book, which will convince "viewers" to read that book. Commercials may also be shared with other classes and teachers.
3. After reading a selected story or novel, ask the students to paraphrase the story and develop a script for a class play. The students make props, costumes, and puppets if desired. For a shorter version, students role-play parts of the story without verbalizing the information. The remainder of the class guesses the part of the story that is being dramatized. This activity reinforces the events of the story and improves comprehension.

4. Students can use K-W-L charts as a technique to focus attention, with *K* representing what is known, *W* what the student wants to know, and *L* what has been learned.
5. An activity that includes reading for information, survival, and amusement uses menus from the community's restaurants, fast-food chains, or food counters. Give students specific assignments to compare prices, develop lists of meals, or identify the top 10 places to go on a special date. Students might also construct a composite menu to be printed in the graphics department and used for personal review. This menu can provide a basis for a variety of exercises to develop vocabulary, attack skills, and word recognition.
6. Art and reading can be combined in book review collages. Students should select a book that they have completed and then cut out words and pictures from magazines and newspapers to illustrate the idea of the book (H. E. Buck, 2008; Crisculo, 1985).