The sun was streaming into the classroom on a crisp October morning as Mr. Roberts sat with a group of fifth-grade students. They were about to begin studying the rainforests of the Amazon. Tomorrow they would embark on an interactive online exploration at a site called passporttoknowledge.com, so Mr. Roberts thought a vocabulary lesson would help the kids get the most out of the experience. Because they lived in an urban setting in a desert region of the West, he knew there would be some fairly alien notions for his students.

Mr. Roberts wrote the following words on the easel chart—Amazon River, South America, biodiversity, canopy, Brazil, photosynthesis, species—and then said, “As I mentioned this morning, we’re going to begin an exciting unit of study on the rainforests of the Amazon. These are a few of the words from the lesson guide that will be coming up in our Internet experiences, so I thought we should talk about them a little. Let’s begin with the basics—who can tell me where South America is?”

James eagerly responded, “I think it’s near Orlando.”

LaJean retorted, “I don’t think so. It’s where Chile is, isn’t it?”

Mr. Roberts said, “Very good, LaJean. Let’s all take a look at the map and see exactly where South America is. Now let’s all gather round the television screen and I’ll use Google Earth on the Internet so we can take an even better look at South America from space!” He then proceeded with a short geography lesson using the Google Earth map, moving around the continent and finally ending up tracing the Amazon River.

Regularly, Mr. Roberts would cross-reference images the children were seeing on Google Earth with the large map so they could see how the two matched and yet served different purposes, such as the map showing boundaries.

Roberts then returned to the vocabulary words he had written on the easel chart. “Okay, then, can anyone tell me something about the word biodiversity? I’ll give you a hint: If you break away the first part of the word, bio, which means ‘life,’ that leaves you with a pretty familiar word—diversity. What does diversity mean?”
Words are the symbols we use to express ideas—*captions*, you might say, that describe life experiences. Vocabulary learning is a process that goes on throughout life and can be enhanced in the classroom through enticing learning experiences. Except for children who are economically deprived or have a learning disability, most acquire a vocabulary of over 10,000 words during the first 5 years of their lives (Smith, 1987). Most schoolchildren learn between 2,000 and 3,600 words per year, though estimates vary from 1,500 to more than 8,000 (Clark, 1993; Johnson, 2001; Nagy, Herman, & Anderson, 1985). Clearly, vocabulary development is a critical aspect of learning to read (Rupley, Logan, & Nichols, 1999).

There seems to be a cyclical effect between vocabulary knowledge and reading. As Johnson and Rasmussen (1998) have stated, “Word knowledge affects reading comprehension, which in turn helps students expand their knowledge bases, which in turn facilitates vocabulary growth and reading comprehension” (p. 204). As students move forward in their schooling, vocabulary becomes even more important. In content-area instruction (e.g., science, social studies, etc.), new vocabulary constitutes both information students must learn and concepts they need to understand to function within the subject (Rekrut, 1996).

Since the latter part of the 19th century in America, there has been a great deal of investigation and debate about the role of vocabulary knowledge in learning to read. In 1885 James M. Cattell argued that children should learn entire words as a method of beginning reading. Though learning “sight words” alone is no longer recommended as an effective beginning reading approach, most teachers and researchers still believe that the acquisition of a large number of sight words should be part of every child’s beginning reading program.

There are actually several different “vocabularies” housed in one’s mind and usable for language transactions. The largest of these is known as the *listening vocabulary*. These are words you are able to hear and understand but not necessarily use in your own speech. For example, when the famous Hale-Bopp Comet visited our solar system in 1997, most children currently in the middle and upper elementary grades were quite capable of watching news telecasts about the comet and understanding most of what was reported. However, if you were to ask many of these same children to explain what they had just learned, many of the technical words and factual bits of information would not have been included in their description. It is not that the children somehow forgot everything they had just learned; rather, they did not “own” the words for speech purposes quite yet. Although they were able to hear and understand the technical words, the words were in their listening vocabulary only.

Words that students can hear, understand, and use in their speech are known as *speaking vocabulary*. It is a subset of the listening vocabulary and, thus, is smaller. The gap...
between people’s listening and speaking vocabularies is greatest in youth. The gap tends to narrow as adulthood approaches, though the two vocabularies are never equal. The next largest vocabulary is the reading vocabulary. As you may guess, it is a subset of one’s listening and speaking vocabularies and consists of words one can read and understand. The smallest vocabulary that one learns is the writing vocabulary—words that one can understand when listening, speaking, and reading, and can reproduce when writing.

Cooter and Flynt (1996) group listening and reading vocabularies into a collective category known as the receptive vocabulary, and they group writing and speaking vocabularies into a category known as the expressive vocabulary. These descriptors reflect the broader language functions of these vocabularies for the student as either information receiver or spoken or written language producer.

For students to be able to read and understand a word, they must have first acquired it at the listening and speaking levels. Teachers, then, must somehow find out which words are already “owned” by their students as listening and speaking vocabulary and then teach the unknown words that may be critical in their assigned reading. Without this kind of knowledge, adequate context for word identification will be missing and can threaten further reading development and, of course, hinder comprehension.

Research Findings on Vocabulary Learning

To determine how vocabulary can best be taught and related to the reading comprehension process, the National Reading Panel (National Institute of Child Health and Human Development, 2000) examined more than 20,000 research citations identified through electronic and manual literature searches. From this set, citations were removed if they did not meet predetermined scientific criteria. Fifty studies dating from 1979 to 2000 were reviewed in detail. In the next sections, we briefly summarize key research-supported findings by the National Reading Panel, as well as other important research.

Three Levels of Vocabulary Learning

The truth is, words are not either “known” or “unknown.” As with most new learning, new vocabulary words and concepts are learned by degree. The Partnership for Reading (2001), in summarizing conclusions drawn by the National Reading Panel, described three levels of vocabulary learning: unknown, acquainted, and established. Definitions for each of these three levels are presented in Figure 8.1. Keep in mind that these levels or “degrees” of learning apply to each of the four vocabulary types—listening, speaking, reading, and writing, so helping children build strong reading and writing vocabularies can sometimes be a formidable task indeed.

Sometimes we learn new meanings of words that are already known to us. The word race, for example, has many different meanings (a running competition, a classification of human beings, etc.). One of the most challenging tasks for students can be learning the meaning of a new word representing an unknown concept. According to the research, much of learning in the content areas involves this type of word learning. As students learn about deserts, hurricanes, and immigrants, they may be learning both new concepts and new words. Learning words and concepts in science, social studies, and mathematics is even more challenging
because each major concept often is associated with many other new concepts. For example, the concept \textit{desert} is often associated with other concepts that may be unfamiliar, such as \textit{cactus}, \textit{plateau}, and \textit{mesa} (Partnership for Reading, 2001, p. 43).

### Building a Robust Vocabulary: Which Words Should We Teach?

Not all words are created equal, at least in terms of how common or useful they are in English. Beck, McKeown, and Kucan (2002) suggest that words may be put into one of three “tiers” in terms of frequency of occurrence and usage. **Tier one words** consist of the most basic words that occur frequently in life and rarely require direct instruction. \textit{Clock, baby, ball, happy, walk, and run} are a few examples of tier one words. Beck and her colleagues (2002) suggest that there are about 8,000 tier one words that do not need instruction.

**Tier two words** are high frequency in terms of use by mature English language users and are found across a variety of knowledge domains: \textit{coincidence, absurd, industrious,} and \textit{fortunate} are examples. Tier two words are not exclusive to one event, a single content area, or one context. Tier two words play an enormous role in the language user’s inventory of words. They tend to be transposable in a wide variety of settings or contents. Instruction directed at tier two words can be most fruitful and have a major impact on verbal functioning, reading, and writing development. Beck and colleagues (2002) estimate that there are about 7,000 tier two words to be learned, and indicate teaching 200 to 400 words per year in grades K through 12 can have significant impact.

**Tier three words** are low-frequency terms that tend to be limited to certain domains and areas of study (e.g., mathematics, science, the social studies). Examples of tier three words include \textit{carburetor, isotope, lathe, and pentathlon}.

### Developing Robust Vocabularies

Beck and her colleagues (2002) recommend “student-friendly” explanations when teaching tiers two and three words, using the following procedure.

1. Describe the word and how it is generally used.
2. Explain how the word is used in everyday language.
3. Invite students to help you explain the word.

Once instruction is completed, a formative assessment may be given to check for understanding. For example, one first-grade teacher* uses the book \textit{Antarctic Ice} (Mastro & Wu, *Note: We discovered and adapted these classroom examples on the website www.trussvillecityschools.com. Teacher Donna Reynolds from Florida is credited with creating these splendid examples.*
2003) as inspiration to introduce these tier two words: nuzzled, pranced, raging, adapt, intriguing, inhabit.

To describe the word nuzzled the following example was offered along with a matching picture:

*If an animal nuzzled against you, it would be rubbing you with its face or nose.*

To explain the word nuzzled in a variety of contexts, the following examples were offered and discussed:

*When the weather was stormy, the mother horse nuzzled her colt with her soft face to comfort him and keep him warm.*

*The colt must have felt very safe when his mother nuzzled her face against him.*

*Have you ever had a pet nuzzle against you? How did it make you feel?*

Then, to extend the conversation about nuzzled and invite students to help explain the new word, the teacher and children discussed these questions:

*Name an animal that you would like to nuzzle you.*

*Do you think a person can nuzzle? How?*

*Would an animal who nuzzled you be friendly or not friendly? Why do you think so?*

Later, once all new words had been introduced, they reviewed the words in a testlike format, demonstrated in the following excerpt.

*Fill in the blanks with the correct word.*

**nuzzled pranced inhabit**

My sister _________ around the room as she showed us her new shoes.

Last night, my puppy and I _________ close to each other while we relaxed on the couch watching TV.

In this chapter, as you will see, we offer assessment and teaching strategies focused almost entirely on tier two and tier three words. You will note that each of the instructional activities in this chapter are marked Robust Vocabulary Tier Two, Robust Vocabulary Tier Three, or Robust Vocabulary Tiers Two & Three as appropriate.

**What Research Tells Us about Teaching Vocabulary**

Most vocabulary is learned indirectly, but some vocabulary must be taught directly. The following conclusions about indirect vocabulary learning and direct vocabulary instruction are of particular importance to classroom teachers (National Institute of Child Health and Human Development, 2000):

- *Children learn the meanings of most words indirectly through everyday experiences with oral and written language.* There are typically three ways children learn vocabulary indirectly. First, they participate in oral language every day. Children learn word meanings through conversations with other people; as they participate in conversations, they often hear words repeated several times. The more conversations children have, the more words they learn!

  Another indirect way children learn words is by being read to. Reading aloud is especially powerful when the reader pauses during reading to define an unfamiliar word and, after reading, engages the child in a conversation about the book. Conversations about books help children learn new words and concepts and relate them to their prior knowledge and experience (Partnership for Reading, 2001).
The third way children learn new words indirectly is through their own reading. This is one of many reasons why many teachers feel that daily independent reading practice of 10 to 20 minutes is so critical (Krashen, 1993). Put simply, the more children read, the more words they will learn! There is a caveat to mention on this point, however. Struggling readers are often incapable of sitting and reading on their own for extended periods of time. For best results, many readers will get much more from their practice reading when working with a “buddy” who has greater ability. From evidenced-based reading research, we can conclude that students learn vocabulary indirectly when they hear and see words used in many different contexts. Conversations, read-aloud experiences, and independent reading are essential.

- **Students learn vocabulary when they are taught individual words and word learning strategies through direct instruction.** Direct instruction helps students learn difficult words (Johnson, 2001), such as words that represent complex concepts that are not part of students’ everyday experiences (National Institute of Child Health and Human Development, 2000). We also know that when a teacher preteaches new words that are associated with a text the students are about to read, better reading comprehension results (Brett, Rothlein, & Hurley, 1996; Wixson, 1986). As mentioned earlier, direct vocabulary instruction should include specific word learning, as well as teaching students word-learning strategies they can use on their own.

- **Developing “word consciousness” can boost vocabulary learning.** Word consciousness learning activities stimulate an awareness and interest in words, their meanings, and their power. Word-conscious students enjoy words and are zealous about learning them. In addition, they have been taught how to learn new and interesting words.

  The key to capitalizing on word consciousness is through wide reading and use of the writing process. When reading a new book aloud to students, call their attention to the way the author chooses words to convey particular meanings. Imagine the fun you can have discussing some of the intense words used by Gary Paulsen (1987) in his book *Hatchet*, Shel Silverstein’s (1974) clever use of rhyming words in his book of poetry *Where the Sidewalk Ends*, or the downright “magical” word selection employed by J. K. Rowling (1997) in *Harry Potter and the Sorcerer’s Stone*. Encourage your students to play with words, such as with puns or self-created raps. Help them research a word’s history and search for examples of a word’s usage in their everyday lives.

### Children from Poverty

Children who come to school with thousands of “words in their head”—words they can hear, understand, and use in their daily lives—are already on the path to reading success (Allington & Cunningham, 1996). Similarly, children who have small listening, speaking, and reading vocabularies—from what could be termed “language-deprived backgrounds”—must receive immediate attention if they are to have any real chance at reading success (Johnson, 2001; National Research Council, 1998). Many children living at the poverty level have this need for intensive vocabulary development.

Researchers (e.g., Hart & Risley, 1995; Hoff-Ginsburg, 1998) have studied the differences between socioeconomic groups with regard to vocabulary knowledge. The key finding is that most poor children begin school with only about 25 percent of the vocabulary knowledge of their middle- and upper-class peers in kindergarten. This finding underscores the need for teachers serving underprivileged children to include a very robust vocabulary supplement in their daily teaching.
Meeting the Needs of English Language Learners: ESL Connections

A growing percentage of students in our schools are learning to read in a second language—English. According to the National Center for Educational Statistics (1999), about 17 percent of all students are classified as Hispanic (14%) or Asian/Pacific Islander (3%). Many of these students speak a language other than English as their native tongue.

As it was in the earliest days of our country for most newcomers, learning to read and write in English can be a formidable challenge, but one that must be successfully addressed if these students are to reach their potential in our society. *Literacy is in so many ways the gateway to social equity.*

One of the common needs of English learners (ELs) is assistance with unfamiliar vocabulary they encounter while reading. Peregoy and Boyle (2001), in *Reading, Writing, and Learning in ESL*, recommend some guidelines for vocabulary development. First, select words to emphasize that you consider important to comprehending the assigned passage. Next, create several sentences loaded with context using these target words. This will give students an opportunity to use the surrounding text to predict the meanings of the target words. Teacher modeling of prediction strategies using context is a must for students to grasp this strategy. Follow these modeling and guided practice sessions with discussion using excerpts from the text they will be assigned in which the target words appear.

Two vocabulary development activities appearing later in this chapter are highly recommended for EL students (May & Rizzardi, 2002; Peregoy & Boyle, 2001): the vocabulary cluster and the semantic map. Certainly, any of the strategies found in this chapter are appropriate for EL students as long as you are direct and explicit in your teaching. Direct instruction helps EL students create mental scaffolding for support of new vocabulary and concepts.

Johnson’s Vocabulary Instruction Guidelines

Dale Johnson, a well-known reading researcher having a particular interest in vocabulary instruction, suggests guidelines for instruction in his book entitled *Vocabulary in the Elementary and Middle School* (2001, pp. 41–48). Based on his extensive review of the research and quite congruent with the philosophy of comprehensive instruction, Johnson’s vocabulary instruction guidelines are summarized in the following list.

- **Word knowledge is essential for reading comprehension.** Vocabulary instruction should utilize activities like those found in this chapter that link word learning to concept and schema development.
- **Wide reading should be encouraged and enabled in the classroom.** Literally thousands of words are learned through regular and sustained reading. Time should be set aside each day for this crucial learning activity. As an example, Johnson advocates the use of an Iowa program called “Read a Million Minutes” that was designed to foster wide reading. Each student sets a personal in-school and out-of-school reading goal that is part of the school’s overall goal.
- **Use direct instruction to teach words necessary for passage comprehension.** Considering how critical some words are for comprehending a new passage, teachers should not leave vocabulary learning to incidental encounters but should instead plan regular direct instruction lessons to make sure that essential words are learned.
- **Active learning activities yield the best results.** According to research conducted by Stahl (1986), vocabulary instruction that provided only definitional information (i.e., dictionary activities) failed to significantly improve comprehension. Active learning opportunities—such as creation of word webs, playing word games, and discussing new
words in reading groups or literature circles—are far more effective in cementing new knowledge and improving comprehension.

- **Students require a good bit of repetition to learn new words and integrate them into existing knowledge (schemas).** In some cases, students may require as many as 40 encounters to fully learn new vocabulary. To know a word well means knowing what it means, how to pronounce it, and how its meaning changes in different contexts. Repeated exposure to the word in different contexts is the key to successful learning.
- **Students should be helped to develop their own strategies for word learning from written and oral contexts.** This includes the use of context clues, structural analysis (root words, prefixes, suffixes), and research skills (use of the dictionary, thesaurus, etc.).

**Assessing Vocabulary Knowledge**

Most vocabulary assessment done by master teachers is through careful classroom observations of student reading behaviors. As teachers work with their pupils each day in needs-based group instruction, they discover high-utility words that seem to cause trouble for one or more students. Teachers can work these words into vocabulary instruction activities like those featured later in this chapter. But this is not to suggest that more cannot be done early in the school year to discover which words most of your students need to learn. Following are a few classroom-proven ideas to help with that process.

**Oral Reading Assessment**

**Purpose**

Oral reading assessment is a method by which problem vocabulary words in print can be identified by the teacher in a quick and efficient manner. It is drawn from the running record style of assessment frequently used to note reading miscues. Ideally, the passages used should be sufficiently challenging so that students will have trouble with about 5 to 10% of the words. It will be necessary for you to do a quick word count to determine if the passages are appropriate once the student has read them. It is also essential that you have a range of passages, in terms of difficulty, to account for the vast differences among students’ reading abilities. (Note: A student who pronounces fewer than 10% of the words correctly may not be getting enough context from the passages for adequate comprehension.)

**Materials**

- Photocopies (two copies each) of three or four passages drawn from reading materials commonly used in your classroom curriculum that you believe to be at the student’s instructional or frustration reading level

**Procedure**

Give the student a copy of the first passage to be read and keep one for yourself. Ask the student to read the passage aloud. Note any words that the student either does not know or mispronounces. Repeat the procedure until the student has read all of the passages. We recommend that you discontinue a passage if the student consistently has trouble with more than one or two words in any one sentence.

After the student has finished, tally the number of miscalled words and determine if the passage is acceptable for analysis (no more than about 10% miscalled or unknown words).
List any words that seem to be problematic for the student. Repeat this procedure with all of your students during the first week or so of the new school year and then create a master list of words that seem to be problematic and determine the number or percentage of the class who seem to find each word difficult or unknown. Use the more frequent problem words as part of your vocabulary instruction program.

Cloze Tests

Purpose
Cloze tests are short (250 words) screening assessment passages drawn from reading materials found in your instructional program. Though they are often used with fiction texts, we feel their best use is with adopted subject-area textbooks that all students are required to read because of the relatively high frequency of unusual words.

Cloze tests have key words deleted and replaced with a blank line (Johnson, 2001). Students are asked to read the teacher-constructed cloze passages and fill in missing words based on what they believe makes sense using context clues. Students guess the missing words based on knowledge of a subject, understanding of basic syntax (word order relationships), and word or sentence meaning (semantics).

Cloze tests have distinct advantages and disadvantages. Perhaps the major advantage is that they can be administered to a group of students rather than to one individual at a time. Another advantage is the emphasis on context and therefore comprehension. On the other hand, cloze tests can be pretty frustrating to kids. However, you can soften the frustration problem, especially with struggling readers, by using a maze test as an alternative (discussed in the next section).

Materials
- Cloze tests based on nonfiction/core subject-area textbooks

Procedure
Begin by identifying three passages of about 250 words each from the book you plan to use for instruction (e.g., science, social studies, supplemental texts, etc.). One passage should be selected near the beginning of the textbook, a second from around the middle, and the third from the end of the book. Using a word processing program, type each of the three selections using the Arial font (or similar font) as this tends to be easier for students to read, especially those who may have minor visual discrimination issues. Once you have created your three text documents, edit them as follows:

1. Leave the first sentence intact (no changes).
2. Beginning with the second sentence, delete one of the first five words and replace it with an underlined blank space large enough for students to write in the word they think is missing.
3. Continue to delete and replace every fifth word thereafter with an underlined blank space until you have 50 blanks. After the 50th blank has been reached, simply leave the remaining part of that sentence intact (no deletions).
4. Include another sentence or two at the end of the cloze passage. Your cloze passage is now ready.

Follow the same steps to compose your other two cloze passages. Refer to Figure 8.2 for an example of a partial cloze passage.
Scoring Cloze Passages

With cloze passages, students must guess the exact missing word to get the response correct. However, misspellings are not counted as errors. Students tend to make many errors on cloze passages so do not be alarmed. The scoring criteria reflect this requirement:

- **Independent Level** = 50% or more correct (25 or more correct out of 50)
- **Instructional Level** = 33–49% (17–24 correct)
- **Frustration Level** = 0–32% (0–16 correct)

If you administer three cloze passages from each textbook as recommended, average the results to determine each student’s overall reading level for the screening assessment.

Maze Test

**Purpose**

The maze test (Guthrie et al., 1974) is essentially the same in purpose and format as the cloze test with one exception. Children are given passages constructed in the same way as the cloze test but there are three choices for students to choose from for each blank. This reduces student stress but also requires a different scoring scale.

**Materials**

- Maze tests primarily based on nonfiction/core subject-area textbooks because of the relatively high frequency of unusual words

**Procedure**

Follow the same steps in creating maze passages as described for creating cloze passages. The one exception is that three choices are given to the reader for replacing the deleted word (Alexander & Heathington, 1988):
1. The correct word
2. An incorrect word that is the same part of speech
3. An incorrect word that is a different part of speech

Maze Sample Sentence

Gem diamonds’ quality is ________ on weight, purity, color, and cut.

(based, stored, seem)

The criteria for assessing maze tests is as follows (Bradley et al., 1978):

- **Independent Level** = 85% or more correct (43 or more correct out of 50)
- **Instructional Level** = 50–84% (25–42 correct)
- **Frustration Level** = 0–49% (0–24 correct)

If you administer three maze passages from each textbook as recommended, average the results to determine each student’s overall reading level.

Vocabulary Flash Cards

**Purpose**

One of the most traditional ways to do a quick assessment of a student’s vocabulary knowledge is the flash card technique. High-frequency words, as well as other high-utility words for specific grade levels, are printed individually on flash cards and shown to students for them to identify. Though some reading researchers argue that flash cards are not a valid assessment tool because the words are presented in isolation instead of in complete sentences and paragraphs, flash cards continue to be used by many master teachers as one way to determine the direction of classroom instruction.

**Materials**

- List of high-frequency sight words (*Note: We provide a copy of the Fry [1980] word list later in the chapter*)
- Index cards with words printed using a bold marker (or printed on a computer printer in a large font size onto heavy paper stock and then cut into uniform flash cards)
- A photocopy/master list of the words for each student in your class for recording purposes

**Procedure**

“Flash” each card to the student one at a time and ask him or her to name the word. Allow approximately 5 seconds for each word to be identified. Circle any unknown or mispronounced words on a copy of the master sheet you are using for that student (simply note the student’s name at the top of the photocopy along with the date of testing). After you have shown the flash cards to all students, compile a master list of troublesome words for whole-class or small-group instruction. We highly recommend the “Word Banks” activity found later in this chapter as one way to use this information. The flash cards can be reused periodically to determine whether students have learned the words being taught.

In Figure 8.3 we summarize the procedures and instruments we have just discussed for assessing factors associated with vocabulary development. In this Summary Matrix of Assessments we provide information about federally related assessment purposes (i.e., screening, diagnostic, progress-monitoring, or outcomes assessment) as well as type of test or procedure...
and psychometric evidence about the test or procedure scores (any available reliability and validity evidence).

Connecting Assessment Findings to Teaching Strategies

Before discussing phonics and word attack teaching strategies, we provide an If-Then chart connecting assessment findings to intervention and strategy choices (see Figure 8.4). It is our

FIGURE 8.3  Summary Matrix of Assessments to Measure Vocabulary Development

<table>
<thead>
<tr>
<th>Name of Assessment Tool</th>
<th>Screening Assessment</th>
<th>Diagnostic Assessment</th>
<th>Progress-Monitoring Assessment</th>
<th>Outcomes Assessment</th>
<th>Norm-Referenced Test</th>
<th>Criterion-Referenced Test</th>
<th>Reliability Evidence</th>
<th>Validity Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Reading Assessment</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td>+</td>
<td>–</td>
<td>+</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Cloze Test</td>
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<td>–</td>
<td>–</td>
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<tr>
<td>Maze Test</td>
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<td>+</td>
</tr>
<tr>
<td>Vocabulary Flash Cards</td>
<td>+</td>
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<td>+</td>
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<td>+</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

FIGURE 8.4  If-Then Strategy Guide For Vocabulary Instruction

“If” the student is ready to learn

“Then” try these teaching strategies

- Academic Word Walls
  - Word sort
  - Password
  - Drawing Pictures
  - Clap, Chant, Write
  - Rhymes
  - Hangman
  - Flashlight Fun
  - Social Studies Word Wall
- Wheel of Fortune/Who Wants to Be a Millionaire?
- Academic Vocabulary Graphic Organizer
- Morphological Structural Analysis
- Five-Step Method
- Frayer Model
- Cubing

Key: + Excellent Strategy * Adaptable Strategy – Unsuitable Strategy
intention to help you select the most appropriate instructional interventions and strategies to meet your students’ needs based on assessment data. The following list briefly describes each vocabulary instruction area found in the If-Then strategy guide.

- **Reading vocabulary.** Describes words in the student’s listening and speaking vocabularies that are not yet recognized in print.
- **Writing vocabulary.** Describes words in the student’s listening, speaking, and reading vocabularies that are not yet known well enough to be used when writing compositions.
- **Concept/schema.** Describes inability to comprehend a new word because of a lack of conceptual knowledge related to the word.
- **Technical vocabulary.** Describes new words that are unknown to the student and directly related to a content area (i.e., science, social studies, mathematics, etc.).
- **Context.** Describes inability to use context clues to figure out the meaning of an unknown word.
- **Morphemic analysis.** Describes lack of knowledge about word parts such as prefixes, suffixes, and root words—also known as structural analysis.
- **Sight words.** Describes difficulty with common words in print that should be recognized instantly.

In the next part of this chapter, we offer vocabulary instruction strategies for intervention based on the foregoing assessments.
TEACHING STRATEGIES: HELPING STUDENTS INCREASE THEIR READING VOCABULARIES

Susan Watts (1995) has described five attributes of effective vocabulary instruction. These criteria, delineated in the following list, have guided our selection of teaching activities in this chapter.

- Students should be provided with *multiple exposures* to new words in a *variety of contexts* over time. This will help students move new vocabulary from short-term to long-term (permanent) memory.
- Words should be taught within the *context* of a content-area unit or topic, theme, or story. This helps the new vocabulary to find the right “schema home.”
- Teachers should help students *activate prior knowledge* (i.e., what they already know) when learning new words.
- *Relationships* should be emphasized in your lesson between *known* words and concepts and the *new* vocabulary you are introducing. This provides the all-important *scaffolding* for learning.
- Students should be taught to *use context clues* and *reference tools* in their reading and writing (i.e., dictionary, thesaurus, online aids) for building word knowledge.

Academic Word Walls

Appropriate for *Robust Vocabulary Tiers Two & Three Words*

Patricia Cunningham (2000) provides us with a wonderful description of a *word wall* as a place where teachers can direct students’ attention to high-frequency words, important words in a content unit of study, or useful words for books they are reading. There are many possible types of word walls. In essence, you simply post important words on a section of wall, usually on butcher paper or a pocket chart, and categorize them according to your purpose.

**Academic word walls** or **AW²** (Cooter, 2009) is a new research-based procedure created especially for schools serving large numbers of children from poverty circumstances. Based on the work of Cunningham (2000), AW² is a method to focus students’ attention on new and important words in core subject areas (e.g., science, social studies, mathematics), while providing them with *multiple exposures* to new vocabulary. AW² can help teachers increase students’ retention of new words, improve their comprehension of assigned readings, and boost writing performance on state tests and other measures. Note that materials for AW² need not be expensive or elaborate—function is everything. It is very important that any word wall allow for target words to be easily moved, grouped, or removed.

**Materials**

- A blank section of the classroom wall, a blank bulletin board, a large whiteboard, or large sheets of butcher paper
- Card stock (approximately 5 × 8 inches each) for writing individual academic words or longer pieces for sentence strips
- Colored markers (dry-erase markers for whiteboards)
- Text and supplemental readings for your required unit of study
- Your state’s “academic vocabulary lists” for your subject/grade level (usually accessible online at your state department of education website)
Teaching Strategies: Helping Students Increase Their Reading Vocabularies

Procedure

Based on several years of experimentation in schools serving large numbers of poverty-level children, the following procedure is a good way to begin using academic word walls.

- **Choosing academic words.** It is important that academic word walls are *group generated* (i.e., teachers and students work *together* in selecting academic words to go on the wall). Begin with students working in small groups provided with the text chapter and/or supplemental texts you plan to use in a new unit of study. Ask them to identify in their groups three to five academic words in the text selection that are:

  1. Known Words
  2. Familiar Words (i.e., words I have heard before, but don’t know very well)
  3. Unknown Words (i.e., words I have never heard before or don’t know what they mean)

  Ask each group to write these three academic word types on a sheet of chart paper and be prepared to share their findings with the class. Note: If students should come across new or interesting *general vocabulary* as they preview the text materials, they can include these in their list, too.

- **Academic words “Gallery Walk.”** Ask each group to take turns sharing and discussing their words with the class. If general vocabulary words are mentioned, they may be discussed and linked to other words and concepts about which students are aware.

- **Creating a group-generated AW².** After the groups have finished their presentations, ask the class to help you identify words that should go onto a master list or the group-generated academic word wall. Help students notice the words they had in common by underlining or circling them. The first words to go onto the AW² should be ones that two or more groups had in common. Write these words on card stock large enough for all students to see and post on a section of wall or a large bulletin board.*

Tips for Using AW² in Your Classroom

The key to success with AW² is to provide students with multiple exposures to new academic words and lots of discussion about their meanings. As a rule of thumb, students usually need from 20 to 40 *meaningful exposures* for academic words to be truly learned. Having students sort academic words on your AW² in different ways on a daily basis for just 5 to 10 minutes, and talking about why these new arrangements of words make sense, will help your students learn and succeed.

There are many ways academic words can be sorted and talked about with your students, and you may be able to invent some of your own in the different subject areas. The purpose of doing word sorts with your academic word walls is to get students to group, discuss, regroup, and discuss important vocabulary in your field of study.

Following are three of the most basic word sort strategies that may be used with your students in AW² activities. Word sort activities are appropriate for *Robust Vocabulary Tiers Two & Three Words.*

*Note: The teacher retains the right to add academic words she or he feels should be included. You must be sure to have enough words for your academic word wall for vocabulary activities. How many? Twenty or more is a good target. Remember, you can always introduce words from prior units that are related to the new unit. It is also permissible to include general vocabulary words that are new to students, but not necessarily specific to content subject area, such as adjectives, adverbs, and so on.*
• **Closed word sorts.** With closed word sorts, students are told in advance the categories in which they must place their cards.

• **Open word sorts.** With open word sorts, students are required to group words from the academic word wall according to how they think they are related and then provide their own label for each group of words. The label may be an important concept in your unit of study, a relationship, or a common characteristic the words share.

• **Speed sorts.** Open or closed sorts are used (teacher’s choice) and students have to complete them within a certain amount of time (e.g., 1-minute sort, 2-minute sort). This is a great review or assessment tool.

It is important in each word sort activity that students should be expected to explain or justify why they think specific academic words belong under a label or category. This creates an opportunity for students to talk about the words, explore their meanings, and retell what they have learned. Word sort activities using academic word walls are ideal for either whole-class discussions or small-group instruction.

**Popular AW² Activities**

Activities already mentioned in this chapter may be adaptable for AW². We now share a few more found to be popular in urban schools participating in our research.

- **Password** (Appropriate for Robust Vocabulary Tiers Two & Three Words). Divide the class into two teams. One person from each team sits in a chair in front of the class. Those two people receive a card with a vocabulary word from the AW². The first person gives a one-word clue to his or her team. If no one from the team can guess the word, the second person gives a clue to his or her team. This alternates back and forth until someone from one of the teams guesses the word, or until a specified number of clues have been given.

- **Drawing pictures** (Appropriate for Robust Vocabulary Tier Three Words). The students draw pictures—but no words—on the board so that the students in the other group can guess the word or expressions they’re trying to represent. This is a fun way to review some vocabulary and break up the class routine.

- **Clap, Chant, Write—Introduction of new words** (Appropriate for Robust Vocabulary Tiers Two & Three Words). Adapted from Sigmon (1997), the teacher introduces five new words per week by having students
  - See the words
  - Say the words
  - Chant the words (snap, clap, stomp, cheer)
  - Write the words and check them together with the teacher
  - Trace around the words and check together with the teacher
  
1. Have the students number a sheet of paper 1 to 5.
2. Place one of the five new academic word cards on the academic word wall. Say the word, use the word in a sentence, provide a picture clue if appropriate, and then have students write the word on their paper. Continue in this way with your four new additional words.
3. When all five words have been written, point to the words and have the students clap and chant the spellings of the words.
4. Students use a red pen, marker, or crayon to trace around the word.
5. On the following days of the week, the teacher practices the new word wall words and reviews previous words with practice activities.
• **Word wall rhymes (Appropriate for Robust Vocabulary Tiers Two & Three Words).** Recommended by Cunningham (1999), the teacher says a sentence that contains a word that rhymes with one of the target words on the AW² and is spelled with the same pattern. Children must decide which AW² word rhymes and how to spell it as demonstrated in the following simple AW² example where students are learning about alternative verbs for the word *said*.

1. Students number their paper from 1 to 5.
2. The teacher gives the following clues for the AW² words.
   - Number one begins with *cr* and rhymes with *stowed*
     Student writes *crowed* on paper
   - Number two begins with an *m* and rhymes with *stumbled*
     Student writes *mumbled* on paper
   - Number three begins with an *f* and rhymes with *melt*
     Student writes *felt* on paper
3. To check the answers, teacher says the rhyming word and students then say the word they wrote and chant its spelling.

• **Hangman (Appropriate for Robust Vocabulary Tiers Two & Three Words).** An old favorite game, hangman is a simple (though perhaps gruesome) vocabulary review activity. Proceed according to the following easy steps substituting words and details as needed for those used in this example from a unit on the moon for the target word *crater*:

1. On a whiteboard or chart paper, draw a “gallows” and the number of spaces below it representing each letter of the target word (see illustration below).
2. Say, “I’m thinking of a word on our academic word wall that has six letters and has something to do with an impact.”

![Gallows Drawing]

3. The student(s) guess one letter at a time. As a correct letter is guessed, write the letter in the corresponding blank. For each incorrect guess, draw one part of a stickman in this order—head, body, one arm, then the next, and ending with each leg. If the whole body is drawn due to incorrect responses, the man is hanged (see below) and

![Hangman Drawing]
the teacher/partner supplies the correct answer. (Note: You can also play hangman on the Internet by going to this fun website: www.hangmangame.net.)

- **Flashlight Fun** (Appropriate for many Robust Vocabulary Tier Two Words). Flashlight Fun is a simple activity suggested by Gruber (1998) that students through middle school enjoy. (Note: Students enjoy taking turns using the flashlight.)

1. Turn out the lights in your classroom.
2. Say this poem together with the class: *Flashlight, flashlight, oh so bright, Shine on a word with your light.*
3. Shine the flashlight on individual AW² words placed around the room for the class to read and chant.

- **Social studies academic word wall** (Appropriate for Robust Vocabulary Tier Three Words). This AW² activity works well with any core subject-area vocabulary or current events. The following example focuses on issues in the Middle East.

1. Put up a map showing countries of the Middle East.
2. Using yarn, target the areas or countries of interest and attach a string of yarn to the map.
3. Create a card for your AW² with the name of the country and a number and attach to the yarn.
4. Cover the label with a sticky note and have the children guess which country is which with a worksheet numbered 1 to 10 or with the number of yarn cards you have placed on the wall.

**Teacher Self-Evaluation Continuum: AW²**

Teachers, like students, go through zones of proximal development (from novice to expert) in the implementation of new teaching strategies. As part of a large-scale federal project in urban schools, Cooter (2009) developed a kind of rubric or continuum for implementing AW² to help you monitor your own use of this strategy and discover ways to deepen its use in your classroom (see Figure 8.5).

**Wheel of Fortune**

Appropriate for most Robust Vocabulary Tiers Two & Three Words

**Purpose**

Based on the popular television program, Wheel of Fortune is an exhilarating game for vocabulary review in small-group settings. This game can be played with eight students as described below with minimal materials or, if you want to create your own computer version, there are many free sites online (for example, http://jc-schools.net/tutorials/PPT-games).

**Materials**

- Index cards
- Markers
- A number wheel with the numbers 1 through 8 as pictured in Figure 8.6
Procedure

Give each student an index card with a number already printed on it (i.e., from 1 to 8) and one of the target vocabulary words to be reviewed. Instruct students to write a review question that goes with their vocabulary word on their card (allow students to use their word banks or other text resources as necessary). Next, spin the arrow on the wheel. The student whose index card is chosen by the wheel selects who will receive the question on their card.
Who Wants to Be a Millionaire?

Appropriate for most Robust Vocabulary Tiers Two & Three Words

Purpose
Another popular television game show adapted for vocabulary review is “Who Wants to Be a Millionaire?” As with Wheel of Fortune, this game can be constructed by using a free download from the Internet (usually a PowerPoint program). This game can be played in a learning center, in small-group sessions with the teacher, or as a whole class. Warning: Students get very excited playing this game! Note: It is easy and cost effective to download the game from the Internet to a classroom computer and create your own program, which can be reused year after year; one site we often use for this and other vocabulary review games is found at http://jc-schools.net/tutorials/PPT-games.

Materials
- Index cards
- Markers
- Academic word wall

Procedure
Who Wants to Be a Millionaire? is a game that features a series of questions in ascending levels of difficulty (easiest to most difficult) with four possible answers from which contestants may choose. In other words, it is a 15-item multiple-choice test. Thus, simply prepare a 15-item multiple-choice test with the questions arranged from easiest to most difficult using the following categories for the questions:
The game may be played with students in pairs (one as the host, one as the contestant) in a learning center, in small groups with the teacher as host and students working as a team, or the whole class. As each question and four choices are posed, students decide on the correct answer. If they get the answer correct, they advance to the next question. If they answer incorrectly, then the game ends and another contestant can play the game (requiring one set of questions and answers for each contestant).

As with the television version, a contestant who is unsure of an answer has three options: phone a friend (i.e., ask a classmate), use the 50–50 option (two of the multiple choices are eliminated, leaving the correct answer and one incorrect answer from which to choose), or ask the audience (classmates write the answer they would choose and then totals for each choice are announced to help the contestant make an informed choice).

Academic Vocabulary Graphic Organizer

Appropriate for Robust Vocabulary Tier Three Words

Purpose

An academic vocabulary graphic organizer helps students see relationships in known and new vocabulary while also helping to give students the necessary multiple exposures to new words so they are permanently learned. Cooter, Flynt, and Cooter (2005) developed and field-tested a graphic organizer to assist in the learning of new content vocabulary (see Figure 8.7). This example in the figure relates to the science topic of fiber optic communications. The column headings are selected to fit the teacher’s instructional goals.

Morphemic Analysis (Structural Analysis)

Appropriate for Robust Vocabulary Tier Two Words
Purpose

Morphemic analysis, also referred to as structural analysis, is the process of using one’s knowledge of word parts to deduce meanings of unknown words. A morpheme is the smallest unit of meaning in a word. There are two types of morphemes: free and bound. A free morpheme is a freestanding root or base of any word that cannot be further divided and still have meaning. In the word farmer, farm is the root word or free morpheme. The -er portion of the word farmer is considered to be a bound morpheme. Bound morphemes carry meaning but only when attached to a free morpheme. The most common bound morphemes are prefixes (in-, pre-, mono-), suffixes (-er, -ous, -ology), and inflectional endings (-s, -es, -ing, -ed, -est).

There are several ways teachers commonly introduce morphemic analysis to students as a way of learning the meanings of new words. Sometimes we use students’ knowledge of morphemes to analyze the meaning of a new word by showing a list of similar words having the same morpheme (e.g., words ending in the morpheme -phobia or -er to decipher meaning). Other times, teachers simply tell students the meanings of new morphemes and let them figure out word meanings on their own or in small groups.

The essential activity for teachers is to research the meanings of morphemes and, in the case of activities involving word family lists, examples of other words having the morphemes to be used. A resource we have found helpful in planning many vocabulary activities is The Reading Teacher’s Book of Lists (Fry, Kress, & Fountoukidis, 2000).

Materials

- A list of words taken from a reading selection
- Words with similar morphemes for some of the words
- Individual morphemes defined for some of the words

Procedures

Preselect words to be learned from the reading selection; then do the necessary background research and planning about the morphemes found in the new words. One activity is to
construct word family lists that help students determine morpheme meanings. For example, a middle school teacher may decide to focus on the word *claustrophobia*. Her research into the morpheme *-phobia* may lead to the construction of the following list:

- clausrophobia
- cardiophobia
- olfactophobia
- telephonophobia
- verbaphobia

This activity leads students to use compare-and-contrast methods of morphemic analysis. That is, they must look at the unfamiliar word and use their prior knowledge of other words that look like parts of the unfamiliar word to figure out what each word probably means. For example, *cardio-* probably reminds you of *cardiac*, which deals with the heart, and *-phobia* means “fear of.” Therefore, *cardiophobia* must mean a fear of heart disease. To use this compare-and-contrast technique with students, first select words that have morphemes that can be compared to other words students are likely to know; then present both the new word and other words that begin or end like the unfamiliar word. Look at the following example from Cooter and Flynt (1996):

> Because of my expansive vocabulary, my teacher called me a verbivore.

- *verbi-*vore
- *verbal* carnivore
- *verbose* herbivore
- *verbalize* omnivore

The teacher would write the sentence on the chalkboard and list below it examples of words that begin and end like the unfamiliar word. Then, through questioning, the teacher would lead students to specify the word’s meaning by comparing and contrasting the known words to the unfamiliar one, concluding in this case that a verbivore is a person who loves (eats) words.

Another way of using morphemic analysis to help students deduce meaning is to present unfamiliar terms along with explanations of the morphemes that make up the terms. The following procedure may be used as part of an introduction to a new text containing the words listed.

**Step 1.** Identify the terms that need preteaching.
- pro-life
- illegal
- pro-choice
- rearrest
- unable
- forewarn

**Step 2.** Along with these terms, write on the board a list of appropriate morphemes and their meanings.
- *pro* in favor of
- *il* not
- *fore* earlier
To do again
not

Step 3. Engage students in a discussion of what each term means and how the terms are interrelated. When there is confusion or disagreement, direct students to the terms in the text or the glossary for verification.

As useful as morphemic analysis can be, Cooter and Flynt (1996) offer a word of caution:

Although we encourage the teaching of how to use context and morphemic analysis, we in no way advocate the overuse of these two techniques nor the memorization of lists of morphemes or types of context clues. Teachers who make students memorize common prefixes and suffixes run the risk of having students view the task as an end and not a means to help them become better readers. The story is told of a student who memorized the prefix trans- as meaning across. Later the same week, the student was reading a science text and was asked what the word transparent meant. He replied confidently “a cross mother or father.” The point being that all vocabulary instruction in the upper grades should be meaning-oriented, connected to text, functional, and capable of being used in the future. (p. 154)

Five-Step Method
Appropriate for Robust Vocabulary Tiers Two & Three Words

Purpose
Smith and Johnson (1980) suggested a five-step direct method of teaching new vocabulary for instant recognition. It uses multiple modalities to help students bring new words into the four vocabularies: listening, speaking, reading, and writing.

Materials
- A dry-erase board, chalkboard, or an overhead projector
- Flash cards
- Different color markers

Procedure
1. Seeing. The new vocabulary word is shown on the overhead projector, chalkboard, or dry-erase board in the context of a sentence or (better) a short paragraph.
2. Listening. The teacher next discusses the word with students and verifies that they understand its meaning.
3. Discussing. Students are asked to create their own sentences using the new word or, perhaps, to think of a synonym or antonym for the word. This is done orally.
4. Defining. Students try to create their own definitions for the new word. This is often much more difficult than using it in a sentence and may not even be possible for some words (i.e., is, the, if, etc.). Sometimes it is helpful to ask students questions such as “What does this word mean?” or “What does this word do in the sentence?”
5. Writing. We advocate using word banks or similar strategies in grades K to 3. Students, sometimes requiring help, add each new word to their word bank and file it in alphabetical order. Each word is listed in isolation on one side of an index card and in the context of a sentence on the reverse side. Emergent readers may want to draw a picture clue on the word bank card to remind them of the word’s meaning.
Frayer Model

Appropriate for Robust Vocabulary Tiers Two & Three Words

Purpose
The Frayer Model (Frayer, Frederick, & Klausmeir, 1969) is a classic strategy that helps students understand new vocabulary and concepts in relation to what is already known. Frayer is especially useful for nonfiction terms—especially in the sciences—because it presents essential and nonessential information related to the term, as well as examples and nonexamples.

Materials
- A blank Frayer Model form on a transparency
- An overhead projector for demonstration purposes
- Paper and pencils for student notetaking

Procedure
The teacher presents or helps students determine essential and nonessential information along with examples and nonexamples of a concept and identify coordinate and subordinate relationships of the concept. This classification procedure can be done as a group, in dyads, or individually. Figure 8.8 shows an example for the concept of mammals.

Cubing: The Die Is Cast!

Appropriate for Robust Vocabulary Tier Three Words

Purpose
Cubing (Cowan & Cowan, 1980) is a postreading activity requiring students to analyze, discuss, and write about important new terms. The process helps activate prior knowledge or schemata that relate to the new term, which in turn helps the new information to become part of long-term memory.

FIGURE 8.8 Frayer Model: Mammals

Concept: MAMMALS

Essential Information or Attributes: | Examples:
---|---
1. higher-order vertebrates | 1. dogs
2. nourish young with milk from mammary glands | 2. humans
3. warm blooded | 3. monkeys
4. have skin covered with hair | 4. whales

Nonessential Information or Attributes: | Nonexamples:
---|---
1. size of the mammal | 1. spiders
2. number of young born | 2. fish
3. where the mammal lives (i.e., water, land, etc.) | 3. reptiles
Materials
- A large foam or wooden cube covered with contact paper.

Procedure
On each side of the cube write a different direction or question related to the new term. The following examples show questions for the term *wheelchair*:

1. What does it look like?
2. What is it similar to or different from?
3. What else does it make you think of?
4. What is it made of?
5. How can it be used?
6. Where are you likely to find one?

Once the cube is rolled and the question or direction facing the class or group is seen, each student is given a set number of minutes to record his or her answer. All six sides of the cube can be used in the activity or, if you prefer, only a few. Once the cubing has ended, students can share their responses with the class or in small groups.

Vocabulary Bingo!
Appropriate for Robust Vocabulary Tiers Two & Three Words

Purpose
Vocabulary Bingo! (Spencer, 1997) is a whole-group word review activity in the format of the popular game Bingo. This activity is an especially useful review for students learning English as a second language (ESL) and students in language enrichment programs, as well as for students whose first language is English.

Materials
- Vocabulary Bingo! boards on which you have printed new words learned in reading and writing activities during the year or chosen from a classroom word bank
- Definitions for each word found on the cards written on slips of paper for the caller to read aloud during the game

Procedure
Unlike traditional Bingo games in which participants cover spaces on their boards when a number such as “B23” is called, students playing Vocabulary Bingo! cover board spaces showing review vocabulary words matching the definitions that are read aloud by a caller. Boards can all be the same or can differ from one another, depending on the size of the group and the abilities of the learners. When all spaces in a row are covered, the student calls out “Bingo!” An example of a Vocabulary Bingo! card is shown in Figure 8.9.

Savor: Subject Area Vocabulary Reinforcement Activity
Appropriate for Robust Vocabulary Tiers Two & Three Words

Purpose
The Subject Area Vocabulary Reinforcement Activity (Stieglitz & Stieglitz, 1981) is an excellent postreading vocabulary learning procedure. As its name implies, SAVOR is intended for use
with factual readings. Students combine research and rereading skills to identify similarities and differences among new terms taken from topics being studied in science, social studies, mathematics, health, history, or another content area. Make a content analysis of the unit of study and list selected new terms in the left-hand column of the SAVOR grid and list characteristics related to the terms across the top row. An example is shown in Figure 8.10.

### Materials
- A SAVOR grid constructed on a bulletin board or worksheet to be photocopied

### Procedure
SAVOR is intended to be used as a postreading activity to reinforce learning of new vocabulary. After students have completed their initial reading of the subject-matter text, introduce the SAVOR grid bulletin board or photocopied worksheet. Discuss how to complete each grid space with either a plus (+) or minus (−), based on whether the term has the trait listed across the top of the grid. As with all minilessons, the teacher should first model the thinking process he or she is using to determine whether to put a plus or minus in the space provided. In Figure 8.10, we show an example of a SAVOR grid completed by children in a southern Texas school as they studied the solar system.

### Peer Teaching
**Appropriate for Robust Vocabulary Tiers Two & Three Words**

### Purpose
An activity that has been proven to be effective with ESL students is called peer teaching (Johnson & Steele, 1996). It is considered to be a generative strategy, or one that is student initiated and monitored and can be used in different situations. In peer teaching, a student chooses from the reading selection a word he or she feels is new and important and then teaches that term to another student, after which the roles are reversed.

### Materials
- A reading selection to be shared with the whole group
- Typical supplies usually found in a writing center for students to use as they wish
- A list showing several ways of teaching new vocabulary words to others, like those techniques found in this chapter that you commonly use with the students in your class

![Vocabulary Bingo! Card](FIGURE 8.9)
Procedure
First, conduct a one- or two-session minilesson in which you model choosing a word from the reading selection that seems to be important to understanding what the author is saying. As an example, in Betsy Byars’s Newberry Award–winning book *The Summer of the Swans* (1970), the main character, Sara, has a “grudging tolerance” of her Aunt Willie. Because this is important to understanding Sara and her feelings, you may select “grudging tolerance” as a term to teach someone reading the book. Next, model how you would choose one of the common strategies you use in class (on a list you post for all to see) and demonstrate how you would plan to teach your term to another. Finally, ask someone to role-play with you as you teach “grudging tolerance.”

Personal Word Lists
Appropriate for Robust Vocabulary Tiers Two & Three Words

Purpose
Most words are learned through repeated encounters in a meaningful context in spoken and written forms. All too often, however, when students come to a word they do not know, they simply run to the dictionary or to someone else for a quick definition instead of using sentence or passage context to figure out for themselves the word’s meaning. While we certainly want students to develop dictionary skills, the first line of attack for gaining word meaning should be sentence or passage context. Personal word lists, as described in this section, have been around elementary and secondary classrooms for a very long time and have recently found success with ESL learners (Johnson & Steele, 1996). A personal word list is a structured way of helping students develop the habit of using context to determine vocabulary meaning and to permanently fix the vocabulary in long-term memory.

Materials
- Multiple blank copies of the personal word list, as shown in Figure 8.11
- A transparency version for demonstrations
- Overhead projector
Teaching Strategies: Helping Students Increase Their Reading Vocabularies

Procedure
Distribute blank copies of the personal word list sheet for students to review as you explain its function. Using a passage read recently by the class, model two or three examples of how you would complete the form for words you found in the passage that seemed important. Next, do a guided practice exercise with the whole group in which you provide several more words from the passage. Ask students to complete the form for each word, and have volunteers share what they found with the class. Once students seem secure with the personal word list form, ask them to make several new entries with words of their own choosing in the next reading assignment. This will serve as a kind of individual practice exercise. Further use of the personal word list will depend on your class needs and how well you feel it works with your students. An example of a personal word list for the book *Lincoln* (Donald, 1995) is shown in Figure 8.11.

Semantic Maps
Appropriate for Robust Vocabulary Tiers Two & Three Words

Purpose
Semantic maps are useful in tying together new vocabulary with prior knowledge and related terms (Johnson & Pearson, 1984; Monroe, 1998). They are essentially a kind of “schema blueprint” in which students map what is stored in their brain about a topic and related concepts. Semantic maps help students relate new information to schemata already in the brain, integrate new information, and restructure existing information for greater clarity (Yopp & Yopp, 1996). Further, for students having learning problems, using semantic maps prior to reading a selection has also proven to promote better story recall than traditional methods (Sinatra, Stahl-Gemake, & Berg, 1984).

Materials
- Writing materials
**Procedure**

There are many ways to introduce semantic mapping to students, but the first time around you will likely want to use a structured approach. One way is to introduce semantic maps through something we call “wacky webbing.” The idea is to take a topic familiar to all, such as the name of one’s home state, and portray it in the center of the web, inside an oval. Major categories related to the theme are connected to the central concept using either bold lines or double lines. Details that relate to the major categories are connected using single lines. Figure 8.12 shows a semantic web for the topic “Tennessee.”

Semantic webs can also be constructed that relate to a story or chapter book the students are reading. In Figure 8.13, we share one example of a semantic web from a story in the book *Golden Tales: Myths, Legends, and Folktales From Latin America* (Delacre, 1996).

**Making Words**

*Appropriate for Robust Vocabulary Tier Two Words*

**Purpose**

Making Words (Cunningham & Cunningham, 1992) is a word-learning strategy that may fit just as well in our chapter on phonics. It is a strategy that helps children improve their phonetic understanding of words through invented or “temporary” spellings (Reutzel & Cooter, 2000) while also increasing their repertoire of vocabulary words they can recognize in print. Making Words will be a familiar strategy for anyone who has ever played the crossword board game Scrabble.

**Materials**

- A pocket chart
- Large index cards
- Markers

![Semantic Web: Tennessee](image)
**Procedure**

Students are given a number of letters with which to make words. They begin by making two- or three-letter words with the letters during a set amount of time, progressing to words having more letters until they finally arrive at the teacher’s target word that uses all of the letters. This final word can be the main word to be taught for the day, but the other words discovered during the activity may also be new for some students. By manipulating the letters to make words of two, three, four, and more letters using temporary spellings, students have an opportunity to practice their phonemic awareness skills. Making words is recommended as a 15-minute activity when used with first and second graders. In Figures 8.14 and 8.15, we summarize and adapt the steps in planning and teaching a Making Words lesson as suggested by Cunningham and Cunningham (1992). Figure 8.16 provides details necessary for making two more Making Words lessons suggested by Cunningham and Cunningham (1992) that may be useful in helping your students learn the procedure.

**Word Banks**

*Appropriate for Robust Vocabulary Tiers Two & Three Words*

**Purpose**

It is important for students to learn to recognize a number of words on sight to facilitate the decoding process. Many sight words carry little meaning (*the, of, and a*) but provide the “glue” of language that helps us represent thoughts. One question for teachers is how to go about helping students increase the numbers of words they can recognize immediately on sight. Word banks are one method to help students collect and review sight words.
banks also can be used as personal dictionaries. A word bank is simply a student-constructed box, file, or notebook in which newly discovered words are stored and reviewed.

Materials
- Small shoe boxes (early grades)
- Notebooks or recipe boxes (upper grades)
- Alphabetic dividers

Procedure
In the early grades, teachers often collect small shoe boxes from local stores to serve as word banks. The children are asked at the beginning of the year to decorate the boxes in order to make them their own. In the upper grades, more formal-looking word banks are used. Notebooks or recipe boxes are generally selected. Alphabetic dividers can also be used at all levels to facilitate the quick location of word bank words. In addition, use of alphabetic dividers in the early grades helps students rehearse and reinforce knowledge of alphabetical order. Figure 8.17 shows an example of a word bank.
Once students have constructed word banks, the next issue for the teacher is helping students decide which words should be included and from what sources. At least four sources can be considered for sight word selection and inclusion in word banks (Reutzel & Cooter, 2000): basal reader sight word lists; "key vocabulary" words that students have self-selected for learning (Ashton-Warner, 1963); “discovery” words (i.e., words that are discovered during reading)

**FIGURE 8.15** Teaching a “Making Words” Lesson

1. Place the large single letters from the key word in the pocket chart or along the chalking board ledge.
2. For modeling purposes, the first time you use Making Words, select one of the students to be the “passer” and ask that child to pass the large single letters to other designated children.
3. Hold up and name each of the letter cards and instruct students selected to participate in the modeling exercise to respond by holding up their matching card.
4. Write the numeral 2 (or 3, if there are no two-letter words in this lesson) on the board. Next, tell the student “volunteers” the desired word and its definition. Then, tell the student volunteers to put together two (or three) of their letters to form the desired word.
5. Continue directing the students to make more words using the letter cards until you have helped them discover all but the final key word (the one that uses all the letters). Ask the student volunteers if they can guess the key word. If not, ask the remainder of the class if anyone can guess it. If no one is able to do so, offer students a meaning clue (e.g., “I am thinking of a word with _____ letters that means . . .”).
6. As a guided practice activity, repeat these steps the next day with the whole group using a new word.


**FIGURE 8.16** Making Words: Additional Examples

**Lesson Using One Vowel:**
Letter cards: u k n r s t
Words to make: us, nut, rut, sun, sunk, runs, nuts/rust, tusk, stun, stunk, trunk, trunks (the key word)
You can sort for . . . rhymes, “s” pairs (run, runs; rut, ruts; trunk, trunks)

**Lesson Using Big Words:**
Letter cards: a a a e i b c h l l p t
Words to make: itch, able, cable, table, batch, patch, pitch, petal, label, chapel, capital, capable, alphabet, alphabetical (the key word)
You can sort for . . . el, le, al, -itch, -atch

class discussions); and “function words” (words that supply structure to sentences but carry little or no meaning, such as with, were, what, is, of). A list of high-frequency sight words is supplied in Figure 8.18.

Comparison Grids for Content-Area Vocabulary

Appropriate for Robust Vocabulary Tier Three Words

Purpose
In content-area instruction, it is important to create conceptual bridges between new vocabulary and their meanings and their relationships to other concepts (Harmon, Hedrick, & Fox, 2000). Comparison grids can create a kind of two-dimensional framework for students that greatly simplifies abstract thinking. See Figure 8.19 for an example adapted from Harmon and others (2000) for the new vocabulary terms executive, legislative, and judicial.

Materials
- A simple grid that has one set of terms along the left-hand column and the vocabulary you want students to compare and contrast along the top row.
Teach these words any way you can. Teaching suggestions might include (1) flashcards for flashing and sorting, (2) word walls, (3) pocket charts for short sentences or stories using instant words, (4) teacher-written cooperative stories shown on the chalkboard, (5) spelling lessons, (6) games such as Bingo or board games, (7) lots of easy reading, and (8) a copy of this sheet given to the student for home study.

Test these words by asking the students to read them instantly. Test each student beginning, mid-year, and at the end of the year.

<table>
<thead>
<tr>
<th>First Hundred</th>
<th>Second Hundred</th>
<th>Third Hundred</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–25</td>
<td>101–125</td>
<td>201–225</td>
</tr>
<tr>
<td>26–50</td>
<td>126–150</td>
<td>226–250</td>
</tr>
<tr>
<td>51–75</td>
<td>151–175</td>
<td>251–275</td>
</tr>
<tr>
<td>76–100</td>
<td>176–200</td>
<td>276–300</td>
</tr>
</tbody>
</table>

- the, or, will, number, over, say, set, try, high, saw, important, miss
- of, one, up, no, new, great, put, kind, every, left, until, idea
- and, had, other, way, sound, where, end, hand, near, don’t, children, enough
- a, by, about, could, take, help, does, picture, add, few, side, eat
- to, words, out, people, only, through, another, again, food, while, feet, face
- in, but, many, my, little, much, well, change, between, along, car, watch
- is, not, then, than, work, before, large, off, own, might, mile, far
- you, what, them, first, know, line, must, play, below, close, night, Indian
- that, all, these, water, place, right, big, spell, country, something, walk, really
- it, were, so, been, year, too, even, air, plant, seem, white, almost
- he, we, some, call, live, mean, such, away, last, next, sea, let
- was, when, her, who, me, old, because, animal, school, hard, began, above
- for, your, would, am, back, any, turn, house, father, open, grow, girl
- on, can, make, its, give, same, here, point, keep, example, took, sometimes
- are, said, like, now, most, tell, why, page, tree, begin, river, mountain
- as, there, him, find, very, boy, ask, letter, never, life, four, cut
- with, use, into, long, after, follow, went, mother, start, always, carry, young
- his, an, time, down, thing, came, men, answer, city, those, state, talk
- they, each, has, day, our, want, read, found, earth, both, once, soon
- I, which, look, did, just, show, need, study, eye, paper, book, list
- at, she, two, get, name, also, land, still, light, together, hear, song
- be, do, more, come, good, around, different, learn, thought, got, stop, being
- this, how, write, made, sentence, farm, home, should, head, group, without, leave
- have, their, go, may, man, three, us, America, under, often, second, family
- from, if, see, part, think, small, move, world, story, run, later, it's

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Vocabulary Cluster

Appropriate for Robust Vocabulary Tiers Two & Three Words

Purpose
It is especially important that students who struggle with reading use the context of a passage with vocabulary they know to understand new words in print. English language learners (ELLs) and students who have language deficiencies due to poverty are two large groups of students who benefit from direct instruction of this kind (Peregoy & Boyle, 2001). With the vocabulary cluster strategy, students are helped to read a passage, gather context clues, and then predict the meaning of a new word you have targeted for learning.

Materials
- Multiple copies of a text students are to read
- An overhead transparency and projector
- Erasable marking pens for transparencies

Procedure
First, select vocabulary you want to teach from a text the students will be reading. This could be a poem, a song, a novel, a nonfiction textbook, or other appropriate reading. Next, gather the students around the overhead projector and draw their attention to the transparency you
have prepared. The transparency should contain an excerpt from the text with sufficient context to help students predict what the unknown word may be.

The target word should have been deleted and replaced with a blank line, much the same as with a cloze passage (discussed earlier in this chapter). In Figure 8.20 you find a passage prepared in this way along with a vocabulary cluster supporting the new word to be learned. This example is based on the book *Honey Baby Sugar Child* by Alice Faye Duncan (2005) written as a read-aloud book for young children. Through discussion, you will lead students into predicting what the unknown word may be. If the word is not already in students’ listening vocabulary, as with ELL students or those with otherwise limited vocabularies, then you will be able to introduce the new word quite well using the context and synonyms provided in the vocabulary cluster.

**FIGURE 8.20** Vocabulary Cluster based on *Honey Baby Sugar Child* (Duncan, 2005) Target word: *twirl*

*You make me laugh.*

*We jump and __________.*

*We run in the green, green grass.*

*And when the clouds rush and swirl*

*on a rainy day;*

*yo smile is my sunshine.* (Duncan, 2005, pp. 7–8)

Contextual Redefinition for Technical Vocabulary

Appropriate for Robust Vocabulary Tier Three Words

Purpose
While there has been some debate over the years about the extent to which context should be emphasized, it is clear that learning from context is a very important component of vocabulary acquisition (Adams, 1990, p. 150). An excellent method of introducing terminology in context, such as that found in informational readings, as well as demonstrating to students why they should use context whenever possible to figure out unfamiliar words, is a strategy called contextual redefinition (Cunningham, Cunningham, & Arthur, 1981).

Materials
- Chalkboard, overhead projector, and/or teacher-constructed activity sheets

Procedure
The steps in this procedure have been adapted from Cooter and Flynt (1996). Begin by selecting five or six terms that are unfamiliar or probably known by only a few students in the class. Introduce the topic and display the new terms on the chalkboard or overhead. Ask each student or pair of students to predict a brief definition for each term, encouraging them to guess at word meanings and reminding them that the goal is to try to come up with logical ideas and not to worry about being “right.” After the students have had an opportunity to discuss probable definitions, call for individuals to share their ideas and write them on the chalkboard or overhead projector transparency. Briefly discuss why the students were unable to do much more than guess at the word’s meanings.

Next, tell the students that you have written these same words in sentences or short paragraphs and that you want them to read each passage to see if they want to revise their original guesses. Be sure to present each word in a contextually rich sentence. During the ensuing discussion, encourage students to explain why they think the word means what they now think it means. Record varying responses next to each term as they occur.

Finally, if there are differences, have students find the word in either the text or the glossary and read its definition. Then have students copy the finalized sentences in their notebooks or journals.

Contextual redefinition provides students with opportunities to share their skills in using context and can be helpful in promoting independent use of context clues. Teachers find it an invigorating means for preteaching terms and showing that the glossary is not the first tool readers can use in figuring out the meanings of new words; context usually is.

SELECTED REFERENCES

Selected References


Cooter, R. B., & Flynt, E. S. (1996). Teaching reading in the content areas: Developing content literacy for all students. Columbus, OH: Merrill/Prentice Hall.


Now go to Topic 6: “Vocabulary” in the MyEducationLab (www.myeducationlab.com) for your course, where you can:

- Find learning outcomes for “Vocabulary” along with the national standards that connect to these outcomes.
- Complete the tasks in the Assignments and Activities to help you more deeply understand the chapter content.
- Examine challenging situations and cases presented in the IRIS Center Resources.
- Access video clips of CCSSO National Teachers of the Year award winners responding to the question, “Why Do I Teach?” in the Teacher Talk section.
- Apply and practice your understanding of the core teaching skills identified in the chapter with the Building Teaching Skills and Dispositions learning units.