Chapter 6
Increasing Reading Vocabulary

What Does Research Tell Us About Vocabulary Learning?
How Can Teachers Effectively Assess Students’ Vocabulary Knowledge?
Evidence-Based Instruction Practices for Increasing Vocabulary Knowledge
Response to Intervention: Tier 2 Vocabulary Instruction
How do students acquire reading vocabulary?

Name four types of vocabulary assessment and tools that may be used for each.

What explicit instruction strategies can be employed to help students learn vocabulary? Can you describe incidental instructional strategies that may also help students learn new words?

Which vocabulary instruction strategies are appropriate for Tier 2 instruction as a part of a Response to Intervention (RTI) approach?

What lessons can teachers learn from the Lemony Snicket series for incidentally teaching new vocabulary word meanings?

If you were to decide between digital jumpstarts or podcasts to weave technology into your vocabulary instruction, which would you choose? How might your choice change for use with struggling readers?

How can “reading backpacks” be used to involve parents in their child’s vocabulary learning?

**Motivation and Engagement:**
- Teaching Vocabulary

**Technology and New Literacies:**
- Using Technology and New Literacies to Enhance Vocabulary Learning

**Family and Community Connections:**
- Connections That Enhance Vocabulary Learning
Can You Hear Me Now?

(Author's Note: To learn more about how to use joint productive activities with your class, go online to http://crede.berkeley.edu and view “The Five Standards”)

It is November, and Becky has only recently arrived at Hillview School from Pennsylvania. She likes living on the West Coast and has made a new friend, Katy, in her fourth-grade class. Katy has been asked to be Becky’s personal docent for a few weeks by their teacher, Mr. Garcia, to help Becky feel comfortable in her new surroundings. Today is a great day for Katy-the-docent for two reasons. For one thing it is a stormy day.

“I positively love a good gulley-washer!” says Katy to Becky rather theatrically.

Not only that, today Mr. Garcia is having the students work in groups of four on a “joint productive activity” or JPA during science. Katy enjoys JPAs because she gets to work with a small group to solve a kind of puzzle as a team. When they finish, the group always gets to post their “findings” on chart paper for a Gallery Walk and also see how the other students solved the same task. Because Katy is Becky’s docent, they get to be in the same group.

Katy and Becky are assigned to work with Alfred and Walker in their JPA group. (Their task sheet is on the following page.) After their group work and Gallery Walk are finished and they are at lunch, Katy asks Becky what she likes best about the JPA.

“I’ve never done anything like it!” replies Becky. “I’m not used to being allowed to actually talk in class like this. It was pretty great! I liked how we were able to decide together how to fill out the grid. Raymond had some ideas about cell phones I never would have thought of on my own. Also, Walker did a great job being our spokesperson for the Gallery Walk. I think I’d like to try being the spokesperson sometime.”

“No problem,” says Katy. “Mr. Garcia makes sure everyone gets a turn. Just let the rest of the group know when you want to try it. We’ll all help you!”

Teacher Knowledge

What Does Research Tell Us About Vocabulary Learning?

It has been rightly said that vocabulary is the glue that holds stories, ideas, and content together, making comprehension accessible for children (Rupley, Logan, &
What Does Research Tell Us About Vocabulary Learning?

Nichols, 1998/99, p. 339). 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 whether they speak English as their native language or are English learners (Lervag & Auhurst, 2010). Conversely, children who have small listening, speaking, and reading vocabularies—who are from what could be termed “language-deprived backgrounds”—must receive immediate attention if they are to have any real chance at reading success (National Research Council, 1998; Johnson, 2001).

Words are the captions, you might say, that describe our life experiences (Reutzel & Cooter, 2011). An analysis of the domain of vocabulary instruction should first consider what the word means. The first definition of vocabulary in the Random House Webster’s Unabridged Dictionary (Flexner, 2003) is “the stock of words used

Joint Productive Activity
Can you hear me now?
Comparing and Contrasting Hi-Tech Vocabulary

Time Allowed: 45 minutes

Your Group’s Task: Scan the article we have been reading together; “The Cell Phone Revolution,” from Invention & Technology magazine to complete the “semantic feature analysis grid” below. In this chart you will compare and contrast the important ideas and characteristics of the words listed in the left-hand column. This activity should be done in the same way I modeled the example yesterday when we compared insects and animals.

Important things to remember from past JPAs:
1. All group members must agree on answers.
2. You should appoint a timekeeper to keep things moving. You will only have 45 minutes to complete this task. No exceptions.
3. Use a “six-inch voice” when you talk so you don’t disturb the other groups.
4. No “side bar” conversations. Listen as each person talks; you might learn something!
5. Observe “equity of voice”; let everyone talk at least two times.

When your work is done, copy your semantic feature analysis grid onto the chart paper provided using the colored markers at your table. Vote for one of your group members to be the “champion” for the group to do a 1-minute presentation at the beginning of the Gallery Walk to explain your answers. If someone hasn’t been champion for a group before, let them give it a go if they are ready.

Here is the semantic feature analysis grid for you to complete.

The Cell Phone Revolution

<table>
<thead>
<tr>
<th></th>
<th>Wireless</th>
<th>Makes this tool work</th>
<th>Early communications technology</th>
<th>People who use or have used this</th>
<th>Tool for two-way communication technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>cellular phone tower</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mobile phone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transistor radio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>antenna</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>silicon chip</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subscriber</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BlackBerry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>walkie-talkie</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Directions: After checking for the meanings of the vocabulary words in the left-hand column against the magazine article, “The Cell Phone Revolution,” put a “0” in the appropriate box if the word and description do NOT go together, a “1” if the word partly matches, and a “2” if they go together well. If you have disagreement in your group, vote for a majority opinion before marking your response.
by or known to a particular people or group of persons.” A subsequent definition is “the words of a language.” Vocabulary instruction is defined as teaching word meanings and how one determines word meanings from an understanding of word parts and contextual clues when available. When clues are unavailable, then word meanings and word meaning learning strategies must be taught. Vocabulary development in humans, which goes on throughout life, can be enhanced in the classroom through explicit and incidental instruction. Except for the economically deprived or children with learning disabilities, most children acquire a vocabulary of over 10,000 words during the first 5 years of their lives (Smith, 1987). Most schoolchildren will 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). First-graders from high socioeconomic status (SES) populations have access to twice as many word meanings as children from lower SES groups (Graves, Brunetti, & Slater, 1982; Graves & Slater, 1987).

Vocabulary knowledge in reading is the “great predictor” of school success (Cooter, 2010). For example, we now know that vocabulary knowledge accounts for over 80 percent of the variance in students’ reading comprehension test scores. In fact, for fourth-grade students, 70 percent of reading comprehension problems are related to a lack of vocabulary (National Research Council, 1998). Even though the need for robust vocabulary development in our students is obvious for developing fluent reading, there is currently little emphasis on instruction focused on the acquisition of vocabulary in schools and classrooms (Biemiller, 2001; Reutzel, 2010).

### How Do Students Acquire New Vocabulary?

There are many sources for learning new word meanings. Some of them may surprise you. Students learn a great deal of their new vocabulary from conversations, independent reading, and even from the media. However, they do not learn new words from each source equally. To illustrate this point, Table 6.1 presents selected statistics revealing the provenance of rare words (i.e., new or unfamiliar words) found in various language and text sources commonly accessed by children and adults (Cunningham & Stanovich, 1998; Rasinski, 1998).

<table>
<thead>
<tr>
<th>Source</th>
<th>Number of Rare (Uncommon) Words per 1,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult speech (expert testimony)</td>
<td>28.4</td>
</tr>
<tr>
<td>Adult speech (college graduates to friends)</td>
<td>17.3</td>
</tr>
<tr>
<td>Prime time adult television</td>
<td>22.7</td>
</tr>
<tr>
<td>Mister Rogers and Sesame Street</td>
<td>2.0</td>
</tr>
<tr>
<td>Children’s books—preschool</td>
<td>16.3</td>
</tr>
<tr>
<td>Children’s books—elementary</td>
<td>30.9</td>
</tr>
<tr>
<td>Comic books</td>
<td>53.5</td>
</tr>
<tr>
<td>Popular magazines</td>
<td>66.7</td>
</tr>
<tr>
<td>Newspapers</td>
<td>68.3</td>
</tr>
<tr>
<td>Adult books</td>
<td>52.7</td>
</tr>
<tr>
<td>Scientific article abstracts</td>
<td>128.0</td>
</tr>
</tbody>
</table>

Were you surprised by any of these figures? How about the number of rare words used by college graduates in their conversations with friends compared to the number commonly found in comic books!? Or for that matter, the number of uncommon words found in comic books compared to elementary children’s books? Such findings help make the supporting case for students’ daily reading in self-selected books—including nonfiction (e.g., science, social studies), comics, graphic novels, and popular magazines.

### Research on Vocabulary Learning

In reviewing research on vocabulary learning, one conclusion becomes crystal clear: Reading comprehension and writing composition are dependent on
word knowledge. Indeed, all good readers and writers have a large store of word meanings they can access without significant effort or attention. So what do we know about vocabulary learning? To partially answer this question, we discuss in the following section key findings supported by research (e.g., Beck, McKeown, & Kucan, 2002; Johnson, 2001; Sanacore & Palumbo, 2009).

**Vocabulary Is Built Through Language Interactions**

Children who are exposed to vocabulary through conversations learn words they will need to recognize and comprehend while reading (Dickinson & Tabors, 2001). Burns, Griffin, and Snow (1999) explain early language acquisition in the following way:

> Vocalization in the crib gives way to play with rhyming language and nonsense words. Toddlers find that the words they use in conversation and the objects they represent are depicted in books—that the picture is a symbol for the real object and that the writing represents spoken language. In addition to listening to stories, children label the objects in books, comment on the characters, and request that an adult read to them. . . . Talking to adults is children's best source of exposure to new vocabulary and ideas. (p. 19)

Reading, and being read to, also increase vocabulary learning (Blewitt, Rump, Shealy, & Cook, 2009). Books give us challenging concepts, colorful description, and new knowledge and information about the world in which we live. Conversely, children who come to school with limited vocabularies as a result of either second-language learning or the effects of poverty (Cooter, 2003, 2010) struggle to take even their first steps in reading and understanding texts. Burns, Griffin, and Snow (1999) ask, “How can they understand a science book about volcanoes, silkworms, or Inuits? What if they know nothing of mountains, caterpillars, or snow and cold climates?” (p. 70). As teachers, we must make sure that every child is offered many educational opportunities to develop a rich and useful vocabulary.

**Research Findings by the National Reading Panel.** To determine how vocabulary can best be taught and related to the reading comprehension process, the National Reading Panel (NRP) examined more than 20,000 research studies identified through electronic and manual literature searches. The studies reviewed suggest that vocabulary instruction does not necessarily lead to gains in comprehension unless the methods used are appropriate to the age and ability of the reader. Vocabulary is also learned incidentally through storybook reading or in listening to others read aloud. Preteaching word meanings before reading a text is also helpful.

**Repeated Exposure.** Having the student discover words in various contexts appears to enhance vocabulary development. This may include word games, word wall activities, and reading high-interest supplemental texts.

**The Four Types of Vocabulary**

Although we often speak of vocabulary as if it were a single entity, it is not. Human beings acquire four types of vocabulary—in descending order according to size, listening, speaking, reading, and writing vocabularies. **Listening vocabulary,** the largest, is made up of words we can hear and understand. All other vocabularies are subsets of our listening vocabulary. The second-largest vocabulary, **speaking vocabulary,** is
composed of words we use when we speak. Next is our reading vocabulary, those words we can identify and understand when we read. The smallest vocabulary is our writing vocabulary—words we use in writing. These four vocabularies are continually nurtured in the effective teacher’s classroom.

**Levels of Vocabulary Learning**

As with most new learning, new vocabulary words and concepts are mastered by degree. Beck, McKeown, and Kucan (2002) describe three levels of vocabulary words: tiers 1, 2, and 3. In order to avoid confusing the tiers of vocabulary words described by Beck and colleagues (2002) with Tier 1, 2, and 3 Response to Intervention (RTI) terminology, we will refer to these three levels of vocabulary words to be learned as basic speaking vocabulary (Tier 1), elaborated speaking vocabulary (Tier 2), and academic knowledge domain vocabulary (Tier 3). Definitions for these three levels of vocabulary are presented in Table 6.2. These levels of vocabulary knowledge apply to each of the four types of vocabularies every individual possesses: listening, speaking, reading, and writing.

**Levels of Word Learning**

Research informs us about the number of words that need instruction found in individuals’ basic speaking vocabularies. Estimates indicate that about 8,000 basic speaking vocabulary words need no instruction for most students (Beck et al., 2002). At the elaborated speaking vocabulary level there are about 7,000 words that require explicit instruction. Beck and others (2002) recommend that we plan instruction for about 400 elaborated speaking vocabulary words per year to help students stay on track academically.

**What Research Tells Us About Teaching Vocabulary**

Most vocabulary is learned indirectly, but some vocabulary must be taught explicitly (Rupley, Blair, & Nichols, 2009). The following conclusions about indirect vocabu-

<table>
<thead>
<tr>
<th>Level Word Knowledge</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 Basic speaking vocabulary</td>
<td>Word meanings that are commonly learned in conversation and from accessible media sources (No instruction needed)</td>
</tr>
<tr>
<td>Tier 2 Elaborated speaking vocabulary</td>
<td>Word meanings that are “sophisticated synonyms” for words in the basic speaking vocabulary. Basic (e.g., big vs. gigantic; lucky vs. fortunate); relatively highly frequent in the speaking vocabularies of well-educated persons</td>
</tr>
<tr>
<td>Tier 3 Academic knowledge domain vocabulary</td>
<td>Word meanings that are learned within highly specialized knowledge domains such as botany, geography, medicine, and physics (photosynthesis, peninsula, astereopis, quark)</td>
</tr>
</tbody>
</table>

lary learning and direct vocabulary instruction are of particular interest and value to
classroom teachers (National Reading Panel, 2000):

- **Children learn the meanings of most words indirectly, through everyday experiences with oral and written language.** Children learn word meanings in conversations with other people. As they participate in conversations children 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 to define an unfamiliar word and, after reading, engages the child in a conversation about the book using the word (Blewitt et al., 2009).

  The third way children indirectly learn new words is through reading. This is why many teachers believe that daily, independent reading practice sessions of 10 to 20 minutes are so critical (Krashen, 1993). Put simply, the more children read, the more words they’ll 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. Many readers learn much more from practice reading when working with a “buddy.”

- **Students learn vocabulary when they are explicitly taught individual word meanings and word learning strategies.** Explicit instruction helps students learn unfamiliar word meanings (Taylor, Mraz, Nichols, Rickelman, & Wood, 2009) such as those that represent complex concepts not part of students’ everyday experiences (National Reading Panel, 2000). When teachers preteach new words that are associated with a text that students are about to read, better reading comprehension likewise results (Webb, 2009).

- **Developing word consciousness boosts vocabulary learning.** Word consciousness learning activities stimulate awareness and interest in words, their meanings, and their power. Word-conscious students enjoy words and are zealous about learning them. By modeling the use of sophisticated words, teachers can promote students’ vocabulary growth and word consciousness (Lane & Allen, 2010).

  The keys to maximizing word consciousness are wide reading and extensive writing. When reading a new book aloud to students, call their attention to the way the author chooses her words to convey particular meanings. Imagine the fun you can have discussing some of the intense words used by Gary Paulsen (1987) in his novel *Hatchet* or the downright captivating word selection employed by J. K. Rowling (2009) in *Harry Potter and the Deathly Hallows*. Encourage your students to play with words by constructing puns or raps. Help students research a word’s history and find examples of its usage in their everyday lives.

**Which Words Should Be Taught?**

Not all words are created equal, especially in terms of difficulty. As McKeown and Beck (1988) explain:

> The choice of which words to teach and what kind of attention to give them depends on a variety of factors, such as importance of the words for understanding the selection, relationship to specific domains of knowledge, general utility, and relationship to other lessons and classroom events. (p. 45)
Realistically, you will only be able to teach thoroughly about 10 per week, so you must choose words carefully. Focus your energy on high-utility words in literature selections (elaborated speaking vocabulary words) and words that are important to understanding the content selections you will be reading in class (academic knowledge domain vocabulary).

**Academic Knowledge Domain Vocabulary.** The words used to represent the specialized concepts and ideas found in core subject area fields (i.e., mathematics, science, social studies, English/language arts) are referred to as academic knowledge domain vocabulary. Although each field of study has its own comprehensive list of academic vocabulary some are commonly used across boundaries, though in different contexts. In a study of over 3.5 million running words of written academic text, Coxhead (2000) identified the 60 most frequently used words across disciplines (see Figure 6.1). These are of great utility to all learners and deserve our attention.

![Figure 6.1](https://example.com/figure6.1.png)


To help you plan and evaluate learning you must consider tactics for assessing students’ reading vocabulary knowledge (Pearson, Hiebert, & Kamil, 2007; Berne & Blachowicz, 2008). Dale Johnson (2001), a prominent researcher in the area of vocabulary instruction, explains three challenges in vocabulary assessment: (1) choosing which words to test, (2) determining what it means for a student to actually “know” a word, and (3) deciding how to reliably test vocabulary knowledge. In this section, we take a look at ways classroom teachers can do four types of assessments: screening assessments at the beginning of the school year or at the start of a unit of study, diagnostic assessments for students having special learning needs, progress-monitoring assessments, and outcome assessments once instruction has been concluded.
Screening Assessments

Screening assessments provide a critical first look at students’ vocabulary knowledge. They should be quick but also provide reliable and valid data. Screening assessments help teachers place students into preliminary instructional groups based on their vocabulary knowledge and needs. Here is our “short list” of screening assessments for vocabulary knowledge we have found helpful.

Vocabulary Definition. A teacher-constructed tool, vocabulary definition (Beck et al., 2002) can be used either as a whole-group screening assessment or for individual (one-on-one teacher and student) assessment. The idea is to identify key words to be learned and then ask students to complete a grid like Figure 6.2 in which they describe their knowledge of each word. Once students have completed this quick self-assessment, teachers can plot each student’s results to create a profile similar to Figure 6.3. From this classroom profile small-group instruction can be planned based on student needs. Notice that individual student responses are rated in terms of how well students may know word meanings: established, acquainted, and unknown.

Figure 6.2
Vocabulary Definition Student Sheet

<table>
<thead>
<tr>
<th>Name</th>
<th>Betheny</th>
</tr>
</thead>
<tbody>
<tr>
<td>Words</td>
<td>I know it well (Established)</td>
</tr>
<tr>
<td>tyranny</td>
<td>A</td>
</tr>
<tr>
<td>sensitive</td>
<td>E</td>
</tr>
<tr>
<td>dubious</td>
<td></td>
</tr>
<tr>
<td>purport</td>
<td>U</td>
</tr>
<tr>
<td>revolution</td>
<td>A</td>
</tr>
<tr>
<td>traitor</td>
<td>A</td>
</tr>
</tbody>
</table>


Figure 6.3
Vocabulary Definition Student Profile

<table>
<thead>
<tr>
<th>Key Words</th>
<th>Shannon</th>
<th>Randy</th>
<th>Julie</th>
<th>Eddie</th>
<th>Betheny</th>
<th>Jake</th>
</tr>
</thead>
<tbody>
<tr>
<td>tyranny</td>
<td>U</td>
<td>E</td>
<td>U</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>sensitive</td>
<td>E</td>
<td>E</td>
<td>A</td>
<td>A</td>
<td>E</td>
<td>A</td>
</tr>
<tr>
<td>dubious</td>
<td>A</td>
<td>A</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
</tr>
<tr>
<td>purport</td>
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<td>U</td>
<td>U</td>
<td>U</td>
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<tr>
<td>revolution</td>
<td>A</td>
<td>E</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>U</td>
</tr>
<tr>
<td>traitor</td>
<td>A</td>
<td>A</td>
<td>U</td>
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<td>A</td>
</tr>
</tbody>
</table>

Key: U = Unknown, A = Acquainted, E = Established
Word Map. A word map (Schwartz & Raphael, 1985; Stahl, Hare, Sinatra, & Gregory, 1991) is a kind of graphic rendering of a word’s meaning. Word maps were found to be informative and easy to implement in urban middle schools serving underprivileged students in a federally funded research study (Cooter & Cooter, 2010). A good alternative to the word definition strategy described previously, word maps ask students to answer three important questions about target words: What is it? What is it like? What are some examples? Answers to these questions are valuable because they help children link the new word or concept to their prior knowledge and world experiences, a process known to have a beneficial effect on reading comprehension.

To get started, Cooter and Cooter (2010) recommend that you carefully review an upcoming unit of study in your core reading program or in content area studies (i.e., science, social studies, etc.). Identify the most important facts, terms, and concepts and select five to ten of these to use in your assessment. Prepare and administer the word map assessment to your students using one map for each word (see Figure 6.4). This will help you better understand the background knowledge students have about each word before you begin instruction. Use a word map summary sheet like the one shown in Figure 6.5 to summarize your students’ results. A check mark indicates an acceptable response.

with important vocabulary-building words from the text listed on the left. Using the three-level self-rating on the form, students can indicate not knowing a word (level 1), having heard the word (level 2), or can define and use the word (level 3). This rating system is congruent with research findings of the Partnership for Reading (2001) and the National Reading Panel (2000), which describe the three levels of vocabulary learning with the terms unknown, acquainted, and established, as in Figure 6.3. Figure 6.6 features a before-and-after word knowledge self-rating form completed by a student on a text with the theme of transportation.

**Diagnostic Vocabulary Assessments**

Diagnostic vocabulary assessments, which can be teacher constructed or commercially produced, provide in-depth information about each student’s particular vocabulary knowledge and needs. These assessments are a bit more involved and take extra time to conduct. An educational psychologist, certified diagnostician, or bilingual specialist may be needed to administer some diagnostic tests due to the amount of time and/or special training required.

Perhaps the simplest way to conduct a quick diagnostic vocabulary assessment is using teacher-made flash cards. Flash cards can also be produced on a computer with a word-processing program. For recording purposes, you will also need a master list of the words to record each student’s responses. “Flash” each card to the student, one at a time, and ask him to name the word. Allow about 5 seconds for the student to respond. Circle any words that the student does not know or that he mispronounces on the student’s record form.

**Formal Diagnostic Vocabulary Assessment Tools**

Several commercially produced vocabulary tests are available for diagnostic purposes. They are often used by Title I reading specialists and special education faculty, but may be employed by classroom teachers who have appropriate training. We recommend four tests for assessing a student’s word knowledge or receptive vocabulary. The first two are intended for native English speakers, and the other two are for students who speak Spanish as their first language and are learning to speak and read in English.

**Peabody Picture Vocabulary Test, Third Edition (PPVT–III).** The PPVT–III (Dunn & Dunn, 1997) is a quickly administered instrument (11–12 minutes) that indicates the strength of a student’s vocabulary knowledge compared to other students of the same age nationally. Results can help the teacher better understand the needs of students in terms of formal and informal vocabulary instruction. It is available in two parallel forms, Form III A and Form III B. Each form contains four training items followed by 204 test items divided into 17 sets of 12 items each. The sets are progressively difficult, a format referred to as a “power” test. Each item has four simple black-and-white illustrations arranged in a multiple-choice format. The examinee’s task is to select the picture that best illustrates the meaning of a stimulus word presented orally by the examiner.

**Expressive Vocabulary Test (EVT).** The EVT (Williams, 1997), which correlates well with the PPVT–III, is an untimed norm-referenced, individually administered assessment of expressive (speaking) and word retrieval (word memory) that takes about 15 minutes to complete. The EVT was developed and normed using the most recent U.S. census data for gender, race/ethnicity, region, and parent or self-education
### Before-Reading Word Knowledge

<table>
<thead>
<tr>
<th>Key Terms</th>
<th>I can define and use this word in a sentence. (Established) 3</th>
<th>I have heard this word before. (Acquainted) 2</th>
<th>I don’t know this word. (Unknown) 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>mileage</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>freight</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>GPS</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>passenger</td>
<td>X</td>
<td></td>
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<tr>
<td>fossil fuel</td>
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<td>X</td>
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<td>X</td>
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<td>alternative fuels</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

### After-Reading Word Knowledge

<table>
<thead>
<tr>
<th>Key Terms</th>
<th>Self-Rating (3, 2, 1)</th>
<th>Define</th>
<th>Use in a Sentence</th>
<th>Questions I Still Have About This Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>mileage</td>
<td>3</td>
<td>How far it is to a place you’re going</td>
<td>The mileage from Salt Lake City to Provo is about 50 miles.</td>
<td></td>
</tr>
<tr>
<td>freight</td>
<td>3</td>
<td>Things that are being shipped by a truck or by another way</td>
<td>Boxes on a truck are called freight.</td>
<td></td>
</tr>
<tr>
<td>GPS</td>
<td>2</td>
<td>A kind of compass</td>
<td>A GPS can help me find my way home.</td>
<td>I can’t remember what GPS means.</td>
</tr>
<tr>
<td>passenger</td>
<td>3</td>
<td>A person going somewhere in a vehicle</td>
<td>I was once a passenger in an airplane.</td>
<td></td>
</tr>
<tr>
<td>fossil fuel</td>
<td>2</td>
<td>Makes a car run</td>
<td>Cars use fossil fuels to run the engine.</td>
<td>I don’t know what fossil means.</td>
</tr>
<tr>
<td>ethanol</td>
<td>1</td>
<td></td>
<td></td>
<td>I can’t remember anything about this. Did we really learn this?</td>
</tr>
<tr>
<td>route</td>
<td>3</td>
<td>How you are getting to a destination.</td>
<td>I took a northern route to get to Canada.</td>
<td></td>
</tr>
<tr>
<td>express</td>
<td>3</td>
<td>Getting something or someone to their destination quickly</td>
<td>I sent my package by FedEx overnight express.</td>
<td></td>
</tr>
<tr>
<td>destination</td>
<td>3</td>
<td>Where you are going</td>
<td>My destination on my next trip is Boston.</td>
<td></td>
</tr>
<tr>
<td>ETA</td>
<td>3</td>
<td>When you are getting somewhere</td>
<td>My estimated time of arrival or ETA is 9 a.m.</td>
<td></td>
</tr>
<tr>
<td>alternative fuels</td>
<td>2</td>
<td>Like gas and diesel fuel</td>
<td>Some cars run on gas; others use diesel.</td>
<td>I think there may be other kinds, but I’m not sure.</td>
</tr>
</tbody>
</table>
level as a measure of socioeconomic status. This easy to administer test contains two types of items, labeling and synonym. For the 38 labeling items, the examiner points to a picture or a part of the body and asks a question. For the 152 synonym items, the examiner presents a picture and a stimulus word or words within a carrier phrase. The examinee is instructed to respond to each item with a one-word answer. Four unscored examples are presented, two before the labeling items and two before the synonym items. No reading or writing is required by the examinee.

*Test de Vocabulario en Imágenes Peabody (TVIP).* This test (Dunn, Lugo, Padilla, & Dunn, 1986) is an adaptation of an early version of the PPVT–III for native Spanish speakers. Taking about 10 to 15 minutes to administer, it measures Spanish vocabulary knowledge.

*Woodcock–Muñoz Language Survey (WMLS).* English and Spanish Forms (Woodcock & Muñoz-Sandoval, 1993). Teachers, particularly in urban centers, often have a large number of students who are learning English as a second language (ESL). The extent to which students have acquired a listening and speaking vocabulary in English is an important factor in reading instruction because reading is a language skill that depends on learners having a fairly strong English vocabulary. The WMLS is a widely respected instrument used throughout the United States. It takes about 20 minutes to administer, featuring two subtests: Oral Language and Reading/Writing.

**Progress-Monitoring Vocabulary Assessments**

Progress-monitoring assessments provide ongoing and timely feedback as to how well individual students are responding to your explicit teaching of word meanings. This allows you to continually reevaluate your instruction and make adjustments as needed. Most core reading programs adopted by school districts include progress-monitoring vocabulary assessments for key words in their units of study.

**Outcome Assessments**

Outcome assessments assist us in determining how effectively our reading program and teaching help students attain grade-level standards or benchmarks. These tests are usually administered to whole groups of students at one time (typically in the spring), but may be given individually when necessary. The following instruments are considered to be excellent examples in this area of reading assessment.

*The Woodcock–Johnson Tests of Achievement, Third Edition (WJTA–III).* The WJTA–III (Woodcock, McGrew, & Mather, 2001) is a norm-referenced, individually administered wide-range test of academic knowledge and skills. It is designed for ages 5 and up, including adults. Many areas are covered in the basic achievement test, with vocabulary included in the supplemental tests. The total test time varies, depending on which tests are administered.

*Iowa Tests of Basic Skills (ITBS).* The ITBS (Hoover, Dunbar, & Frisbie, 2005) is a popular standardized achievement battery used by school districts to provide information for improving instruction and by U.S. researchers to measure the effects of experimental education programs. Available for levels 5 through 14, the ITBS includes a vocabulary subtest measuring listening vocabulary. At the primary level students hear a word and sometimes they also hear the word used in a sentence. Then they choose one of three pictorial response options. The vocabulary test at levels 7
Evidence-Based Teaching Practices

Evidence-Based Instruction Practices for Increasing Vocabulary Knowledge

How can we help students increase their vocabulary knowledge? To answer this essential question for teachers, in this section we present some of the most successful research-backed methods.

Principles of Effective Vocabulary Instruction

We have developed a list of principles for effective vocabulary instruction from the research of such scholars as Stahl (1986), Rasinski (1998), and Coyne and colleagues (Coyne, McCoach, Loftus, Zirpoli, & Kapp, 2009). Consider these principles as you think about vocabulary strategies to use in your classroom.

Principle 1: Vocabulary Should Be Taught Both Explicitly and Incidentally.

Children learn new words in two ways. First, they are taught basic definitions or information that helps them connect the new word to known words (i.e., elaboration). This step can be accomplished by simply providing the definition, by building semantic maps linking the known to the new, and through examining the target word in terms of its synonyms, antonyms, classification, root, and affixes.

On the foundation of explicit teaching, context helps readers choose the correct meaning for multiple-meaning words. The old adage that “experience is the best teacher” is certainly true in vocabulary learning. Much new vocabulary is learned through indirect, vicarious experience in daily reading of interesting and varied texts (Rasinski, 1998). Marilyn Jager Adams (1990) put it this way:

The best way to build children’s visual vocabulary is to have them read meaningful words in meaningful contexts. The more meaningful reading that children do, the larger will be their repertoires of meanings, the greater their sensitivity to orthographic structure, and the stronger, better refined, and more productive will be their associations between words and meanings. (p. 156)

Principle 2: Learning How to Construct Vocabulary from Rich Contexts Is Valuable.

Context has to do with knowing the core definition of a word and understanding how that definition varies in different texts. For example, the word *run* is generally thought of as a verb meaning “to move swiftly.” When looking for this simple word in the dictionary, one quickly realizes that the word *run* has approximately 50 definitions! Context helps the reader know which definition the author intends.

Principle 3: Effective Vocabulary Instruction Must Include Depth of Learning As Well As Breadth of Word Knowledge.

Deep processing of vocabulary includes both relating new word meanings to other similar known word meanings (elaboration) as well as learning new concepts and the words that label these new concepts (expansion). Stahl (1986) defines three levels of processing for vocabulary instruction:
Evidence-Based Instruction Practices for Increasing Vocabulary Knowledge

1. *Association processing*. Students learn simple associations through synonyms and word associations.

2. *Comprehension processing*. Students move beyond simple associations by doing something with the association, such as fitting the word into a sentence blank, classifying the word with other words, or finding antonyms.

3. *Generation processing*. Students use the comprehended association to generate a new or novel product (sometimes called *generative comprehension*). This could be a restatement of the definition in the student’s own words, a novel sentence using the word correctly in a clear context, or a connection of the definition to the student’s personal experiences.

**Principle 4: Multiple Meaningful Exposures Is Important for Learning New Vocabulary.** Vocabulary learning requires repetition (Coyne et al., 2009). To learn words thoroughly, students need to see, hear, and use words many times in different contexts (Rasinski, 1998). Providing students with multiple exposures in varied contexts appears to significantly improve reading comprehension.

**Planning Vocabulary Instruction**

Use the following suggestions to guide you in selecting words to teach and planning instruction in your classroom:

1. First, examine the type of text the children will be reading. Is it narrative or informational? Recalling the three levels of word knowledge discussed earlier—unknown, acquainted, and established (Partnership for Reading, 2001), develop a list of ten unknown and acquainted words to be taught during the week, two per day. Select elaborated speaking vocabulary words to teach if the children will primarily be reading narrative, literary texts. Select academic knowledge domain vocabulary words to teach if children will be reading informational, expository texts.

2. Read the text to determine the nature of the context in which each of the selected words appear. This will give you some insights into how much support and modeling you may need to provide. Reading contexts can be described as: *directive*, *nondirective*, or *misdirective*. A *directive context* gives clues, hints, and synonyms to help readers determine an approximate word meaning. If a word appears in a directive context, teach children how to use the information to determine an approximate word meaning. On the other hand, *nondirective context* only mentions the word without giving any clues to determine word meaning whereas, *misdirective context* gives clues that lead readers to false word meaning construction. Words that appear in nondirective or misdirective contexts are good candidates for your ten-word teaching list.

3. If you have English learners in your classroom, be sure to determine whether any Spanish–English cognates may help them in understanding English words. Consider the following example:

```
information (English)
información (Spanish)
```


4. Okay, now that you have selected ten words to teach for an upcoming week, begin your preparations by looking up each word in a dictionary or glossary for a definition. Next, construct a “student-friendly” definition using your own words. If you have trouble doing this, try looking up the term online in Wikipedia. We like the
Collins Cobuild New Student’s Dictionary (Cobuild Staff, 2002) as a resource that saves a lot of planning time.

Next, find the page where the word occurs in the story or subject area text and look at its context. List the textual clues and write the word in a sentence. Think about ways each word can be introduced to students in a rich and meaningful context. For example, you may be able to use pictures or video clips found online; you could list examples of the word in different contexts or find synonyms and antonyms in a thesaurus. Think about the characteristics or attributes of the word (roots, prefixes, suffixes) and how these could feature in your presentation.

You might decide to employ a graphic organizer known as the Frayer Model (Frayer & Klausmeir, 1969). This tool is a classic strategy that is not only useful for teacher preparation but also helps students understand new vocabulary and concepts in relation to what is already known. Frayer is especially useful for nonfiction terms or academic vocabulary because it presents essential and nonessential information related to the term, as well as examples and nonexamples (Reutzel & Cooter, 2011). For example, let’s say the text you are using in a social studies lesson has the British word tram (the word streetcar would be used in the United States). In Figure 6.7 we share a completed Frayer Model for the word tram.

**Vocabulary Instruction Activities and Tools**

There are a number of activities and tools teachers can use in the classroom to help build students’ vocabulary.

**Word Banks.** A word bank is a tool to help students collect and review words. They can also be used as personal dictionaries or students can review the words in their banks to apply in their writing. A word bank can take many forms, from a student-constructed box to a file or notebook in which newly learned words are stored. In the early grades, teachers often collect small shoeboxes from local stores for this purpose. Students decorate the boxes to make them their own. In the upper grades,
Evidence-Based Instruction Practices for Increasing Vocabulary Knowledge

more formal-looking word banks—notebooks or recipe boxes—give an “adult” appearance.

Alphabetic dividers can be used at all levels to facilitate the quick location of word bank words. Alphabetic dividers in the early grades also help students rehearse and reinforce knowledge of alphabetical order. Figure 6.8 shows a sample word bank.

**Word Walls.** Many teachers use word walls to direct students’ attention to words of all kinds—high-frequency words, important words in a content unit of study, or useful words for books they are reading (Cunningham, 2000). 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 (Reutzel & Cooter, 2011). Academic word walls (AW²) (Cooter & Cooter, 2010) provide a variation on word walls for core subject area instruction (e.g., science, social studies, mathematics).

**Word Walls versus Word Wallpaper.** In classrooms across America we have often seen fantastic examples of word walls used as potent learning tools—as resources for generating multiple meaningful exposures to new words, as opportunities for discussions around new concepts and terms in subject area studies, and as mechanisms to boost the learning of students from even the

---

**Figure 6.8**

Word Bank

A word bank is a box in which children keep/file new words they are learning. The words are usually written in isolation on one side of the card, and in a sentence on the back of the card (usually with a picture clue).

- Recipe box or small shoe box
- Index cards with vocabulary words
- Alphabetic dividers
- Decals/stickers

**Example:**

**Front**

Jason rode his bicycle to school.

**Back**

bicycle
most challenging life circumstances. As words are moved and sorted and discussed in fascinating ways, students can become enthusiastic wordsmiths. However, we have also seen word *wallpaper* instead of word *walls*—that is, words laminated in place and rarely noticed or used. In one case we saw a “word wall” pasted on the ceiling of a classroom! So how does one use a word wall to its best potential? Here are some guidelines adapted from Dade County Schools in Miami, Florida (Dade County Schools, 2010).

1. Word walls should be placed in a prominent location in the classroom where everyone can see the words. A blank section of wall, a moveable bulletin board, whiteboard, or large sheets of butcher paper are often used as media.
2. Words should be added gradually (five to ten per week), so be stingy with your word selection—they should be important examples that are frequently used in your texts.
3. Words may be printed on card stock with bold markers. Word cards should be easily removable for word sort and other activities with the class.
4. Remove high-frequency words when they are no longer needed.
5. Be sure to include the two levels of words discussed earlier—elaborated speaking vocabulary and academic knowledge domain vocabulary.
6. Provide a variety of review activities to ensure enough practice so that words are read and spelled instantly and automatically.
7. Make sure that word wall words are spelled correctly in any writing students complete.
8. It is fine to have more than one word wall. Many teachers eventually have separate word walls for reading, social studies, science, and mathematics.
9. Use word wall activities in 5- to 10-minute increments as opening routines for lessons, as closing routines, before lunch, and so forth.

**Word Sorts.** The purpose of doing word sorts is to get students to group, discuss, regroup, and discover new meanings of important vocabulary and word parts (prefixes, suffixes, etc.) in the texts you use. There are many ways words can be sorted and talked about with your students, and you may be able to invent some of your own, especially in specific subject areas (i.e., mathematics, science, social studies). Basic word sort strategies include the following:

- **Closed word sorts.** Teacher-directed activities in which students are told in advance the categories for sorting the new words are considered closed sorts. To provide multiple meaningful exposures to new words try using word hunting, which can be done by partners, with small groups, or in a learning center. Students go through familiar books, magazines, or websites and make a list of the words they find that match entries posted on the word wall. They then record their findings in a notebook giving the sentence and source where the word was found.

In subject area vocabulary instruction using an academic word wall (AW²), words may be sorted in many ways (e.g., concepts, events, and so forth). For example, one teacher presenting a unit of study about the discovery of North America had the following entries on his word wall: *Columbus, Nina, Indians, Vikings, danger, rough, Eric the Red, Pinta, corn, tobacco, disease, Spain, The New World, Santa Maria, Queen Isabella, forests*. Students were asked to do the following: “Read the following vocabulary words out loud with your partner. Then consider the following three word categories—People, The Voyage, and What They Discovered. Sort each word...
Evidence-Based Instruction Practices for Increasing Vocabulary Knowledge

into its best category among those three choices and make a chart.” This academic word wall (AW²) sort when completed by students might look like the following:

![Discovery of North America Vocabulary](chart)

- **Open word sorts.** Student-directed activities in which they are free to group words from the word wall according to how they think they are related, providing their own labels for each group of words, are considered open sorts. The label may be an important concept in a unit of study, a relationship, or a common characteristic certain words share. For example, each student in a group might be asked to sort words on their word wall and give each grouping a name (category) without telling the other students their categories. The other people in the group will be asked to guess the categories created by each person and explain why they think so.

<table>
<thead>
<tr>
<th>People</th>
<th>The Voyage</th>
<th>What They Discovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbus</td>
<td>Nina</td>
<td>New World</td>
</tr>
<tr>
<td>Vikings</td>
<td>Portugal</td>
<td>forests</td>
</tr>
<tr>
<td>Eric the Red</td>
<td>Santa Maria</td>
<td>corn</td>
</tr>
<tr>
<td>Queen Isabella</td>
<td>Pinta</td>
<td>tobacco</td>
</tr>
<tr>
<td>Indians</td>
<td>danger</td>
<td>disease</td>
</tr>
</tbody>
</table>

**Example: A Student’s Word Sort and Categories Identified (in parentheses)**

- dog asparagus apple chair
- cat peas orange sofa
- mouse beans banana table
- hamster corn apricot cot
- (Animal) (Vegetable) (Fruit) (Furniture)

- **Speed sorts.** Using open or closed sorts, teachers can direct students 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 to note that in each word sort activity, 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.

There are a number of additional word sort activities that teachers can use to help build students’ vocabularies. Some involve working in groups whereas others are individual activities.

**Password.** 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 team. If no one from the team can guess the word, the second person gives a clue to 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.** 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.

**Key Vocabulary.** As a category of words mainly for beginning or emergent readers in grades pre-K–1, Silvia Ashton-Warner, in her classic book *Teacher* (1963),
describes **key vocabulary** as “organic”—words that emerge from the child’s experiences. Ashton-Warner defines key vocabulary words as “captions” for important events in the child’s life.

Children can be taught key vocabulary through a variety of direct instructional strategies. For example, the student meets with the teacher individually at an appointed time, or during a group experience, and indicates which words he or she would like to learn. The teacher might prompt: “What word would you like to learn today?” The child responds with a lexical word—*police*, *ghost*, *sing*. The teacher writes the word on an index card or a small piece of tagboard using a dark marker. The teacher directs the student to share the word with as many people as possible during the day. Later, the word is added to his or her writing folder or word bank for future use in writing.

Ashton-Warner found that the most common categories of key vocabulary children wanted to learn were (1) fear words (*dog, bull, kill, police*); (2) sex (as she called them) or affection words (*love, kiss, sing, darling*); (3) locomotion words (*bus, car, truck, jet*); and (4) a miscellaneous category generally reflecting cultural and other considerations (*socks, frog, beer, Disneyland, Dallas Cowboys*). Ashton-Warner (1963) refers to key vocabulary as “one-look words” because one look is usually all that is required for permanent learning to take place.

**Discovery Words.** During the course of a typical school day, students are exposed to many new words in their content studies. Words such as *experiment, algebra, social, enterprise, conquest, Bengal tiger, spider*, and *cocoon* find their way into students’ listening and speaking vocabularies. Every effort should be made to add these discovery words to the word bank as they are discussed in their natural contexts. Such words often appear in student compositions.

**Clap, Chant, Write—Introduction of New Words.** In this adaptation from Sigmon (1997), the teacher introduces five new words per week with the following activities: See the words, say the words, chant the words (snap, clap, stomp, cheer), write the words and check them together with the teacher, and trace around the words and check together with the teacher. Use the following procedure:

1. Have the students number a sheet of paper 1 through 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 entries and reviews previous words with practice activities.

**Hangman.** An old favorite game, Hangman is a simple (though perhaps somewhat morbid) vocabulary review activity. The following example is from a unit and word wall focusing on The Moon. The target word is *crater*.

1. On a whiteboard or chart paper, draw a “gallows” and spaces below it representing each letter of the target word (see following illustration).
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.”

3. Students 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 stick man 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 the teacher/partner supplies the correct answer. (Note: You can also play Hangman on the Internet by going to the fun website www.hangmangame.net.)

The possibilities for word sort activities are endless. One of the more popular resources for word sorts is the book series Words Their Way (Bear, Invernizzi, Templeton, & Johnston, 2007), and many more free activities can be found online at www.readwritethink.org.

**Teaching Word Functions and Changes**

Synonyms are words that have similar, but not exactly the same, meaning (Johnson & Pearson, 1984). No two words carry exactly the same meaning in all contexts. Thus, when teaching new words and their synonyms, teachers should provide numerous opportunities for students to see differences as well as similarities. As with all reading strategies, this is best done within the natural context of real books and authentic writing experiences.

One very productive way to get students interested in synonyms in the upper elementary grades is to teach them how a thesaurus can add variety and flavor to their writing. This tool is best used during the revising and editing stages of the writing process when students sometimes have problems coming up with descriptive language. For example, let’s say a character in their story was tortured by hostile
savages (sorry to be so violent in our example!), but the child writes that the victim felt “bad.” If this word is targeted for thesaurus research, then the student might come up with synonyms for bad such as in pain, anguished, in misery, depressed, or desperate.

Following are several common words that students overuse and their synonyms as listed in a thesaurus.

<table>
<thead>
<tr>
<th>good</th>
<th>big</th>
<th>thing</th>
</tr>
</thead>
<tbody>
<tr>
<td>pleasant</td>
<td>vast</td>
<td>object</td>
</tr>
<tr>
<td>glorious</td>
<td>grand</td>
<td>item</td>
</tr>
<tr>
<td>wonderful</td>
<td>enormous</td>
<td>gadget</td>
</tr>
<tr>
<td>delightful</td>
<td>huge</td>
<td>organism</td>
</tr>
</tbody>
</table>

One way to stimulate students’ interest in synonyms is to develop a modified cloze passage using an excerpt from a favorite book. In preparing the passage, replace targeted words with blanks that students will fill in with synonyms for the original text. The following excerpt from Eric Carle’s *The Grouchy Ladybug* (1986) is well suited to this strategy.

“Good morning,” said the friendly ladybug.
“Go away!” shouted the grouchy ladybug. “I want those aphids.”
“We can share them,” suggested the friendly ladybug.
“No. They’re mine, all mine,” screamed the grouchy ladybug.
“Or do you want to fight me for them?”

The teacher might delete the words said, shouted, suggested, and screamed and list them on the chalkboard along with possible synonyms and near synonyms, such as hinted, greeted, growled, yelled, reminded, mentioned, pointed out, and offered. Student rewrites might look something like the following:

“Good morning,” greeted the friendly ladybug.
“Go away!” growled the grouchy ladybug. “I want those aphids.”
“We can share them,” hinted the friendly ladybug.
“No. They’re mine, all mine,” yelled the grouchy ladybug.
“Or do you want to fight me for them?”

Class discussions might look at how the use of different synonyms can alter meaning significantly, thus showing how synonyms have similar but not exact same meanings. For example, if we took the sentence

“Go away!” shouted the grouchy ladybug.

and changed it to read

“Go away!” hinted the grouchy ladybug.

it would be easy for children to understand how the author’s message had been softened considerably. This “cross-training” with reading and writing experiences helps synonyms take on new relevance as a literacy tool in the hands of students.

Antonyms are word opposites or near opposites based on a shared characteristic. Hard–soft (density), dark–light (energy), and big–small (size) are examples of antonym pairs. Like synonyms, antonyms help students gain insights into word meanings. When searching for ideal antonym examples, teachers should try to identify word sets that are mutually exclusive or that completely contradict each other.

Several classes of antonyms have been identified (Johnson & Pearson, 1984) that may be useful in instruction. One class is referred to as relative pairs or counterparts because one term implies the other. Examples include mother–father, sister–brother, uncle–aunt, and writer–reader. Other antonyms reflect a complete opposite or reversal of meaning, such as fast–slow, stop–go, and give–take. Complementary antonyms tend to lead from one to another, such as give–take, friend–foe, and hot–cold.

Antonym activities, as with all language-learning activities, should be drawn from the contexts of familiar books and student writing samples. Interacting with familiar text and clear meanings, children can easily see the full impact and flavor of different word meanings. Remember, in classroom instruction involving mini-lessons, teaching from whole text to parts (antonyms in this case) is key. Thus, if the teacher decides to develop an antonym worksheet for students, it should be drawn from a book that has already been shared (or will be shared) with the whole class or group. A fun book for this exercise is Weird Parents by Audrey Wood (1990), which could yield sentences like the following in which students supply antonyms for the underlined words.

1. There once was a boy who had weird ( ) parents.
2. In the morning ( ), the weird mother always walked the boy to his bus stop.
3. At twelve o’clock when the boy opened ( ) his lunchbox, he’d always have a weird surprise.*

Another activity to practice antonyms is to ask students to find words in their writing or reading for which they can think of antonyms. A student in sixth grade who reads A Wrinkle in Time (L’Engle, 1962) might create the following list of words from the novel and their antonyms.

<table>
<thead>
<tr>
<th>Wrinkle Words</th>
<th>Antonyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>punishment</td>
<td>reward</td>
</tr>
<tr>
<td>hesitant</td>
<td>eager</td>
</tr>
<tr>
<td>frightening</td>
<td>pleasant</td>
</tr>
</tbody>
</table>

A student in third grade who writes a story about his new baby sister might select antonyms for some of the words he uses in his account.

<table>
<thead>
<tr>
<th>Baby Story Words</th>
<th>Opposites</th>
</tr>
</thead>
<tbody>
<tr>
<td>asleep</td>
<td>awake</td>
</tr>
<tr>
<td>cry</td>
<td>laugh</td>
</tr>
<tr>
<td>wet</td>
<td>dry</td>
</tr>
</tbody>
</table>

One way to assess students’ ability to recognize antonyms is through multiple-choice and cloze exercises. The teacher should extract sentences from familiar text and have students select the correct antonym for a targeted word from among three choices. These choices might be (1) a synonym of the targeted word, (2) an unrelated word, and (3) the appropriate antonym. Following are two examples of this assessment technique that are based on The Glorious Flight (Provensen & Provensen, 1983).

1. Like a great swan, the beautiful (attractive, homely, shoots) glider rises into the air . . .
2. Papa is getting lots (limited, from, loads) of practice.

*From Weird Parents, by Audrey Wood, 1990. Used by permission of Dial Books for Young Readers, a Division of Penguin Young Readers Group, a member of Penguin Group (USA) Inc. 395 Hudson Street, New York, NY 10014. All rights reserved.
Of many possible classroom activities, the most profitable will probably be those in which students are required to generate their own responses. Simple recognition items, as with multiple-choice measures, do not require students to think critically in arriving at a correct response.

Activities That Support Incidental Vocabulary Learning

Reading aloud to students is an effective way to boost students’ vocabulary development. We know that books, especially nonfiction, are almost twice as rich in rare words (elaborated speaking and academic knowledge domain vocabulary words) as adult conversation (Stahl & Nagy, 2006). It is most productive to read aloud texts that are above students’ independent reading levels and at the leading edge of their listening vocabulary (Trelease, 2009). We also want to read-aloud from a variety of text genres. One tool we like to help in planning for read-alouds is the genre wheel discussed in Chapter 5.

When reading aloud you should use text talk. There are six components to consider for “talking the text.”

- **Selection of texts.** Discuss why you chose this text to share, and the name the kind of text genre it represents.
- **Background knowledge.** Have a short discussion about anything within students’ common background that may relate to what you will be reading.
- **Vocabulary.** Briefly introduce new vocabulary (elaborated speaking and academic knowledge domain vocabulary words). Pronounce and explain.
- **Initial questions.** Pose some questions about the content of the text to lead students’ thinking. This will enhance their attention to key terms and increase comprehension. You may want to post your questions on the whiteboard.
- **Follow-up questions.** Revisit your initial questions and discuss what they learned. You may want to also pose some additional questions to further their thinking.
- **Pictures and concrete objects.** Use pictures and/or concrete objects that represent new vocabulary and concepts. The more concrete the experience, the easier it is for students to understand and retain information.

Helping Students Learn Words Independently

The ultimate task for teachers is to help students become independent word meaning learners. The ongoing learning of new vocabulary throughout life is unquestionably a key to continued self-education. In this section, we feature ways students can become independent learners of new words.

**Word-Learning Strategies.** Students must determine the meanings of new words they encounter in reading. The teacher must help them develop effective word-learning strategies such as how to use dictionaries and other reference aids, how to apply information about word parts to figure out the meanings, and how to make inferences from context clues to determine word meanings.

**Dictionaries and Other Reference Aids.** Students must understand how dictionaries, glossaries, and thesauruses can help broaden and deepen their knowledge of words. In preparation for using these tools, students must learn alphabetical order, ordinal
language (i.e., first, second, third), and the function of guide words. The most helpful dictionaries and reference aids include sentences providing clear examples of word meanings in context.

**Structural Analysis: Understanding Word Parts.** As previously discussed in Chapters 1 and 2, morphemes are the smallest parts of words that carry meaning. Free morphemes (or base words), stand alone as words and carry meaning. Bound morphemes—like prefixes and suffixes—must be attached to a free morpheme in order to carry meaning. Structural analysis was explained in Chapter 2 as a way to decode multisyllabic words. It involves gaining understanding of morphemes in order to comprehend the meanings of words. For example, learning the four most common prefixes in English (**un-**, **re-**, **in-**, **dis-**) can provide helpful meaning clues for about two-thirds of all English words having prefixes. They are relatively easy to learn because most prefixes have clear meanings (for example, **un-** means “not” and **re-** means “again”) and are usually spelled the same way from word to word. Suffixes can often be a bit more challenging. For one thing, quite a few suffixes only change a word’s part of speech and do not explain much (e.g., the suffix **-ness**, meaning “the state of,” is not all that helpful in figuring out the meaning of tenderness).

Students should also learn about root words. About 60 percent of all English words have Latin or Greek origins (Partnership for Reading, 2001). Latin and Greek word roots are common in terms of science and social studies and also form a large share of the new words in student’s content area textbooks.

A morpheme triangle (Winters, 2009) is a tool for helping students understand and apply their knowledge of word parts (see Figure 6.9). In a visual graphic with three defined spaces for thinking about three-syllable words, the teacher during

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**Figure 6.9**

Morpheme Triangle for transported

instruction divides the word written at the center of the inverted triangle into its morphemes, saying each morpheme while visually splitting the word apart. The class begins thinking aloud about each word part, using the corners of the triangle for each morpheme. Students are asked to volunteer known words that contain the morpheme and each word is discussed and added to an emerging list in the space provided. After five to six words have been suggested, the teacher leads a discussion about possible meanings. When the group agrees on a shared meaning, plus signs are placed in front of words where the meaning seems appropriate. Question marks are inserted for words thought to be “imposters” and more follow-up discussion takes place to confirm the word part’s meaning. Winters states that this willingness to question word meanings rather than assume that the “same spelling always equals same meaning” can be important for students’ future word analyses.

Using Context Clues to Determine Word Meanings. Context clues are indicators of the meaning of an unknown word found in the words, phrases, and sentences that surround the word. It is not an overstatement to say that the ability to use context clues is fundamental to acquiring a larger reading vocabulary. This is because most word meanings students learn incidentally occur from context. The following classroom example from Put Reading First (2001) demonstrates the use of context clues as a word-learning strategy.

**An Example of Classroom Instruction**

**Using Context Clues**

In a third-grade class, the teacher models how to use context clues to determine word meanings.

**Student (reading the text):** When the cat pounced on the dog, the dog jumped up, yelping, and knocked over a lamp, which crashed to the floor. The animals ran past Tonia, tripping her. She fell to the floor and began sobbing. Tonia’s brother Felix yelled at the animals to stop. As the noise and confusion mounted, Mother hollered upstairs, “What’s all that commotion?”

**Teacher:** The context of the paragraph helps us determine what *commotion* means. There’s yelping and crashing and sobbing and yelling. And then the last sentence says, “as the noise and confusion mounted.” The author’s use of the words *noise* and *confusion* gives us a very strong clue as to what *commotion* means. In fact, the author is really giving us a definition there, because *commotion* means something that’s noisy and confusing—a disturbance. Mother was right; there was definitely a commotion!


**Response to Intervention (RTI)**

**Response to Intervention: Tier 2 Vocabulary Instruction**

In the previous sections of this chapter we have focused on basic or “core” vocabulary instruction. In a Response to Intervention (RTI) model this type of teaching would be considered Tier 1 instruction. In this section we focus mainly on Tier 2 interventions that might be considered when Tier 1 vocabulary instruction is insufficient for some students to acquire new word meanings. Struggling readers are
more likely to learn essential vocabulary if explicit instruction is part of the teacher’s repertoire of teaching methods (Rupley et al., 2009). At the heart of explicit instruction are explanations, modeling or demonstrating, and guided practice coupled with gradual release to independence, a technique sometimes called scaffolding. We also know that student engagement and response are important keys to success (Taylor, et al., 2009). In this section we consider Tier 2 strategies that include both an explicit instruction component and active student engagement. Note that any of the strategies found in this chapter can be adapted for struggling readers as long as you are direct and explicit in your teaching. Direct instruction helps less proficient readers create mental scaffolding for support of new vocabulary and concepts.

The Vocabulary Cluster Strategy

It is especially important that students who struggle with reading use the context of the passage, their background knowledge, and the vocabulary they know to understand new words in print. This is true whether English is their second language or their first (as with students from language-deprived backgrounds). With the vocabulary cluster strategy, students are helped to read a passage, gather context clues, and then predict the meaning of a new word targeted for learning. Here’s how it works.

You will need multiple copies of the text students are to read, an overhead transparency and projector, and erasable marking pens for transparencies. Select vocabulary you want to teach from the reading, which could be a poem, song, book excerpt (novel), or nonfiction passage. Prepare a transparency containing an excerpt from this text with sufficient context to help students predict what the unknown word might be. Delete the target words and replace them with blank lines, much the same as you would with a cloze passage. Figure 6.10 illustrates 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*.

Through discussion, lead students into predicting what the unknown word might be. If the word is not already in students’ listening vocabulary, you will be able to introduce the new word quite easily and effectively using the context and synonyms provided in the vocabulary cluster.

Semantic Maps

A semantic map is essentially a kind of blueprint in which students sketch out or map what they know about a topic. Semantic maps help students relate new concepts to schemata and vocabulary already in the brain as they integrate new information and restructure existing information for greater clarity (Yopp & Yopp, 2000). Students who struggle with reading can use semantic maps prior to the act of reading to...
There are many ways to introduce semantic mapping to students, but the first time around it is best to use direct instruction followed up with a lot of teacher modeling and guided and independent practice.

The actual map is a type of graphic organizer in which a topic under discussion forms the center of a network of descriptors, concepts, and related categories. In introducing the process of mapping, begin with a topic familiar to the entire class, such as your home state. Write the topic on the board or an overhead transparency. Have students brainstorm categories of descriptors and concepts related to the topic and record their ideas. Connect these categories to the topic visually using bold or double lines. Students then brainstorm details that relate to these major categories. Connect details to categories with single lines. Figure 6.11 shows a semantic map for the topic “Tennessee.”

Semantic maps (also called webs) can also relate to a story or chapter book students are reading. Figure 6.12 features an example (Reutzel & Cooter, 2011) of a Puerto Rican legend, “Guanina.”

**Figure 6.11**
Semantic Map: Tennessee

**Figure 6.12**
Semantic Map: “Guanina”

**Linking Multicultural Experiences with Vocabulary Development**

Vocabulary development in spoken and written English is at the heart of literacy learning (Wheatley, Muller, & Miller, 1993). Because of the rich diversity found in U.S. classrooms, teachers need to consider ways of adapting the curriculum so that all students can learn to recognize and use appropriate and varied vocabulary. In this section, we consider three possible avenues proven to be successful in multicultural settings.

**Link Vocabulary Studies to a Broad Topic or Novel.** We know that there is a limit to the number of words that can be taught directly and in isolation. Au (1993) tells us that students in multicultural settings learn vocabulary best if the new words are related to a broader topic. Working on vocabulary development in connection with students’ exploration of content area topics is a natural way to learn new words and explore their various meanings.

**Encourage Wide Reading at Independent Levels as a Vehicle for Vocabulary Development.** Reading for enjoyment on a daily basis helps to increase vocabulary. Teachers can help students become regular readers by assessing their reading interests and then locating books that fit them. Matching books with students is a simple way of encouraging the kinds of reading behaviors that pay dividends.

**Implement the Village English Activity.** Delpit (1988) writes about a method of teaching Native Alaskan students new vocabulary that works well in many other multicultural settings. The Village English Activity respects and encourages students’ home language while helping them see relationships between language use and social and professional realities in the United States (Au, 1993).

The Village English Activity begins with the teacher writing “Our Language Heritage” at the top of one side of a piece of poster board and “Standard American English” at the top of the other side. The teacher explains to students that in the United States people speak in many different ways, and this variety of languages makes our nation as colorful and interesting as a patchwork quilt. For elementary students, we think this would be a good time to share *Elmer* by David McKee (1990), a book about an elephant of many colors (called a “patchwork elephant”) and how he enriched his elephant culture.

The teacher then explains that there are many times when adults need to speak in the same way so they can be understood, usually in formal situations. At such times, we speak Standard American English. When at home or with friends in our community, we usually speak the language of our heritage. It is like the difference between a picnic compared to a “dressed-up” formal dinner. The teacher writes phrases used in students’ native dialect under the heading “Our Language Heritage” and notes and discusses comparative translations on the side labeled “Standard American English.” These comparisons can be noted in an ongoing way throughout the year as part of a special word wall. The Village English Activity can be an engaging way to increase vocabulary knowledge while demonstrating appreciation for language differences.
Vocabulary instruction is motivating when it is challenging, inventive, and playful. A recent article by Arter and Nilsen (2009) illustrates this point with the popular 13-book series Lemony Snicket. In fact, we encourage you to consider books like these for whole-class instruction to present clever and offbeat uses of words to open readers’ eyes to the fun of word play. We fashioned the following lessons from Arter and Nilsen’s analysis of Snicket’s (a.k.a., Daniel Handler) technique.

1. **Provide readers multiple experiences with a word or a concept.** In *The Ersatz Elevator* (Snicket, 2000) Snicket explains that *ersatz* is “a word that describes a situation in which one thing is pretending to be another, the way the secret passageway the Baudelaires were looking at had been pretending to be an elevator” (p. 129). He also describes a villain as being *ersatz* for pretending to be a good person and calls a cable made of tied-together strips of cloth an *ersatz* rope. Finally, he advises readers who may be imagining a happy ending for the Baudelaires that their “imaginings would be *ersatz*, as all imaginings are” (p. 253) (Arter & Nilsen, 2009, p. 236).

2. **Help students see that words can be defined in quite different yet still correct ways.** Arter and Nilsen (2009) share another clever Snicket example of this truism: “In *The Hostile Hospital* (Snicket, 2001), Snicket plays with the difference between literal and figurative meanings when he has Esmé Squalor arrive at the hospital wearing ‘a pair of shoes with stiletto heels.’ Although dictionaries describe *stiletto heels* as ‘a woman’s shoe with a very long and narrow heel, each of Esmé’s shoes ‘is affixed with a small, slender knife where each heel should be’ (p. 116).” (p. 236)

3. **Provide opportunities for creative activities around words.** As an alternative to completing vocabulary worksheets or activity pages, have students create and present Snicket-style definitions for important new vocabulary. This can take place in small-group work (joint productive activities) or involve creating products (such as poster presentations, PowerPoint slides, or interactive whiteboard presentations) that can be presented and discussed.

**Technology and New Literacies**

**Using Technology and New Literacies to Enhance Vocabulary Learning**

**Digital Jumpstarts**

Teacher-composed digital stories, or digital jumpstarts (DJs), have been shown to help students, especially English learners, build vocabulary knowledge and factual background information (Rance-Roney, 2010). The University of Houston’s website
on digital storytelling explains, “Digital Storytelling is the practice of using computer-based tools to tell stories. As with traditional storytelling, most digital stories focus on a specific topic and contain a particular point of view. However, as the name implies, digital stories usually contain some mixture of computer-based images, text, recorded audio narration, video clips and/or music. Digital stories can vary in length, but most of the stories used in education typically last between two and ten minutes. In essence, DJs help teachers to create supplemental materials for instruction that focus on targeted vocabulary and concepts.”

Digital jumpstarts use software such as iMovie for MacBook users or free, downloadable versions of Photo Story or Movie Maker for PC users that can unite still images, a narrator-teacher’s voice, music, and sometimes video (Rance-Roney, 2010). Teachers begin by creating a script that provides background information and a schema for the topic and then introduces and repeats targeted vocabulary crucial to the topic. Next the teacher searches for images that support the script and introduces visual images connected to upcoming reading. Google Images (http://images.google.com) and Flickr (www.flickr.com) are great sources for these images. The “voice-over” reading of the script is added next, along with music (if desired). For examples of digital storytelling, links, and resources, go online to http://digitalstorytelling.coe.uh.edu.

Using Podcasts to Enhance Content Vocabulary Development

Podcasting borrows from the traditional radio broadcast concept and transforms it into portable digital media that people can subscribe to over the Internet to receive “shows” directly on their computer (Putman & Kingsley, 2009). Podcasts can then, if desired, be listened to on a portable music player like an MP3 player or iPod. Podcast were first used for entertainment and in higher education settings, but have since become more common in school settings from kindergarten through high school as teachers use them to enhance learning. We see podcasting as a supplemental tool for vocabulary instruction that can enhance learning and student engagement.

To help teachers interested in trying podcasts for instruction, Putman and Kingsley (2009, p. 106) offer the following suggestions from their work in classrooms.

• *Don't rely on traditional definitions.* Use your own or have students develop their own and use them.
• *Include information that utilizes the words in context.* Periodically read portions of text that include the targeted vocabulary word.
• *Don’t just lecture.* Keep the tone light and create podcasts that feel like conversations.
• *Make them interactive.* Students should have to stop the podcast periodically to process the information and complete a brief activity.
• *Be spontaneous.* Students are not going to listen to podcasts that are not interesting or motivating, so add sound effects or an occasional joke.

Web Tools You Can Use in the Classroom lists recommended resources to guide you through developing your own podcasts for vocabulary instruction.
Family and Community Connections

That Enhance Vocabulary Learning

There are a number of vocabulary-enhancing strategies teachers can use to involve family and community. Opportunities for learning can be found in family activities at home or in community events sponsored by the school.

Reading Backpacks

During our respective careers, we have gone back and forth between teaching in elementary classrooms and in teacher education programs. Some may think we have suffered a series of identity crises (especially our spouses), but we never tire of working with children and their families. Because our better halves are teachers themselves, they humor us. Teaching is the greatest profession on earth!
One of the mainstays of our instruction is the reading backpack strategy (Cooter, Mills-House, Marrin, Mathews, & Campbell, 1999; Reutzel & Cooter, 2007; Reutzel & Fawson, 1990). In this straightforward technique, a teacher provides one or more backpacks, perhaps with the school’s name and mascot emblazoned on them, that are sent home at least once a week containing reading or writing activities to be completed by a child and parent. Many homes are without printed text of any sort, and reading backpacks can bring fresh opportunities for enjoyment and learning into the family’s evening. They can also help parents in their efforts to do something constructive for their child’s literacy development. We have used backpacks to send home a supply of trade books on a variety of topics on different reading levels matching the child’s ability (in both English and Spanish), easy activities written on reusable laminated card stock, and materials for written responses to books (e.g., markers, colored paper, scissors, tape, etc.). Sometimes, if parents themselves are not literate, we have sent books accompanied by tape recordings and a tape player. Teacher-produced videotapes or DVDs demonstrating educational games parents can play with their children can also be sent home for special occasions.

In this section, we share a few backpack ideas you might consider for drawing families into the circle for developing reading vocabulary. In most cases these ideas are easy and inexpensive.

**Newspaper Word Race.** Send home the following materials in the backpack:

- Two out-of-date newspapers
- Two copies listing target words you want the child to practice seeing and saying
- An egg timer
- Two highlighting markers
- Directions explaining the task

On a laminated instruction card to the parents, explain that they are to sit down at a table with their child and take one newspaper and highlighter for themselves and give one of each to the child. They should set the egg timer for 1 minute and then have a race to see how many of the target words they can find and circle in the newspaper with their highlighter. When they are finished, they should share with each other the words they found and read the sentence in which they appear. For beginning readers, the parent will sometimes need to read the sentences with words located by the student and then explain what the sentences mean. This process encourages meaningful verbal interaction between parent and child, which we consider very powerful for a child’s verbal improvement.

**Catalog Interviews.** In this backpack activity, the parent is given an imaginary $5,000 to spend in a shopping spree. The student conducts an interview to find out what the parent will purchase and why. Afterward, the student should write a short summary of what he or she learned from the interview. If $5,000 doesn’t seem enough, offer a “million dollar bill.” The student interviews family members to find out what they would do with such a fantastic sum. The student then writes about their responses.

The point here is to inspire real dialogue between the parent and student in which words are exchanged and discussed. As we saw earlier in this chapter, students add words to their listening and speaking vocabularies when they are engaged in
two-way discussions (K. Cooter, 2006), which this activity helps to make happen. This backpack activity only needs a few supplies:

- A target words vocabulary card with words to be used in writing
- A catalog that may be used for inspiring joint writing between student and parent
- Directions explaining the task
- Writing supplies (paper, pencils)

**Scrabble.** If you are lucky in your garage sale junkets you may come across an old edition of the perennial favorite Scrabble for your reading backpacks. This is the quintessential vocabulary game, of course, and having students play Scrabble with their family will provide a splendid opportunity for word talk. A variation would be to send home with the board game a target words vocabulary card and indicate that every target word used by anyone playing the game earns an extra five points. For this backpack activity you will need the following:

- Scrabble game
- Target words vocabulary card with words to be used for bonus credit
- Directions explaining the task

**Language Workshop: After-School Vocabulary-Building Activities**

Townsend (2009) developed a voluntary after-school program for English learners (ELs) called the **language workshop.** Research-based sessions focus on increasing academic vocabulary knowledge (see Figure 6.2) and include collaborative, fast-paced, and highly interactive activities combined with elements of direct instruction and text-based discussions of the target words. As Townsend (2009) explains,

> In designing Language Workshop, we absolutely had to respond to needs for engagement and fun; a voluntary after-school program on academic vocabulary words without these components would not have yielded much student attendance. Each session involved direct instruction of words and discussions around words as they appeared in short pieces of informational text that were accompanied with many diagrams and pictures. (pp. 244–245)

Following are some of the activities found to be effective in the language workshop.

**Picture Puzzlers.** Because academic vocabulary can be quite abstract and may carry different meanings in different contexts, activities in which students are asked to match pictures to new target words can be a little confusing. Townsend (2009) illustrates these challenges using the word *function* as an example. He notes that this word is defined both as the purpose something has and as something working correctly.

Such definitions are nearly impossible to illustrate with a picture, but a picture of a computer working correctly (or incorrectly) provides an opportunity to discuss what it means when something is functioning. A picture of a household item such as a kitchen sponge or a screwdriver allows for a discussion of the functions of these items.

With picture puzzlers (Townsend, 2009) the teacher works each day with students to choose pictures with contexts that match target words and then use those
pictures to prompt small-group and whole-class discussion. Picture puzzlers are consistent with reading research in that they provide students with visual cues, multiple exposures to new words in varied contexts, and opportunities to process and personalize word meanings.

**Academic Taboo.** Based on the popular Hasbro game Taboo, the object of Academic Taboo is for one student to provide clues to get his team to say a target word or academic word wall term by describing it without using certain specified (closely related) words. For example, a student might have to get his team to guess the word *automobile* without using the words *car, vehicle,* or brand names (e.g., Chevrolet, Toyota, etc.). In Townsend’s language workshop version of Academic Taboo players make game cards using the academic target words and other words from instructional texts and discussions. The group is divided into two teams, with one student from each group competing on every turn. Because academic vocabulary words are so abstract, they do not always include a list of related words that are banned from play (making it more like the Password game). In this case, students name as many clue words as they can in 1 minute. Academic Taboo is a fast-paced and highly interactive game that provides students with opportunities to think about word meanings and connections between words.

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Dale Johnson (2001, pp. 41–48), an eminent researcher in the field of vocabulary development, provides valuable insights in his book *Vocabulary in the Elementary and Middle School.* From his writings, we know that word knowledge is essential for reading comprehension. Evidenced-based research tells us that vocabulary instruction should utilize motivational activities that link word learning to concept and schema development. We should also teach specific word learning strategies to our students, as well as strategies they can use on their own to understand unfamiliar words in print.

Wide reading should be encouraged and made possible 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 (2001) advocated the use of a program called “Read-a-Million-Minutes” which was designed to foster wide reading throughout Iowa. All students set their own in-school and out-of-school reading goal that contributes to the school’s goal.

Explicit instruction should be used to teach words that are 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 rather plan regular explicit vocabulary instruction lessons to make sure that new word meaning are learned as a part of every school day. 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.

We also know that 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 it’s meaning changes in different contexts. Repeated exposures to the word in different contexts are key to successful vocabulary learning.

Students should be helped to develop independence in using vocabulary learning strategies. This includes the use of context clues, structural analysis (word roots, prefixes, suffixes), and research skills (use of the dictionary, thesaurus, etc.).

Finally, parents can help their children succeed in expanding concept and vocabulary knowledge by exposing them to new experiences and helping them to read about and discuss new ideas in the home.
Field and Classroom Applications

- Design a lesson plan introducing word walls to third-grade students. Be certain that the lesson includes rich literature examples, teacher–student interaction, and student–student discussion.
- As a joint productive activity, with a group of peers in your college class or in your school, review a local school district’s curriculum guide for a specific grade level, and select two topics or themes of study in either science or social studies. Plan and teach three word sort activities using relevant academic vocabulary to a group of children. How can you assess the effectiveness of your lessons?
- Develop and present a podcast for a unit of instruction in science that emphasizes the specialized vocabulary contained therein. This can be a grade level of your choosing.
- Develop and administer a cloze test and a maze test to two different groups of children using a text they will be reading. Analyze your results. Afterwards, interview several of the students from each group. Try to discover whether the “cloze” or the “maze” students felt they did well on the exercise. Does one group feel more positive when you use the given procedure? Why do you think that is?
- With two partners, fully develop five reading backpack family activities. Work with your cooperating classroom teacher to distribute your backpacks to five students. Once the backpacks return, interview the students to discover what happened at home and what they thought of the backpack activity. Send home a brief survey to parents as well if time permits.

Recommended Resources

Print Resources

Web Resources
http://crede.berkeley.edu
The CREDE Center at U.C. Berkeley: Information on Joint Productive Activities
http://digitalstorytelling.coe.uh.edu
Digital storytelling links and resources
http://images.google.com
Google Images and Flickr; digital images that may be used in preparing PowerPoints and other teaching aids connected to upcoming reading assignments, etc.
www.readwritethink.org
Word sorts and many other vocabulary activities
www.apple.com/ilife/tutorials/#garageband-podcast-51
Learning to Podcast (Apple)
www.apple.com/support/garageband/podcasts
More support from Apple for podcasting
Podcasting with Audacity: A Tutorial for PCs
www.intelligenic.com/blog
KidCast: Learning and Teaching with Podcasting
STANDARDS for Reading Professionals and Guiding Principles for Educators

What Does Research Tell Us About Vocabulary Learning?

**IRA Standards for Reading Professionals**

**Standard 1: Foundational Knowledge**

**Element 1.1**
Candidates understand major theories and empirical research that describe the cognitive, linguistic, motivational, and sociocultural foundations of reading and writing development, processes, and components, including word recognition, language comprehension, strategic knowledge, and reading–writing connections.

**Common Core Standards**

**Vocabulary Acquisition and Use**

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

5. Demonstrate understanding of word relationships and nuances in word meanings.

6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

**Response to Intervention**

6. Expertise

All students have the right to receive instruction from well-prepared teachers who keep up to date and supplemental instruction from professionals specifically prepared to teach language and literacy (IRA, 2000).

- Teacher expertise is central to instructional improvement, particularly for students who encounter difficulty in acquiring language and literacy. RTI may involve a range of professionals; however, the greater the literacy difficulty, the greater the need for expertise in literacy teaching and learning.
- Important dimensions of teachers’ expertise include their knowledge and understanding of language and literacy development, their ability to use powerful assessment tools and techniques, and their ability to translate information about student performance into instructionally relevant instructional techniques.
- The exemplary core instruction that is so essential to the success of RTI is dependent on highly knowledgeable and skilled classroom teachers (IRA, 2003).
- Professionals who provide supplemental instruction or intervention must have a high level of expertise in all aspects of language and literacy instruction and assessment and be capable of intensifying or accelerating language and literacy learning.
- Success for culturally and linguistically diverse students depends on teachers and support personnel who are well prepared to teach in a variety of settings. Deep knowledge of cultural and linguistic differences is especially critical for the prevention of language and literacy problems in diverse student populations.

How Can Teachers Effectively Assess Students’ Vocabulary Knowledge?

**IRA Standards for Reading Professionals**

**Standard 3: Assessment and Evaluation**

**Element 3.1**
Candidates understand types of assessments and their purposes, strengths, and limitations.

**Element 3.2**
Candidates select, develop, administer, and interpret assessments, both traditional print and electronic, for specific purposes.

**Element 3.3**
Candidates use assessment information to plan and evaluate instruction.
Common Core Standards

Speaking and Listening: K–5
Comprehension and Collaboration
3. Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric.

Speaking and Listening: Grades 6–12
Comprehension and Collaboration
2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
3. Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric.

Language: Grades K–5
Conventions of Standard English
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Knowledge of Language
3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Vocabulary Acquisition and Use
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
5. Demonstrate understanding of word relationships and nuances in word meanings.
6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Response to Intervention

3. Assessment
An RTI approach demands assessment that can inform language and literacy instruction meaningfully.

- Assessment should reflect the multidimensional nature of language and literacy learning and the diversity among students being assessed. The utility of an assessment is dependent on the extent to which it provides valid information on the essential aspects of language and literacy that can be used to plan appropriate instruction.
- Assessments, tools, and techniques should provide useful and timely information about desired language and literacy goals. They should reflect authentic language and literacy activities as opposed to contrived texts or tasks generated specifically for assessment purposes. The quality of assessment information should not be sacrificed for the efficiency of an assessment procedure.
- Multiple purposes for assessment should be clearly identified and appropriate tools and techniques employed. Not all available tools and techniques are appropriate for all purposes, and different assessments—even in the same language or literacy domain—
  capture different skills and knowledge. Particular care should be taken in selecting assessments for ELLs and for students who speak an English dialect that differs from mainstream dialects.

- Efficient assessment systems involve a layered approach in which screening techniques are used both to identify which students require further (diagnostic) assessment and to provide aggregate data about the nature of student achievement overall. Initial (screening) assessments should not be used as the sole mechanism for determining the appropriateness of targeted interventions. Ongoing progress monitoring must include an evaluation of the instruction itself and requires observation of the student in the classroom.
- Classroom teachers and reading/literacy specialists should play a central role in conducting language and literacy assessments and in using assessment results to plan instruction and monitor student performance.
- Assessment as a component of RTI should be consistent with the Standards for the Assessment of Reading and Writing developed jointly by the International Reading Association and the National Council of Teachers of English (2010).

Evidence-Based Instruction Practices for Increasing Vocabulary Knowledge

IRA Standards for Reading Professionals

Standard 2: Curriculum and Instruction
The Curriculum and Instruction Standard recognizes the need to prepare educators who have a deep understanding and knowledge of the elements of a balanced, integrated, and comprehensive literacy curriculum and have developed expertise in enacting that curriculum. The elements focus on the use of effective practices in a well-articulated curriculum, using traditional print, digital, and online resources.

Element 2.1
Candidates use foundational knowledge to design or implement an integrated, comprehensive, and balanced curriculum.

Element 2.2
Candidates use appropriate and varied instructional approaches, including those that develop word recognition, language comprehension, strategic knowledge, and reading-writing connections.
Response to Intervention

1. Instruction
RTI is first and foremost intended to prevent problems by optimizing language and literacy instruction.

- Whatever approach is taken to RTI, it should ensure optimal instruction for every student at all levels of schooling. It should prevent serious language and literacy problems through increasingly differentiated and intensified assessment and instruction and reduce the disproportionate number of minority youth and ELLs identified as learning disabled.
- Instruction and assessment conducted by the classroom teacher are central to the success of RTI and must address the needs of...
all students, including those from diverse cultural and linguistic backgrounds. Evidence shows that effective classroom instruction can reduce substantially the number of students who are inappropriately classified as learning disabled.

- A successful RTI process begins with the highest quality core instruction in the classroom—that is, instruction that encompasses all areas of language and literacy as part of a coherent curriculum that is developmentally appropriate for pre K–12 students and does not underestimate their potential for learning. This core instruction may or may not involve commercial programs, and it must in all cases be provided by an informed, competent classroom teacher.
- The success of RTI depends on the classroom teacher’s use of research-based practices.
- Research on instructional practices must provide not only information about what works, but also what works with whom, by whom, in what contexts, and on which outcomes. The effectiveness of a particular practice needs to have been demonstrated with the types of students who will receive the instruction, taking into account, for example, whether the students live in rural or urban settings or come from diverse cultural and linguistic backgrounds.
- When core language and literacy instruction is not effective for a particular student, it should be modified to address more closely the needs and abilities of that student.

2. Responsive Teaching and Differentiation
The RTI process emphasizes increasingly differentiated and intensified instruction or intervention in language and literacy.

- RTI is centrally about optimizing language and literacy instruction for particular students. This means that differentiated instruction, based on instructionally relevant assessment, is essential.
- Instruction and materials selection must derive from specific student–teacher interactions and not be constrained by packaged programs. Students have different language and literacy needs, so they may not respond similarly to instruction—even when research-based practices are used. No single approach to instruction or intervention can address the broad and varied goals and needs of all students, especially those from different cultural and linguistic backgrounds.

5. Systemic and Comprehensive Approaches
RTI must be part of a comprehensive, systemic approach to language and literacy assessment and instruction that supports all pre-K–12 students and teachers.

- RTI needs to be integrated within the context of a coherent and consistent language and literacy curriculum that guides comprehensive instruction for all students.
- Specific approaches to RTI need to be appropriate for the particular school or district culture and take into account leadership, expertise, the diversity of the student population, and the available resources. Schools and districts should adopt an approach that best matches their needs and resources while still accomplishing the overall goals of RTI.
- A systemic approach to language and literacy learning within an RTI framework requires the active participation and genuine collaboration of many professionals, including classroom teachers, reading specialists, literacy coaches, special educators, and school psychologists. Given the critical role that language development plays in literacy learning, professionals with specialized language-related expertise such as speech-language pathologists and teachers of ELLs may be particularly helpful in addressing students’ language difficulties.
- Approaches to RTI must be sensitive to developmental differences in language and literacy among students at different ages and grades. Although many prevailing approaches to RTI focus on the early elementary grades, it is essential for teachers and support personnel at middle and secondary levels to provide their students with the language and literacy instruction they need to succeed in school and beyond.

### Response to Intervention: Tier 2 Vocabulary Instruction

#### IRA Standards for Reading Professionals

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#### Common Core Standards

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Motivation and Engagement: Teaching Vocabulary

IRA Standards for Reading Professionals

Standard 5: Literate Environment

Element 5.2 (See previous)

Common Core Standards

Speaking and Listening: K–12

Presentation of Knowledge and Ideas

6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Response to Intervention

1. Instruction
   - Instruction and assessment conducted by the classroom teacher are central to the success of RTI and must address the needs of all students, including those from diverse cultural and linguistic backgrounds. Evidence shows that effective classroom instruction can reduce substantially the number of students who are inappropriately classified as learning disabled.
   - The success of RTI depends on the classroom teacher’s use of research-based practices.
   - Research on instructional practices must provide not only information about what works, but also what works with whom, by whom, in what contexts, and on which outcomes. The effectiveness of a particular practice needs to have been demonstrated with the types of students who will receive the instruction, taking into account, for example, whether the students live in rural or urban settings or come from diverse cultural and linguistic backgrounds.
   - When core language and literacy instruction is not effective for a particular student, it should be modified to address more closely the needs and abilities of that student.

Vocabulary Acquisition and Use

4. (See previous)
5. (See previous)
6. (See previous)

2. Responsive Teaching and Differentiation (See previous)

4. Collaboration

RTI requires a dynamic, positive, and productive collaboration among professionals with relevant expertise in language and literacy. Success also depends on strong and respectful partnerships among professionals, parents, and students.

- Collaboration should be focused on the available evidence about the needs of students struggling in language and literacy. School-level decision-making teams (e.g., intervention teams, problem-solving teams, RTI teams) should include members with relevant experience in language and literacy, including second-language learning.
- Reading/literacy specialists and coaches should provide leadership in every aspect of an RTI process—planning, assessment, provision of more intensified instruction and support, and making decisions about next steps.
- Collaboration should increase, not reduce, the coherence of the instruction experienced by struggling readers.

5. Systemic and Comprehensive Approaches
(See previous)

Using Technology and New Literacies to Enhance Vocabulary Learning

IRA Standards for Reading Professionals

Standard 5: Literate Environment

Element 5.1 (See previous)

Language: Grades 6–12

Conventions of Standard English

1. (See previous)
2. (See previous)

Knowledge of Language

3. (See previous)
Common Core Standards

Speaking and Listening: K–12
Comprehension and Collaboration
2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

Presentation of Knowledge and Ideas
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Language: Grades K–12
Vocabulary Acquisition and Use
4. (See previous)
6. (See previous)

Response to Intervention

1. Instruction
• Whatever approach is taken to RTI, it should ensure optimal instruction for every student at all levels of schooling. It should prevent serious language and literacy problems through increasingly differentiated and intensified assessment and instruction and reduce the disproportionate number of minority youth and ELLs identified as learning disabled.

• The success of RTI depends on the classroom teacher’s use of research-based practices.

• Research on instructional practices must provide not only information about what works, but also what works with whom, by whom, in what contexts, and on which outcomes.

Response to Intervention

Language: Grades K–12
Knowledge of Language
3. (See previous)

4. Collaboration
• Collaboration should be focused on the available evidence about the needs of students struggling in language and literacy.

School-level decision-making teams (e.g., intervention
• Involving parents and students and engaging them in a collaborative manner is critical to successful implementation. Initiating and

strengthening collaborations among school, home, and communities, particularly in urban and rural areas, provides the basis for support and reinforcement of students’ learning.