Every teacher is a teacher of language. Regardless of the subject you teach—English, math, social studies/history, chemistry, or another subject—you teach the language of a subject. The most important part of that language is the vocabulary, because the important words in a subject area stand for the most important concepts and ideas in that subject. By providing this language—the vocabulary—you are giving your students the keys to accessing the important ideas and concepts of your subject. Teaching this vocabulary “is more than teaching words, it is teaching about words: how they are put together, how they are learned, and how they are used” (Nagy, 2007, p. 71).

WHY TEACH VOCABULARY THEIR WAY?

Our students are naturally set up to learn words and to be interested in words. They thrive on learning and using words that are a part of their world and their interests—the words of popular culture and of niche subcultures. These words are valuable to students, and are the coin of everyday language that helps define their worth in the eyes of their peers and their independence in the eyes of adults. As students move into middle school and beyond, they thrive on communicating in ways that defy adults’ attempts to comprehend. Of course, it is this way with every generation, because this is, after all, human nature. How can we capitalize on our students’ natural disposition to learn words and teach them the vocabulary we know is “good for them”—the vocabulary that will help them grow beyond the coin of their own language realms and open up the informational treasures of the worlds beyond? The vocabularies that represent the combined ideas, insights, and knowledge expressed through the subject areas we teach? The simple though challenging answer is that we make the exploration of the words and the concepts the words represent as engaging, compelling, and intriguing as we can. We hope that this book will be a valuable resource as you address that challenge.

To get a feel for this type of exploration, let’s observe a slice of one teacher’s vocabulary instruction as she places a transparency on the overhead projector with the following sentence:

Hurricane Katrina decimated much of the Gulf Coast region of the southern United States.

Pointing to decimated, Ms. Baren asks, “Ladies and gentleman, what do you think this word means in this sentence? . . . Yes, Regina?”

“It’s like destroying it or like making things really bad.”

“That may make sense here, Regina. Let’s see . . . any other ideas . . . yes, Cody?”

“Like flooding? Like it flooded a lot of places?”

“That would make sense, too. I’m wondering why Regina and Cody are thinking this word might have this type of meaning. . . . yes, Caitlyn?”

“Well, it’s like we know Katrina caused a lot of damage, and we know it was in that area.”
“Okay, good! Good thinking here all around . . . Now let’s look at the next two sentences.”

Ms. Baren slides a covering page over the transparency:

Hundreds of people died, hundreds of square miles were flooded, and thousands of buildings were blown down. Rarely has the United States seen such widespread damage from a single natural event.

“Do these sentences help us with our thinking about this word? Cody?”

“Yeah! See? It says ‘flooded.’”

Tyrone interjects, “But that’s not all it says!”

“Interesting point, Tyron. I wonder what you’re thinking?”

“Well, it also talks about the people who died and about buildings being blown down.”

Fadila adds, “And it also talks about ‘widespread damage,’ which could mean lots of different kinds of damage.”

“Interesting observations, Tyrone and Fadila! You know, I’m not wondering any more about how Regina, Cody, Caitlyn, Tyrone, and Fadila are thinking about this word! They’ve shown us some pretty perceptive use of the context—the sentences and words around this particular word—to try to figure it out. Ahhhh . . . I see Álvero surreptitiously slipping his pocket dictionary out! Okay, Álvero, please tell us what you’ve found.”

“It says ‘to destroy or kill a large part of a group.’”

“Interesting! Would that meaning work in this passage? Yes, Brittany?”

“Kind of, but it only talks about ‘killing,’ and Katrina did more that that.”

“Good point. Álvero, was that the only definition listed for decimate?”

“No, the next one says ‘to inflict great destruction or damage on.’ I think that fits better!”

“Ladies and gentleman, by a show of hands, how many of us concur with Álvero? . . . Well! Apparently most of us! Okay, let’s read back over these three sentences and see how that definition fits.”

The class concurs that it does. Ms. Baren continues: “Let’s look just at the word decimate itself. Are there any clues in how the word looks that might suggest its meaning? Any prefixes, suffixes, word roots that leap out at us?”

After a few seconds, she continues: “I see a lot of squinched and puzzled faces! You know, nothing leapt out at me, either, when I first looked at this word. What if I reminded you about the Latin word root dec that all of us have learned about? Think of the words decimal and decade.” She writes them on the transparency. “What meaning does the root dec have? Yes, Carey?”

“Ten!”

“Right you are! What do you think? . . . Might the dec in decimate also mean ‘ten’? . . . Ah, I see more squinched and puzzled faces as you’re thinking this one through.

“Let me share a story with you. Back during the Roman Empire, when those Roman legions were busy trying to conquer just about everybody else in the known world, from time to time some troops or soldiers would get unhappy about things. Maybe not enough good food, working conditions weren’t all that good, they missed their families, whatever. Anyway, if things got bad enough for them they might start talking about a mutiny—about rising up and taking over from their general. Well, if the general somehow became aware of this kind of talk he had a very effective way of putting an end to it: He would select one-tenth of his troops by lot—he probably pulled names from a helmet in those days—and those selected would be killed . . . And the other soldiers would have to do the killing! So originally, when you talked about ‘decimating the ranks’ it literally meant ‘killing a tenth.’ Over time, as we have learned, the meanings of words usually grow and evolve, and this happened with decimate. It came to have the meanings that Álvero found in the dictionary: either killing not just a tenth but a large
part of a group, or as it means in our Katrina example, inflicting great destruction or damage.”

Let’s reflect on what’s happened in this lesson. Ms. Baren draws out the students’ thinking about the word *decimate* and encourages more than one contribution. She acknowledges the quality of the students’ ideas (“That would make sense, too”). She good-naturedly teases yet appreciates Álvero checking the dictionary. She asks if there is a consensus about the meaning but checks to make sure one last time. She also uses a few more “scholarly” words along the way—*perceptive, surreptitiously, and concur*. She then tells a story about the word, and in doing so reminds students what they know and are learning about Latin word roots, a critical aspect of vocabulary development. These “stories” about words are also, as we will see, a critical aspect of vocabulary development. This type of quality interaction with students, of course, doesn’t happen out of the blue. Most students do not spontaneously volunteer information, for example, and check definitions in dictionaries. Most students do not talk about other information in a passage and how it can contribute to figuring out the meaning of an unfamiliar word. Many students would be put off by a teacher’s spontaneous use of words such as *surreptitiously* and *concur*, as well as by her talking about Latin word parts.

We’re talking about changing those student attitudes. What facilitates and sustains Ms. Baren’s type of vocabulary instructional climate? Over the course of the year, she has modeled these ways of thinking and strategizing about words: using context clues and whatever information is in the passage to help determine the meaning of a word, and usually referring to the dictionary only as a last resort. She has taught and modeled how to look within words for clues to their meaning. She has also taught and modeled the use of more academic vocabulary and included just enough of it in her speech to reinforce the type of attitude toward words she has worked to establish in her classroom. And she has told interesting stories about words. (If students were not familiar with the meaning of *dec*, they will not now likely forget it.)

Can you tell what grade level or subject Ms. Baren teaches? Geography, science, history, English? It may be difficult to pin down, because this way of talking and thinking about words engages fourth-graders and high school seniors alike, and it works across all subject areas. The attention to word parts such as *dec* and the context in which they occur will help students be more aware of, and learn, many more new words through their reading.

One last example may illustrate this point. Assume a student who has never encountered and is not familiar with the word *decathlon* is reading the following sentence:

Gerry had trained for years before he attempted to compete in the decathlon.

The student will not only understand from the context of the sentence that a decathlon is a very demanding type of competition but will also know how to look at the structure of the word to home in on a more precise meaning. The letters *athl* recall *athlete or athletic* and remembering that *dec* is the Latin root meaning “ten” helps the student determine that a *decathlon* is an athletic competition with ten events. Further reading confirms by context that this is the appropriate meaning. The only reason now to look the word up in the dictionary is to seek additional information—for example, to find out which ten events are part of this competition.

Many of us were fortunate enough to have had teachers like Ms. Baren—teachers who made learning come alive for us by telling stories about words. Some stories may have been humorous, some astonishing or alarming—but these stories always gave us insight into where a word came from and how it grew into the meaning it has today. These teachers demonstrated and talked about how words work to give language its precision, appropriateness, and impact. Perhaps even more important, this way of talking and thinking—stories and conversations about words—intrigued us and hooked us on words more generally. And once we were curious about words, we were more motivated to attend to the meanings and nuances of new words we encountered, what
researchers call word consciousness, the “interest in, awareness of, and appreciation of words” (Stahl & Nagy, 2006, p. 140; Lubliner & Scott, 2008). Our students need to develop this critical aspect of vocabulary improvement, and they also need to learn strategies for learning new words they encounter. For example, Ms. Baren shows her students how words “work”—how word parts such as prefixes and suffixes combine with other word parts and how to use this information in the context of what they are reading.

This book seeks to help you become this type of teacher. Throughout Vocabulary Their Way, we will be examining how you can organize and present your vocabulary instruction to best take advantage of students’ predispositions to learn about word meaning and structure. As you help them become attracted to and excited about words—their meanings, associations, sounds, and histories—your instruction will reflect the following research-based findings:

- We do not learn words one at a time, like adding beads on a string. Words and the concepts they represent are interconnected in many different ways.
- For almost every word we learn, there are potentially many, many more words we could learn at the same time.
- The way words are spelled in English makes more sense than most of us think—and this knowledge can be a powerful tool for helping us learn the meaning of thousands of words.

**WHAT ARE THE DIFFERENT TYPES OF VOCABULARY?**

Over the years, researchers and educators have used a number of terms to describe different types of vocabulary, with a traditional perspective represented in Figure 1.1. Beginning in the center of the diagram, our listening/speaking vocabulary is primary in human development. Estimates vary, but children entering kindergarten average a listening/speaking vocabulary of approximately 5,000 words. As children develop their abilities to read and write, we refer to their reading/writing vocabularies, which over

**FIGURE 1.1  Traditional Perspective on Types of Vocabulary**

Source: Adapted from J. Pikulski and S. Templeton, 2004.
time grow to include most of the words in students’ listening/speaking vocabularies. Significantly, from the upper elementary grades onward our reading/writing vocabularies come to include more words than our listening/speaking vocabularies. Written language contains many words that do not usually occur in most spoken language. Writers use words that they would not normally use in their speech. When readers encounter these new words, they need to decipher them. They are often able to figure out word meanings if they have been taught strategies for doing so.

As an example, suppose you encounter the word *eleemosynary* in an article about charitable organizations in the following sentence: “In contrast to the apparent miserliness of millionaires over 40 years of age, a greater number of younger millionaires seem to be developing eleemosynary tendencies.” You may have never seen this word before, but given the context of this sentence—the word seems to be contrasted with miserliness—and the topic of the article—charitable organizations—you can make a pretty good guess that the word might have something to do with giving to charity or behaving in a charitable fashion. Because this is an interesting-looking word, you’ll make a note to look it up in the dictionary when you finish reading the article. The dictionary confirms your guess, but you may still be a bit uncertain about how to pronounce a word that isn’t really in your speaking vocabulary—and for good reason. How many social situations will you be in where this word would be appropriate and not make you sound like a know-it-all? On the other hand, if you were writing an essay for a required economics course, the word could fit quite appropriately.

Another way of regarding vocabulary refers to *receptive vocabulary* as the words we “receive” or take in and understand through listening and reading, whereas *expressive vocabulary* refers to words we are able to use in speaking or writing. The bottom line, however, is that the vocabulary most of us draw on when reading and writing is larger than the vocabulary we use in our own everyday speech.

Because most new words we encounter come from print or specific content areas, more recently some educators and researchers have fine-tuned the traditional perspective represented in Figure 1.1. Table 1.1 presents the labels that are now most commonly used to represent distinctions in types of vocabulary, subdivided into three broad classifications: conversational vocabulary, core academic vocabulary, and content-specific academic vocabulary.

**Conversational vocabulary** includes the most common and most frequently occurring words in the spoken language, such as *talk, have*, and *upon.* Beck, McKeown, and Kucan (2002, 2008) refer to these words as “tier 1” vocabulary because they are so easily picked up conversationally and rarely require instruction. The other two categories capture the types of vocabulary we encounter primarily in print.

**Core academic vocabulary** includes those words that may not occur a lot in everyday spoken language but which students may encounter frequently in their reading and, because of the high utility of the words, should be able to use in their writing. These words also occur in more formal oral discourse, such as a lecture format, and are equally likely to occur across all content areas. Students usually have the underlying conceptual understanding that these words represent, but they simply lack the label. Beck and colleagues target core academic vocabulary words such as *transmit, energetic,* and *paradox* for instruction because these “tier 2” words can more precisely express concepts that are already understood.

**Content-specific academic vocabulary** refers to words that occur in specific content or subject matter areas such as science, history and social science, mathematics, and the arts. In contrast to core academic vocabulary, much content-specific academic vocabulary represents significantly new concepts, and can therefore be more difficult to learn. For this reason, Beck and colleagues categorize content-specific words such as *rectilinear, potentate,* and *mercantilism* as “tier 3” vocabulary. Nevertheless, students are expected to learn content-specific vocabulary in their content classes, which are most often taught by subject area teachers.
We have included academic language in our core academic vocabulary category rather than in our content-specific academic vocabulary category because this type of language occurs across all content areas. Academic language is the term that educators use to refer to words and phrases that signal relationships among ideas and information, such as therefore, as a result, compare and contrast, and analyze. Although the words and phrases of academic language must be learned and applied in the context of the tasks and tests with which students engage across all subject matter areas, it generally falls to the English, reading, or language arts teacher to make sure that students understand academic language.

On occasion there is some overlap between core academic and content-specific academic vocabularies. For example, when students are first introduced to the word sanctuary it may be a part of the content-specific academic vocabulary in science, referring to a reserved and protected area for animals or birds. As time goes on, however, students will learn that the word occurs in other content areas as well, such as English and history/social sciences, so it becomes a core vocabulary word. However, despite this occasional overlap, when you think about the students, subjects, and grade levels you teach, it will still be useful to keep these distinctions among types of vocabulary in mind.

**WHAT ARE THE DIFFERENT LEVELS OF KNOWING A WORD?**

Consider the words hand, teach, condensation, prehensile, surfeit, and apophasis. For each word, think about the following questions:

- Do you know the word and feel confident about using it?
- Do you have knowledge of the word but lack sufficient familiarity to readily use it in appropriate situations?
• Do you have only a general sense of the word?
• Have you heard or seen the word but do not know what it means?
• Have you never heard nor seen the word before?

For most of us, these questions capture the range of our familiarity with any word we encounter. This is how vocabulary knowledge works; our brains do not have on/off switches for each word, such that we either know it or we don’t. Rather, our knowledge falls along a continuum from feeling pretty confident to total unfamiliarity. Dale (1965) popularized this way of thinking about vocabulary knowledge and suggested that it is one of the best ways to assess our students’ vocabulary knowledge.

Consider for a moment the types of knowledge underlying every word that you in some sense “know”:

• The range of meanings of the word, both literal and figurative. For example, effervescent refers to a carbonated or fermenting liquid in which small bubbles of gas are emitted, but it may also refer to an individual’s behavior or personality.
• The situations and contexts to which the word applies, including informal and formal speech and writing.
• How the grammatical form of a word affects its meaning—effervesce, a verb, is the action of bubbling up; effervescence, a noun, refers to the process of bubbling up; and effervescent, an adjective, attributes the nature and qualities of that process to something or someone.
• Knowing other words that are likely to occur with the word.
• Knowing the probability of encountering the word.

HOW DO WE DECIDE WHICH WORDS TO TEACH?

In Chapter 4 we will explore how you can teach your students the strategies for learning new words on their own, as they are reading independently. As we have just seen, however, much of your instruction will involve teaching words that fall within the core academic vocabulary and the content-specific academic vocabulary categories. In the intermediate grades and up, how do we determine which words within these categories should be directly taught?

Over the years, educators in different content areas—English/language arts, math, science, history and social science, and so forth—have identified the words that they believe represent the concepts that are most important to learn in their respective fields (Marzano, 2004). These words are characterized by their scope and sequence across the grades and are reflected in the curriculum materials that publishers develop for each grade level. The required textbooks you use for the subjects and grade levels that you teach include most of these important words. Your state and school district have also developed standards that reflect the content and concepts that are important to teach at different levels and usually designate the most important vocabulary for this material. Table 1.2 provides examples of concepts and the words that represent these concepts for several subject matter areas across the intermediate, middle, and high school levels.

WHAT DOES THE RESEARCH SAY ABOUT VOCABULARY LEARNING AND INSTRUCTION?

Research clearly supports the need for students to be actively involved in vocabulary learning, and an important effect of this involvement is the development of favorable attitudes toward words and word learning—that word consciousness mentioned earlier.
Teachers should attend to the following three broad aspects of vocabulary learning and instruction (bearing in mind that real-world instruction blurs the boundary lines among them):

- Immersion in rich oral language and wide reading
- Word or lexical-specific vocabulary instruction
- Generative vocabulary instruction

**Immersion in Rich Oral Language and Wide Reading**

*Rich oral language* includes your use of important words the students are learning and have yet to learn, as well as your comments on and observations about words during a period or throughout the day. Part of this rich oral language environment includes read-
ing aloud to your students, from both narrative and informational materials. These read-
 alouds allow you many opportunities to make words interesting—yet again, raising
 students’ word consciousness. Beyond the elementary grades, however, most teachers
 rarely read to their students. If you teach at the middle or secondary level, it is essential
 that you plan to read to your students at least once a week from an example of good
 writing in your subject area no matter what grade you teach.

 The role of wide reading is critical. To illustrate, on average, fifth grade students
 who score at the 98th percentile on a standardized reading test read about an hour
 every day outside of school, whereas students who score at the 50th percentile read
 about 4½ minutes every day outside of school (Anderson, Wilson, & Fielding, 1988).
 Another way of thinking about the role of independent reading is expressed by Cun-
ningham and Stanovich (1998) when they observed that “the entire year’s out-of-school
 reading for the child at the 10th percentile amounts to just two days reading for the
 child at the 90th percentile!” (p. 4). From the intermediate grades on, many other things
 besides books are claiming our students’ attention, so it is especially important that we
 find ways to keep them motivated and engaged to continue reading independently
 outside of school.

 While wide reading is indeed necessary if not critical in increasing vocabulary, for
 most students it is not sufficient. They also need direct instruction in specific words and
 in how words work. This is where teachers play their most important role in students’
 vocabulary learning, as shown by the other two aspects of the previous list.

 **Word or Lexical-Specific Vocabulary Instruction**

 Researchers refer to instruction that targets individual words as *lexical-specific in-
 struction*. Once you have selected the words to address directly, how you go about
 teaching them will depend on your purposes and on your students’ background
 knowledge. Some words will be merely mentioned, whereas others will be explored
 deeply, involving many exposures to the words in meaningful contexts, both in and
 out of texts. This latter category of words represents essential *core academic and content-
specific academic* vocabulary, and research emphasizes that these words should be
 experienced on the average of at least 12 to 15 times each. Such experiences include
 attending to the words before reading, during reading, and after reading, as well as
 in more than one context—in addition to being read, they must be heard, spoken, and
 written.

 **Generative Vocabulary Instruction**

 Researchers refer to instruction to help students understand the processes of word
 formation in English—how prefixes, suffixes, base words, and Greek and Latin word
 roots combine—as *generative* vocabulary instruction. Understanding these processes
 of word formation will *generate* student learning about thousands of words they will
 encounter in their instructional and independent reading (Templeton, 2004b). These
 processes are taught directly, because most students do not discover them on their
 own. In a classic study, Nagy and Anderson observed, “Knowledge of word-formation
 processes opens up vast amounts of vocabulary to the reader” (1984, p. 314). When
 students understand these word formation processes—how to put together and take
 apart these word elements—they have a powerful strategy for independent word learn-
ing (Kieffer & Lesaux, 2007). When they encounter an unfamiliar word in their reading
 they will be able to analyze its parts through a “take apart” strategy, thinking about
 the meaning that each word part contributes and how the combined meaning of the
 parts works in the context in which they encounter the word—as we did with the word
 *decathlon*. 
There are many opportunities to teach vocabulary in a generative way. Take the word *courage*, for example. When examining this word more closely and extending students’ understanding of it, teachers may also present other words that are related in structure and meaning:

- courage
- courageous
- courageously
- en courage
- en courage ment
- dis courage
- dis courage ment
- dis courage ing
- dis courage ly

When we point out this generative aspect of words, we help students understand another important, if not critical, understanding about words: “Words that are related in meaning are often related in spelling as well, despite changes in sound” (Templeton, 1979, 1983, 2004). We refer to this as the *spelling–meaning connection*, an awareness that powerfully supports students’ spelling development as well as vocabulary development.

**HOW DOES VOCABULARY DEVELOPMENT ENHANCE LITERACY LEARNING?**

Exploring vocabulary development guides our efforts to facilitate students’ literacy learning. Given the strong relationship between vocabulary knowledge and reading development, the wide variation in students’ reading development has implications for students’ vocabulary learning. In fact, students’ reading achievement affects how easily they can read the words and then uncover the meanings of the new vocabulary words they encounter in their reading. Students who read well do not have to concentrate on the mechanics of reading and therefore have the time and energy to think and focus on the *meaning* of what they read.

Table 1.3 presents a developmental model that describes the relationships, or “synchrony,” among reading, writing, and word knowledge across the three developmental stages of literacy we primarily see in the middle and secondary grades. By taking a developmental perspective to match these behaviors and look for the relationships, teachers find it easier to gauge their students’ progress as readers and learners and to differentiate and plan for instruction more appropriately, as well as predict the relative ease students will have in learning new vocabulary. We will take a more in-depth look at the relationships among reading, writing, and word knowledge in Chapter 8, in which the role of assessment in guiding instruction is explored.

Most students in the middle and secondary grades are in the last two stages of reading, writing, and word knowledge development. Intermediate readers and writers read at least at a fourth-grade level. Vocabularies expand through the reading in which students engage, in both narrative literature and in specialized content area reading. Students in this stage of development are usually more advanced readers who learn the meanings of more complex prefixes, suffixes, and word roots. If they wish, teachers can use Figure 1.1 and examples of students’ reading and writing at the beginning of the school year to explain literacy learning and development both to students and parents. They then may better understand what literacy behaviors go together and what they can look for to assess progress.
This chapter has sketched in broad strokes the vocabulary instructional terrain that will be explored throughout this book. The next two chapters lay the foundation for this exploration. Chapter 2 describes the nature of words and how they work, and Chapter 3 explores the nature of the historical journeys that words travel and how those journeys are a part of understanding and appreciating words and how they work. This foundational information should support quite powerfully the balance of the information provided in this book. In addition to providing appropriate and engaging activities and teaching students strategies for learning words independently, this foundation should develop your own confidence with respect to discussing words with your students and in telling the stories about words that will engage them and motivate them to become lifelong word learners.