



Vocabulary Teaching and Learning

Program Research Base



Wright Group

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Vocabulary Teaching and Learning

Executive Summary

The term *vocabulary*, broadly defined, includes two categories: receptive and expressive. Receptive vocabulary includes all of the words that a person understands when listening or reading, but may or may not feel comfortable using in speech or writing. Expressive vocabulary includes all the words a person feels comfortable using in his or her own spoken or written communication. Vocabulary learning, as treated in this paper, involves activating students' apprehension of and use of words that the student is not likely to learn through an oral medium, with the goal of increasing students' expressive vocabulary, year by year, in order to support reading comprehension and enjoyment.

Wright Group LEAD21 is committed to not only broadening students' vocabulary, but to accelerating vocabulary acquisition through a multifaceted approach that involves five aspects: 1. Discussing words and concepts with all readers; 2. Repeating words and concepts; 3. Teaching students to be active vocabulary learners with strategic problem-solving skills; 4. Teaching students to become metacognitively aware of words; and 5. Developing excitement for learning words.

Furthermore, these five aspects can be grouped under three umbrella parts to comprise the entire vocabulary strand in **LEAD21**. Part 1 involves Teaching Individual Words, in which students are repeatedly exposed to the same vocabulary in different contexts and encouraged to deepen their word schema to support word knowledge.

The second part covers Teaching Problem-Solving Strategies. Here students learn a full range of tools that are useful when encountering unknown words. **LEAD21** incorporates semantic knowledge, linguistic knowledge, and strategic knowledge into age-appropriate lessons to lessen student intimidation in the face of unknown words.

Teaching Word Consciousness is the third part of the vocabulary strand. It involves word play, heightening students' awareness of multiple meanings, connotations, idioms, figurative language, cognates, and morphologically related words.

These three parts combined form a robust vocabulary instructional plan. It is placed in the context of both whole-group and small-group instruction to provide students with lifetime skills to support their reading as well as enjoyment of language.

Understanding Vocabulary Learning

Words are the primary building blocks of effective communication. Although gestures and facial expressions work well in face-to-face communication, words carry the weight of meaning when people are removed from each other in distance and time. Thus, when students are reading a book, what they know about the words in the book matters.

However, not all words are equally important in a text, and there are several different facets of vocabulary learning that **Wright Group LEAD21** attends to. First of all, we need to ensure that the words we choose to teach represent important and useful words. Second, we need to teach students to be active vocabulary learners who use a combination of problem-solving strategies and cross checking to figure out new words in context. Third, we need to teach students to become metacognitively aware of words, and of how meaning is packaged into words in English. Fourth, we need to help students develop both the skill and the will to learn new vocabulary words. And fifth, we need to allow students to encounter core vocabulary concepts repeatedly in both the same and different forms.

Defining Vocabulary

Vocabulary, broadly defined, is knowledge about words and word meanings. However, this definition is inadequate, as it sweeps over some important distinctions. First of all, words come in both oral and written forms, and the words typically used in speech are less precise and of a more limited variety than the words used in print. Hayes and Ahrens (1988) found that per 1,000 words, more rare words were used in children's books (30.9) and newspapers (68.3) than in adult television shows (22.7), expert witness testimony (28.4), or college graduates talking to their friends (17.3).

In addition, word knowledge is not an all-or-nothing phenomenon (Beck and McKeown 1991). You may recognize aspects of a word when you hear or read it but not feel comfortable using it in your own speech or writing. This distinction is typically referred to as the difference between receptive and expressive (or productive) vocabulary. Receptive vocabulary is typically larger than expressive vocabulary.

Although gestures and facial expressions work well in face-to-face communication, words carry the weight of meaning when people are removed from each other in distance and time. Thus, when students are reading a book, what they know about the words in the book matters.

To complicate the matter further, teachers in the primary grades often refer to “sight word vocabulary” as vocabulary knowledge. Sight word vocabulary, also known as high-frequency words, refers to the most common words in English that young readers are taught to read fluently (*the, one, ask, could, eight*). In the upper grades, vocabulary usually refers to the less common words used in English, the words that add texture or convey content that is typically not found in oral language (*rancid, hearth, twirl, magma, ecosystem, camouflage*).

Although learning to decode sight words fluently is an important goal, in this paper, vocabulary learning and teaching refers to learning those words that are beyond the most common words needed for basic oral communication. In this paper, we are discussing the words found in books and print that students are not likely to learn outside of an oral medium. There are approximately 300,000 entry words in the most recent *Oxford English Dictionary* and approximately 90,000 distinct words found in English reading materials in schools (Nagy and Anderson 1984). How to teach a subset of these words, and what readers need to learn to do when they encounter these words, is the focus of this paper.

Accelerating Vocabulary Growth

The relationship between vocabulary knowledge and reading comprehension is consistently strong and has been recognized as a contributing factor for academic success through studies going back to the 1920s (NICHD Report of the National Reading Panel 2000; RAND Reading Study Group 2002; Whipple 1925). It is both a major component of a language development program for students who are learning English as another language (Nation 2001) and a major stumbling block for those learning how to talk, write, and read in the language used in schools and books (Cummins 2000; Scarcella, 2002).

In one study, three-year-old children of professional parents were found to have a recorded vocabulary size greater than the *parents* of children on welfare (Hart and Risley 1995, 2003).

Different types of words are used for communication depending on the community of practice in which the language use occurs. These differences in the type of language structures, interaction styles, and vocabulary means that the language of schooling is significantly different from the language many students encounter prior to entering school (Health 1983; Zentella 1997). In particular, some children are exposed to many more distinct word families of the type used in schools than other children. In one study, three-year-old children of professional parents were found to have a recorded vocabulary size greater than the *parents* of children on welfare (Hart and Risley 1995, 2003). Once children enter schools, Stanovich (1986) describes the Matthew effect in which there is an ever-increasing gap between good readers' and struggling readers' vocabulary knowledge. Biemiller and Slonim (2001) found a 3,900 root-word gap between the highest and lowest quartiles measured at Grade 2.

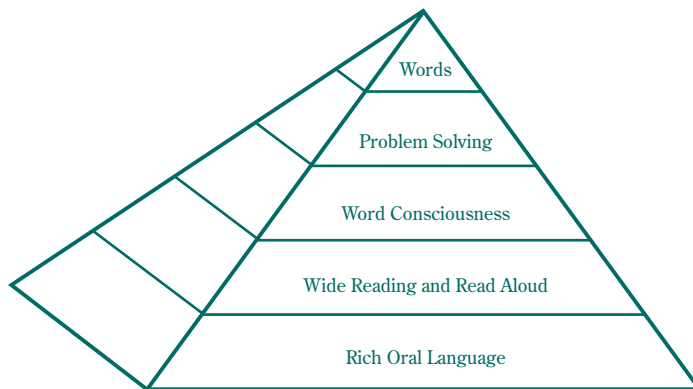
Understanding that this gap starts early and grows is important because a program that teaches 10 new words a week would be able to address, at most, 360 words over the course of an academic year. A vocabulary program of 300–400 words per academic year is simply not adequate to help students develop the word knowledge they need to succeed in reading and writing English in academic settings. Given estimates that students, on average, learn 2,500–3,000 new words per year (Beck and McKeown 1991; and Nagy and Scott 2000), a gap of almost 20,000 root words could exist at the end of Grade 7 if some students learn 1,000 new words per year while others learn 4,000.

LEAD21 is committed to accelerating vocabulary learning for those who enter school with less-developed academic vocabularies through a multifaceted approach that involves five aspects:

1. Discussing words and concepts with all readers
2. Repeating words and concepts
3. Teaching students to be active vocabulary learners with strategic problem-solving skills
4. Teaching students to become metacognitively aware of words and the way word meanings are packaged in English
5. Developing excitement and enthusiasm for learning words

Components of a Strong Vocabulary Program

A strong vocabulary program is one that goes beyond the teaching of individual word meanings. The purpose of a strong vocabulary strand is to provide students with a solid foundation for participating fully in their school experiences. This strand is not limited



(Lublner and Scott 2008)

to teaching individual meanings for words, for that knowledge is merely the tip of what students need to succeed. As in the food pyramid, providing only definitional instruction on specific word meanings is the “fat” that is needed, but should be limited. This type of instruction is often the only aspect that receives attention in reading programs, but a diet of “only fats” is unhealthy. Students also need a diet that contains frequent servings of problem solving, word consciousness, attention to words through wide reading and read-alouds, and a foundation of rich oral language.

The following sections describe the vocabulary pedagogy of **LEAD 21**, covering three topics: **Part 1**, Teaching individual vocabulary words; **Part 2**, Student problem solving when encountering an unknown word; and **Part 3**, Development of word consciousness. Each topic is emphasized with the recognition that these aspects of vocabulary acquisition rest on a strong foundation of wide reading, read-alouds, and rich oral language.

Model for Effective Instruction of Core Vocabulary Words in LEAD21

Part 1 Teaching Individual Words

Specific word instruction, or teaching individual words, can deepen students' knowledge of word meanings. In-depth knowledge of word meanings can help students understand what they are hearing or reading. While developing a base of rich oral language, wide reading, word consciousness, and problem solving are undeniably valuable, some vocabulary words need to be taught in depth. Regarding such in-depth teaching, the following points should be emphasized:

- > **Extended instruction and active engagement with specific words promotes the learning of vocabulary.** Students learn words best when they are provided with instruction over an extended period of time. They continue to build upon that understanding when that instruction has them work actively with the words. The more students use new words, and the more they use them in different contexts, the more likely students are to learn the words.
- > **Repeated exposure to vocabulary in many contexts aids word learning.** Students learn new words better when they encounter them often and in various contexts. The more students see, hear, and work with specific words, the better they learn them. When teachers provide extended instruction that promotes active engagement, they give students repeated exposure to new words. When the students read those same words in their texts, they increase their exposure to the new words.
- > **Tapping into students' knowledge helps develop word schemas.** A word schema is a network of knowledge related to a word (Nagy and Scott 1990). When teachers connect word meanings to what students already know about the concept and morphologically related words, they are helping students build this network of knowledge.

In **LEAD21**, students are introduced to high-level content and concept vocabulary through the use of the Theme Reader in a whole-class setting. These core vocabulary words, identified for each theme, are generally unfamiliar words used with often unfamiliar concepts. In learning about the concepts, students use these words, and the words become part of their listening and reading (receptive) vocabulary with the goal of extending many of them into their speaking and writing (productive) vocabularies.

As the teacher reads the *Theme Book* to students, vocabulary words and concepts are addressed and discussed. The number of vocabulary words explicitly taught will depend on the unit or selection content, specific words used in the Theme Reader and shared reading, student’s knowledge of the content, and grade level. For instance, there may be 3–5 theme vocabulary words attached to a unit in kindergarten, along with other words found in the Differentiated Readers, and 7–8 theme vocabulary words attached to a unit in Grade 3. Through explanations and discussions about connections to other words, students will be able to expand their knowledge to include a greater number of words, much as the concentric circles radiating out from pebbles thrown into a pond encompass an increasing area.

To make the most of explicit vocabulary instruction, **LEAD21** incorporates three facets of instruction:

- *World* knowledge and *word* knowledge are intertwined as students learn new words.
- Students build upon their existing knowledge of the subject and the ways words are put together as they learn new words.
- Students discuss the content and concept vocabulary as a group and are encouraged to use the words regularly in their own writing and discussions.

Instructional Sequence for Teaching Core Words and Concepts

LEAD21 teaches vocabulary in whole-class sessions and in small groups through explicit instruction led by the teacher. Three phases of instructional episodes are identified in the program: Introduce, Reinforce, and Extend.

Theme vocabulary is introduced and taught in the whole-group session, while differentiated vocabulary is introduced and taught in small-group sessions. Each introduction follows the same routine: The teacher defines the word; he or she provides an example; then he or she asks the class for other illustrations of the word.

Vocabulary Routine	
Define	An ecosystem (p. 320) is a community of living and nonliving things that depend on each other.
Example	Plants, animals, dirt, rocks, and water are some of the parts of a forest ecosystem.
Ask	What is another type of ecosystem?

Reinforcement of theme vocabulary takes place in both whole-group and small-group instruction: Differentiated vocabulary is reinforced during small-group instruction. Reinforcement includes activities designed to deepen vocabulary knowledge and provides ways to make connections between vocabulary words. Types of activities that fall under this category might include, but are not limited to, the following examples:

- > Activating and assessing background knowledge—what do students already know about the subject and about the words? For example, using a web with the main concept in the center circle and brainstorming words for the spokes or outer circles is a quick and easy way to access this information.
- > Using realia, video clips, and pictures to clarify word meanings
- > Comparing and contrasting new words with other similar words to capture the nuances of meaning
- > Connecting vocabulary words with other morphologically related words
- > Developing rich word schemas for vocabulary through exposure in a variety of settings

After students have established a deeper understanding of the week’s vocabulary, they are provided opportunities to extend their knowledge. Extension activities include, but are not limited to, studying morphologically related words, classifying synonyms and antonyms of vocabulary words, and providing examples in instances when vocabulary words name categories.

Choosing Core Words to Teach

The English language has too many uncommon words to teach them all explicitly and in depth. However, a great deal of research is available to help us understand how to teach students words and problem-solving strategies. Students will need to be good word learners. **LEAD21** draws on this research to create the reading materials, activities, and instructional sequences to help all students succeed in school. **LEAD21** provides teachers with support in scaffolding their students’ learning; and by generalizing this scaffolded approach, teachers will learn how to teach all students to learn words from the wide array of texts they meet in their other school subjects.

LEAD21 has central themes and topics (for example: challenges, heritage, neighborhoods) that will be developed through the Theme Readers (3–5), Concept Big Books and Literature Big Books (K–2), and Differentiated Readers. **LEAD21** uses the following criteria to select the vocabulary words for this explicit teaching:

- They must be **important** to the unit.
- They must be encountered **multiple times** in different forms in various texts.
- They must be **useful** words that students are likely to encounter and will be encouraged to use in their Inquiry Projects.
- They must represent a **variety** of nouns, verbs, adjectives, and adverbs.

An example of vocabulary words for the Concepts Big Book, *A Perfect Place to Live*, might include *habitat, camouflage, ecosystem, adaptation, survival, and interdependence*. These words are all important and useful for this unit, and will probably be used repeatedly. In addition, most of these words are words that occur in a large family of morphologically related words (*survival, survive, surviving, survived*) and have morphological elements that can be used to teach generative strategies for word learning. Thus teaching the central concepts, the way related words are derived, and the meaning of morphological units (*inter-, eco-, -tion*) can generate knowledge of more words than those explicitly taught. Lesson plans in **LEAD21** capitalize on such connections and generative knowledge, and in so doing, build more comprehensive understanding of language and a larger network of knowledge around each word.

Teaching Core Vocabulary Words to All Students

Words are learned incrementally over time. The first encounter with a word is often a fast mapping of the word to a general semantic category. Thus students might first map *camouflage* onto the concept of *hiding*. After they encounter the word in different contexts, and participate in activities that compare and contrast *camouflage* with *hiding*, students will realize that *camouflage* is a particular type of hiding that involves blending in with the environment. Less-skilled readers often miss out on this type of instruction since a word like *camouflage* is difficult to decode. Because **LEAD21** accelerates vocabulary learning, words such as *camouflage* are explicitly included in rich oral discussion as well as the discussion to develop conceptual content, in order to anchor them to the thematic framework of the unit.

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All readers should encounter the vocabulary explicitly with scaffolded instruction, through the read-aloud materials and in independent reading. Low-skilled students reading Differentiated Readers that are significantly below grade level may not be able to decode all the words in the unit. However, it is important for these students to learn the words both in the context of the unit and through discussion of the book in small groups. In addition, exposure to the orthographic form will help less-skilled students make connections to these words in the future. Vocabulary words appear as highlighted elements to help emphasize for students their meanings in context.

Then, the essential content and concept words are reintroduced through Differentiated Readers selections. Wherever possible, the words are used within the text of the Differentiated Readers so students have continued exposure to them. Because of this ongoing exposure, students will be more likely to use the words in their writing and in their discussions of what they have read.

Part 2 Teaching Problem-Solving Strategies

Problem-solving is a crucial component of effective vocabulary instruction. Just as students need to be taught new word meanings, they also need to be taught how to use their existing knowledge of words to problem solve—to figure out what to look for and how to look for it. Good word learners use semantic, linguistic, and strategic knowledge to access the meanings of unknown words in print.

In **LEAD21**, students are taught to draw on all three sources to figure out the meanings of unknown words. Types of context clues to look for, and ways to cross check the clues are all strategies woven into the teacher discussions and instructional sequences of each lesson. By the end of each unit, students will have strategies that they can coordinate to unlock the meanings of unknown words.

- > **Semantic Knowledge.** Students need to be taught how to activate their knowledge of the world and use it to figure out the meanings of new words. For example, students reading this sentence—*Vendors are selling fruit*—need to activate their knowledge about fruit being sold. Then they can conclude that *vendor* is probably another word for a type of salesperson. **LEAD21** teaches this strategy explicitly. Teachers explain the process; then they model and think aloud using the process, and finally they provide opportunities for guided practice during read-alouds or shared reading. This method is consistent with the model of gradual release described in teaching strategies in the Reading Comprehension Program Research Base.
- > **Linguistic Knowledge.** Students need to be taught how to activate their linguistic knowledge—how word meanings are grouped together—to figure out new words. Knowing affixes, cognate relationships, and how words are put together and related morphologically can facilitate word learning. Recognizing that words share

morphemes (*disappear, appear, appearance*) can make the meaning across a group of morphologically related words transparent (Carlisle 1995, 2003).

There are other types of linguistic knowledge. For example, the knowledge that verbs of motion often incorporate speed is another type of linguistic knowledge. It helps students figure out the meaning of *darted* in this sentence: *A lizard darted into the bush*. The *-ed* ending and its place in the sentence indicate that *dart* is a verb with a past-tense marker. Therefore, *dart* is the way a lizard might move into the bush when startled. Students need to use both semantic and linguistic cues (combining what they know about lizards and knowledge that verbs can incorporate speed) to hypothesize that *dart* is probably a way of moving fast. Again, this strategy is taught in **LEAD21** using the gradual release model.

> **Strategic Knowledge.** Students need to be taught how to recognize text structures so they can understand new words. For instance, students need to be taught that appositive phrases, set apart from the rest of a sentence by commas or dashes, may be definitions. There are several different types of context clues that **LEAD21** points out and discusses to help students understand how to access new word meanings:

- Explanations in text, where the unknown word is explained within a sentence or in nearby sentences

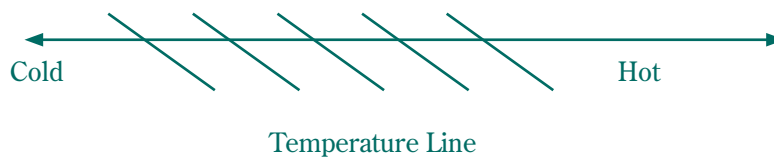
- *He was so stingy he hated to give his son money for shoes.*
- *The horses wear fancy feathers—aigrettes, they call them— with gold bells on the harness.*
- *The cheetah is a diurnal hunter. It hunts usually either early in the morning or later in the evening when it is light but not very hot.*

- ◆ Instructional protocol in **LEAD 21**

- ◊ Uses the gradual release model, with many examples modeled by the teacher
- ◊ Teaches students to look for the commas or dashes that set off explanations or definitions
- ◊ Teaches students to read beyond the sentence and look for a definition in the sentences that follow

- Examples in text, where the unknown word is explained through examples
 - *The names of celestial bodies, such as the planets, moons and stars, often come from mythology.*
 - ◆ Instructional protocol in **LEAD21**
 - ◇ Uses the gradual release model, with many examples modeled by the teacher
 - ◇ Teaches students to look for the signal words—*such as, for example, for instance, and including*—when looking for explanations through examples

- Synonyms or words with a slightly different shade of meaning. For example, *frigid* is not simply another word for *cold*, it means *very cold*. This kind of information helps students understand that new words are often related to known words and that they differ in intensity or degree.
 - *The frigid air stung his face. It was so cold he held his breath.*
 - ◆ Instructional protocol in **LEAD21**
 - ◇ Teaches students to make connections between words that occur along a continuum (*cold-hot; little-big; slow-fast, and so on*). Teachers are encouraged to discuss how different words capture gradations of meaning. For instance, students develop a “Temperature Line” and place the words *cool, blistering, frigid, warm, and so on* along the continuum.



- ◇ Teaches students to place words on a Shades of Meaning sheet (Scott, Skobel, and Wells 2008) that grows as students find and add new variations
- ◇ Teaches students to use opposites and analogies to identify slight nuances in meaning. For instance, which word is the opposite of *warm*? (*cold, cool, hot, frigid, burning*) The value of these exercises is in the rich discussion that is moderated by the teacher around variations in meaning.

- Antonyms in a sentence
 - *Sarah thought that the trip to the healer was futile, but Lucy was convinced it would work.*
 - ◆ Instructional protocol in **LEAD21**
 - ◇ Teaches students to look for the signal words—*but, however, and other than*—when looking for antonyms in a sentence
 - ◇ Uses the gradual release model, with many examples modeled by the teacher
- The overall category of a word, given a list of similar words in a sentence.
 - *The vendor was selling apples, bananas, tamarinds, and pears.*
 - ◆ Instructional protocol in **LEAD21**
 - ◇ Teaches students to look for a list of words that they know in a common semantic category
 - ◇ Explains that the unknown word in such a list is probably a member of that category (fruit)
 - ◇ Helps students understand that this knowledge is probably sufficient for comprehension in these contexts. Students don't need exact knowledge of what a tamarind looks or tastes like.
 - ◇ Provides Think Alouds to demonstrate the metacognitive awareness of the use of categories, when such examples are encountered in text

Integrating Semantic, Linguistic, and Strategic Knowledge with Unfamiliar Words

Using a combination of semantic, linguistic and strategic knowledge can help students figure out word meanings. However, students also need to be taught how to select and mix these strategies when they encounter an unfamiliar word in text.

Students need to learn how to recognize when they have sufficient knowledge for comprehension in a particular context. In the sentence with the word *tamarind*, knowing that a tamarind is a type of fruit is sufficient for most contexts.

Students need to learn and understand that in some contexts they don't need an in-depth knowledge of a word's meaning. Many less-skilled readers become frustrated when they encounter such words as *tamarind* and don't recognize them. They are unable to figure out a general meaning and continue reading. However, more skilled readers can assign such words to a semantic category, realize that knowledge of this category is sufficient, and move on.

Modeling how to use these strategies—in particular, questioning whether general knowledge of a word's meaning is sufficient—is key to the instructional design of the vocabulary strand in **LEAD21**.

Learning How to Use a Dictionary

Finally, students can look up a word in a dictionary. Teaching students when and how to use a dictionary is a focus of many lessons in **LEAD21**. For example, students often take a fragment of a dictionary entry as the entire meaning of the word (Scott and Nagy 1997). For instance, if they are completely unfamiliar with the word *smell*, they may think that “nose” is its meaning. Teaching students how to use a dictionary includes not only finding the words using alphabetical order and key words at the top of the pages, but also how to actually read the entry. Dictionary entries have a unique form: They try to compress quite a bit of information into as few words as possible.

In **LEAD21**, the entries and definitions students explore as they learn how to use a dictionary are carefully chosen to minimize confusion: 1) The definitions place the words in a simple sentence; 2) In the lower grades, the words are presented as only one part of speech; and 3) In the lower grades, the definitions only present a single word meaning. As students practice and learn how to insert meanings into context, the task can be expanded slowly so students learn how to read more complex entries. In **LEAD21**, teaching students how to use a dictionary well is the focus of several lessons during the year. Students learn that the dictionary is one problem-solving tool in their kit for systematic vocabulary building.

Part 3 Teaching Word Consciousness

People can enjoy a piece of art or music because it brings them pleasure. However, art appreciation class or a music appreciation class can increase their depth of understanding and level of appreciation. The development of word consciousness includes an appreciation of how words work to convey images and thoughts combined with an interest in, and awareness about, the structure and power of words (Anderson and Nagy 1992; Graves and Watts-Taffe 2002; Scott and Nagy 2004). Paying attention to the way writers use words is analogous to becoming conscious of how chords blend together to create music (Scott, Skobel, and Wells 2008).

LEAD21 teaches students to become aware of and appreciate words. To develop metacognitive control over word learning, students need to focus on how words work in English and how to use words well in their own speaking and writing. Part of teaching word appreciation and awareness—word consciousness—is helping students see the value in learning to use sophisticated words.

In **LEAD21**, word consciousness activities are encouraged regularly. At a minimum, teachers point out how authors use interesting or unusual words during read-alouds or shared reading, as well as during numerous other types of activities:

- Daily word play and attention to how words work. These activities are rarely long or drawn out. Quick, fun activities are best.

- Attention to idioms and figurative language: *We just read the phrase raining cats and dogs. Are cats and dogs really falling from the sky? What do you think it means?*
- Attention to cognates: *Can you think of Spanish words that are like English words? The ending -ist in English is often -ista in Spanish—artista, dentista. Can you think of any others? Let's look for words that end in -ist today and see whether it works for other words.*
- Attention to morphological relationships: *One of our vocabulary words today is eruption. What is the root word? What do you know about the word meaning of the word erupt? What other words can you think of that have erupt as a root word?*
- Attention to semantic relationships: *One of our vocabulary words today is eruption. We were talking about a volcanic eruption. What comes out during a volcanic eruption? Can you think of other things that erupt? What comes out when a geyser erupts? What comes out when a soda can erupts?*

Teaching Vocabulary through Word Play

Making learning fun is key to any teaching situation and especially to teaching vocabulary. One way to generate enthusiasm and excitement about words is to create many opportunities to interact with words in risk-free, safe, and non-evaluative settings. Games for developing readers, when connected to reading and writing, can generate excitement about and interest in learning words. Many of the activities for both Reinforce and Extend Vocabulary are written to engage the students in game-like, brisk activities. The list below provides a sample of the kinds of activities provided:

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- At the primary level:
 - Play “I Spy” and use words in the clues that you want students to know: *I spy with my little eye . . . something that is circular.* Discuss the word meanings when students discover the object.
 - Use rhymes and songs to introduce and discuss new words.
 - Play “Guess My Word,” a variation on “Charades” that uses part-of-speech and beginning-letter clues.

- At the intermediate level:
 - Play “I Spy” and use sophisticated language in the clues to expand word knowledge: *I spy with my little eye. . . something that is inscribed on a rigid surface.* Discuss the word meanings when students discover the object.
 - Collect “Shades of Meaning” words: forest/city words, words used to describe mean/nice people, morphologically related words, and so on. For a variation: Play in teams using the prompt *How many can you name in two minutes?*
 - Play “Guess My Word,” a variation on “Charades” with part-of-speech, meaning, and beginning-letter clues.
 - Use crossword puzzles to reinforce vocabulary words.

Teaching Students to Pay Attention to Multiple Meanings of Words

Another part of word consciousness is the recognition that words have multiple meanings, and that readers need to figure out which one is appropriate in the context. For example, the word *draft* has a number of distinct meanings, including “a current of air,” “being inducted into the military,” “the act of drawing from a container,” and “a first copy of a text.” Figuring out which meaning is appropriate in a given context is a meta-linguistic task that **LEAD21** teaches to students.

Figuring out which meaning is appropriate in a given context is a meta-linguistic task that **Wright Group LEAD 21** teaches to students.

- > **Selecting a meaning.** Students of **LEAD21** will learn to use all the problem-solving strategies discussed in this paper when the meaning that they know for a word doesn’t make sense in the context. For example, if they know the word *draft* as “a first copy of a text,” then they need to recognize that there must be another meaning of *draft* that fits this context: *He was drafted into the Army.*
- > **Knowledge of Figurative Language.** Students also need to recognize that in some contexts none of a word’s literal meanings makes sense. For example, *an ocean of green* is a description of trees in the jungle: it is not a literal description. To understand the meanings of metaphors, students need to judge which elements map together. Discussion and Think Alouds are good ways to teach these non-literal meanings: *Would it work to call the jungle a lake of green? Why or why not?*

> **Idioms.** Idioms are particularly difficult for English language learners because the meanings of the individual words have no relationship to the meaning of the idiom (*under the weather, tough cookie, line of fire*). Pointing out idioms and helping students learn them is a valuable activity. For instance, students can search for possible idioms in their reading, and create idiom cards. On one side of the card they can use the meanings of the individual words to illustrate the phrase (a picture of someone *under the weather*). On the other side, they can write the idiom, its definition, and a sentence with the idiom. Students then trade the cards and try to guess the idiom and its meaning by looking at the illustration.

Clarifying How Authors Use Words to Create Powerful Images

Explicit discussions of the words that published authors use to convey vivid images and to create rich descriptions of characters and settings help students gain control over words that they use in their own writing (Scott, Skobel, and Wells 2008). One strategy that works well is the development of a Word Bank into which both the teacher and the students can deposit rich descriptions they find in books. Students can then withdraw descriptions from the Word Bank and insert them (and their variations) into their own writing. For instance, N. Babbitt describes a character in *Tuck Everlasting* as “a great potato of a woman.” This description goes into the Word Bank, and students use it to think of analogous descriptions such as “a long string bean of a man” in their own writings.

The class can also create this type of word bank for thematic units and nonfiction. The class collects descriptions and words found from reading selections and uses the collection as a resource for inquiry projects and writing. These collections of words help scaffold students’ writing by explicitly providing sophisticated language that is easily accessible.

Making learning fun and letting students see how sophisticated words enhance communication gives students reasons to want to learn new vocabulary words.

Conclusion: Vocabulary Instruction Across a Unit

Effective vocabulary teaching must encompass a spectrum of activities through many phases of reading instruction. **LEAD21** has a strong instructional plan for teaching three aspects of vocabulary instruction:

- individual words
 - problem-solving strategies
 - word consciousness
- > **Individual Words.** In **LEAD21**, the vocabulary words taught explicitly over the four-week unit are selected based on importance and utility. Reading materials are written to ensure repetition of these words in various inflectional and derivational forms, and these words will be in materials used by all students. The Vocabulary Routine is used to teach these words throughout the unit.
- > **Problem-Solving Strategies.** Every week of each four-week unit, includes two kinds of lessons: One concentrates on morphological relationships relevant to the theme vocabulary; the other concentrates on expanding understanding of the language in the Theme Readers, read-alouds, or independent reading materials through the use of context clues or a dictionary.

Types of context clues to look for, and ways to cross-check the clues are woven into the teacher discussions and instructional sequences of these lessons. By the end of each unit, students have strategies that they can coordinate to unlock the meanings of unknown words. Throughout the year, the vocabulary strategies from previous units are continually reinforced.

- > **Word Consciousness.** In **LEAD21**, in all grades and units, a minimum of one word-consciousness activity is part of each week's instruction. See the table on the pages following for a summary of strategies and skills to develop word consciousness in **LEAD21**.

See **LEAD21 Vocabulary Teaching Pedagogy** on page 21 for a concise summary of the **LEAD21** instructional plan.

Vocabulary Skills and Strategies

Vocabulary Strategy	Selected Comprehension Skills from Scope and Sequence
Utilize Morphology	<ul style="list-style-type: none"> • Identify syllables in written words. • Use structural clues to read and spell words including identifying root words, prefixes, suffixes, verb endings, plural endings, compound words, and derivational endings. • Apply knowledge of word origins, derivations, synonyms, antonyms, and idioms to find word meaning. • Use root word knowledge to learn meaning of words within a passage. • Activate prior knowledge to learn/confirm word meanings. • Make connections to learn/confirm word meanings.
Develop Word Schemas: Linking <i>Word</i> and <i>World</i> Knowledge	<ul style="list-style-type: none"> • Link existing knowledge and vocabulary to new learning experiences and vocabulary. • Develop knowledge of levels of specificity among grade-appropriate words and explain the importance of these relationships (dog/mammal/animal/living things). • Study word meanings systematically such as across curricular content areas and through current events. • Activate prior knowledge to learn/confirm word meanings. • Make connections to learn/confirm word meanings.
Use Problem-solving Strategies	<ul style="list-style-type: none"> • Access prior knowledge triggered by words or text events. • Think critically: analyze, evaluate, and make judgments. • Use context clues to identify and clarify word meanings. • Use language problem-solving strategies. • Use a variety of cognitive strategies to comprehend selections. • Activate prior knowledge to learn/confirm word meanings. • Make connections to learn/confirm word meanings. • Use context to resolve ambiguities about word and sentence meanings. • Self-monitor comprehension during reading and apply needed “fix-up” strategies. • Identify structural patterns found in informational text.

Vocabulary Skills and Strategies, cont.

Vocabulary Strategy	Selected Comprehension Skills from Scope and Sequence
Use Dictionary and Thesaurus	<ul style="list-style-type: none"> • Use dictionaries (both print and electronic) and other resources (thesauruses, glossaries) to determine and clarify word meaning.
Develop Word Consciousness	<ul style="list-style-type: none"> • Understand the concept of <i>word</i>. • Choose appropriate language for different audiences, purposes, and occasions. • Gain control over oral language conventions. • Use clear and specific vocabulary to establish the tone. • Understand differences between less-formal language used at home and more formal language used at school and other public settings. • Participate in word play. • Apply knowledge of word origins, derivations, synonyms, antonyms, and idioms to find word meaning. • Understand figurative language, such as metaphors and similes, and explain in context. • Define figurative language (simile, metaphor, hyperbole, personification) and identify its use in literature. • Distinguish and interpret words with multiple meanings. • Understand and explain synonyms and antonyms as well as the author's language choices and the impact of specific word choice. • Use descriptive language to clarify and create vivid images. • Use appropriate words to shape reactions, perceptions, and beliefs.

LEAD21 Vocabulary Teaching Pedagogy

Research Says	LEAD21 Delivers
There is a strong relationship between vocabulary knowledge and reading comprehension (NICHD Report of the National Reading Panel 2000; RAND Reading Study Group 2002; Whipple 1925).	Vocabulary routine is consistently used when introducing new vocabulary: Define. An ecosystem (p. 320) is a community of living and nonliving things that depend on each other. Example. Plants, animals, dirt, rocks, and water are some of the parts of a forest ecosystem. Ask. What is another type of ecosystem?
A great gap exists in beginning vocabulary for different socio-economic groups of children, which tends to increase as children grow (Hart and Risley 1995; Stanovich 1986).	Accelerated vocabulary acquisition happens through a five-step process: 1. Discussing words and concepts with all readers 2. Repeating words and concepts 3. Teaching students to be active vocabulary learners with strategic problem-solving skills 4. Teaching students to become metacognitively aware of words and the way word meanings are packaged in English 5. Developing excitement and enthusiasm for learning words
A strong vocabulary program goes beyond teaching individual word meanings to encompass problem-solving strategies and word consciousness in a rich oral language environment (Lublinter and Scott 2008).	<ul style="list-style-type: none"> • Theme vocabulary, or core concept vocabulary, is presented to the whole class through the Theme Reader, and is reinforced in appropriate ways for each reading level in the Differentiated Readers. • Three problem-solving strategies are explicitly taught, using the gradual release model: semantic knowledge, linguistic knowledge, strategic knowledge. • Word consciousness is explicitly developed across all strands.
The recognition that words share morphemes can make the meaning across a group of morphologically related words transparent (Carlisle 1995, 2003).	Extend Vocabulary heading covers specific work with morphologically related words.
Developing word consciousness gives students a deeper dimension for appreciating reading. It includes an interest in, and awareness about, the structure and power of words (Anderson and Nagy 1992; Graves and Watts-Taffe 2002; Scott and Nagy 2004).	Word consciousness activities are fully integrated across all strands: Vocabulary Strategies, Read and Comprehend, Study Skills, Word Study, Inquiry, Writing Workshop, and Fluency.
Explicit discussion of the words that published authors use to convey vivid images and to create rich descriptions of characters and settings help students gain control over words that they use in their own writing (Scott, Skobel, and Wells 2008).	Discussions appear under the headings Read and Comprehend, as well as Writing Workshop.

Author Biography

Dr. Taffy E. Raphael is a former intermediate grade classroom teacher, now on the Literacy, Language and Culture faculty at the University of Illinois at Chicago. Previous university faculty positions include University of Utah (1980–1982), Michigan State University (1982–1997), and Oakland University (1997–2001). Dr. Raphael was the 1997 recipient of International Reading Association’s Outstanding Teacher Educator in Reading Award, the 2007 University of Illinois at Urbana-Champaign Distinguished Alumni Award, and the 2008 National Reading Conference Oscar Causey Award for Lifetime Contributions to Literacy Research.

Dr. Raphael’s research has focused on comprehension strategy instruction (Question-Answer Relationships), strategy instruction in writing, and frameworks for literacy curriculum and instruction (*Book Club Plus*). She directs Partnership READ, a school-university partnership funded by the Chicago Community Trust to improve literacy instruction through professional development, recognized by American Association of Colleges of Teacher Education’s 2006 Best Practices Award for Effective Partnerships. Dr. Raphael has published nine books and three edited volumes, and over 100 articles and chapters, in journals such as *Reading Research Quarterly*, *American Educational Research Journal*, *The Reading Teacher*, *Language Arts* and books with educational publishers such as Teachers College Press and International Reading Association. She has been a Fellow of the National Council of Research in Language and Literacy since 1996 and member of the Reading Hall of Fame since 2002. She serves on the Board of Directors of International Reading Association (2007–2010).

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