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## Building Conceptual Understanding through Vocabulary Instruction

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### Abstract

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Instructional design is an integral part of a balanced approach to teaching vocabulary instruction. This article presents several instructional procedures using research-based vocabulary strategies and explains how to design and adapt those strategies in order to reach desired learning outcomes. Emphasis is placed on research-based principles that guide effective vocabulary instruction and on the importance of incorporating vocabulary instruction into all phases of the reading lesson framework— before, during, and after reading (Blair, Rupley, & Nichols 2007; Vacca, Vacca, & Mraz 2011). Vocabulary instruction should encourage students to make associations and accommodations to their experiences and provide them with varied opportunities to practice, apply, and discuss their word knowledge in meaningful contexts (Beck & McKeown, 2002; Rupley & Nichols, 2005). The ultimate goal of teaching vocabulary is for the students to expand, refine, and add to their existing conceptual knowledge and enhance their comprehension and understanding of what they read (Baumann, Font, Edwards, & Boland, 2005; Stahl & Fairbanks, 1986). This article seeks to provide educators with both

a theoretical framework and practical classroom instructional suggestions for doing so.

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### **Building Conceptual Understanding through Vocabulary Instruction**

Vocabulary knowledge closely reflects children's breadth of real-life and vicarious experiences. Students cannot comprehend well without some knowledge of the concepts that are represented by the print (Anderson & Freebody, 1981; Padak, Newton, Rasinski, & Newton, 2008). As noted by Rupley, Logan, and Nichols (1999), "Vocabulary is a shared component of reading and writing—it helps the author and the reader to comprehend through their shared meanings of words" (p. 337). The link between vocabulary and comprehension is strong throughout students' education and can often be attributed to differences in their comprehension capabilities. Students who are successful at decoding can, and often do struggle with comprehension when they encounter too many words for which they have limited or no meaning (Biemiller, 2003). A child's reading vocabulary is likely to increase at the rate of 3,000 to 4,000 words a year, resulting in a reading vocabulary of greater than 25,000 words by eighth grade (Graves, 2004). Not having access to the meaning of words representative of the concepts and content of what they read causes difficulty in children's comprehension of texts, limits their ability to make a connection with their existing background knowledge, inhibits their capacity to make coherent inferences, and impacts their ability to reason. Furthermore, vocabulary knowledge that is rich and well developed contributes significantly to fluent reading (Cunningham & Stanovich, 1997).

Reading instruction that focuses on the growth of children's vocabulary results in enhancing their abilities to infer meanings and to better comprehend what they read (Baumann, et al, 2005; Stahl & Fairbanks, 1986). Daneman (1991) clearly presented the relationship between vocabulary and reading comprehension and the mutual benefits that they share in promoting children's reading development. As students' vocabulary grows their ability to comprehend what they read grows also; furthermore, as their comprehension capabilities grow so do their abilities to learn the meaning of new words from context.

The words that readers know represent the concepts and information available to them to understand what they read. Knowledge of words can be thought of as "hooks" upon which the reader hangs ideas; therefore, vocabulary knowledge supports the reader's understanding and interaction with the author, which in turn promote the formation and validation of concepts and new learning. Vocabulary

can also be thought of as the glue that holds ideas, content, and stories together and facilitates making comprehension accessible for readers. A classroom example to illustrate the relationship between understanding and vocabulary knowledge is the use of a graphic organizer to help students infer the meanings of unknown words. When students come across a word that they don't know the meaning of they can stop and write the word in the first column of the organizer. Then students can record what they infer the word means and what they learned in the second column. In the third column students can write what evidence helped them infer the meaning of the unknown word from the text.

<u>Unknown Word</u>	<u>Inferred Meaning</u>	<u>Evidence</u>
conspiracy	when many people keep something hidden the truth hidden	generations have kept
sinister	horrible, evil	the characters go through a lot just to cover up

### Words that Should Be Taught

Are there too many words to teach? This question was posed by McKeown and Beck (2004) and is surely an important one to consider given the general agreement that children are exposed to approximately 3,000 new words a year in their reading. With so many new words and the cumulative effect that they have as children progress through school how does a teacher decide which words to teach. McKeown and Beck recommend that words be considered in a hierarchical fashion, one that they refer to as having three tiers. Tier one words are the most basic words that rarely require attention given to their meaning—*home, school, bike*. Tier two words are those that occur with a high degree of frequency and are found across a variety of language domains, examples would be words such as *typical, classic, characteristic*. Tier three words are limited in their frequency and are limited to domains of specific content—*magistrate, appellate, atoll*. The words that are encountered in authentic reading activities that could be classified as Tier two words are those that should be the focus of instruction and result in the greatest impact on expanding the vocabulary knowledge of the students.

Word knowledge can be viewed as a “continuum from no knowledge, to a general sense, such as knowing that *mendacious* has a negative connotation; to narrow, context-bound knowledge; to having knowledge but not being able to access it quickly; to rich decontextualized knowledge of a word meaning” (Beck & McKeown, 1991, p. 272). A form of simple-level word knowledge is definitional. Definitional knowledge is word knowledge based upon a definition, such as coming from a dictionary, thesaurus, glossary, word bank, vocabulary web site, or other individuals. Often, however, definitions do not help a reader understand the contribution of an unknown word to meaning. To comprehend, a reader needs some idea not only of a word’s meaning, but also of the ways the meaning contributes to the cohesiveness of the ideas or information represented.

Readers’ experiential and conceptual backgrounds are exceptionally important in vocabulary development. Background knowledge enables readers to develop, expand, and refine the concepts that words represent. Vocabulary knowledge is developmental and is related to background experiences. Tennyson and Cocchiarella (1986) note two phases in the learning of concepts that are applicable still today. The first phase is the formation of concepts in relation to attributes, making connections with existing concepts. The second phase is using procedural knowledge, which is “the classification skills of generalizing to and discriminating between newly encountered instances of associated concepts” (p. 44). In phase 1, individuals may undergeneralize or overgeneralize as a result of their limited experiences with the concept. Vocabulary grows when students have abundant opportunities to encounter new words and examples that are representative of the word in rich contextual settings. Individuals do not use restricted definitions of words as they engage in reading activities, but construct meaning in terms of word meanings for the concepts that represent their background knowledge.

### Explicit Vocabulary Instruction

Teaching vocabulary should include explicit instruction and appropriate guided practice in specific skills along with broad reading opportunities and other language activities. Research supports the explicit teaching of word meanings for struggling and average readers (Coyne, McCoach, Loftus, Zipoli, Ruby, Crevecoeur, & Kapp (2010); Stahl & Fairbanks, 1986). Learning either a new word, or concept for that word, requires an active process. Students learn and process new words to the extent the new words relate to other words and concepts already known by them. Connections between previously learned vocabulary words and new words

encountered in reading help students begin to understand relationships among words (Bromley, 2007). When instruction is based on strengthening these connections, students are not just asked to provide an abstract definition of a word, but make connections between the newly encountered word, their past experiences, and how these past concepts fit with the stories and informational texts they are currently reading (Rupley & Nichols, 2005). For example, teachers can ask students to think of words (angry, happiest) people have said to them that make them react in a certain way. Before reading a story, students can be directed to think about words that affect the feelings and actions of the main characters. After reading the story, ask the students to write these words and what effect each word had on the feelings and actions of the main characters. An abundance of active strategies to learn new words can be found in Allen's work (1999) and that of Frey and Fisher (2009). Research (Blachowicz, Fisher, Ogle, & Watts-Taffe, 2006; Goerss, Beck, & McKeown, 1999) supports the use of instruction that encourages students to make associations and accommodations to their experiences and provides varied opportunities for students to practice, apply, and discuss their word knowledge as a means for learning new vocabulary. As students enlarge their background knowledge, they increase their knowledge of words. Biemiller (1999) noted that students can learn two to three new words a day when the instructional strategies are based on active processing and applied in context. For this reason, explicit vocabulary instruction that use contextual analysis, concept wheels, semantic word maps, webbing, semantic feature analyses, relationships among words, and structural features of words are valuable tools. These strategies when matched with the appropriate instructional design that allows for discussion over the new words and concepts can become part of before, during, and after reading activities (Blamey & Beauchat, 2011). This active process of learning new words is also enhanced when teachers use technology-based instruction. Dalton and Grisham (2011) describe specific strategies using digital tools and the Internet to foster vocabulary growth.

### **Context Clues**

Use of context clues refers to deciphering the meaning of the word from the context in which the word is found. Context clues often have limitations because using them requires some knowledge of the context and how the meaning of the words combine to facilitate author and reader interaction. However, in an analysis of 21 instructional studies focused on improving children's skill in deliberately deriving word meaning from context, Fukkink and de Gloppe (1998) found that context clue instruction appeared to be more effective than the other vocabulary

instructional types they identified (cloze instruction, general strategies, definitions, and practice only).

Use of context clues is best taught by explicit instruction in which the teacher models the procedure, uses familiar written examples, and provides scaffolding as students become proficient in using contextual analysis. Modeling means that the teacher thinks out loud, talks through the processes used in the application of context clues, thus providing instruction in the use of the strategies and supporting students' attempts to apply them in their reading. Class discussions with students about how they derive word meanings from context, and what they do if context does not work, helps them understand the strengths and limitations of the process (Greenwood & Flanigan (2007).

An illustration of modeling the use of context clues follows. Assume that we read a sentence containing an unknown word: "Anthony was positive his \_\_\_\_\_ would let him go." Assume that this is the opening sentence of a story. Many words might complete the idea when this is all that is known. Is Anthony being held prisoner? The word could be *captors*. Is he thinking of getting permission? The word might be mother, father, friends, or teacher.

If the reader notes something about the unknown word, a valuable clue may be revealed. For instance, in "Anthony was sure his p \_\_\_\_\_ would let him go." then, mother, father, teacher, and friends can be eliminated because of the initial letter clue, but several possibilities remain, such as pal, playmates, partners, and parents.

When the sentence does not provide contextual clues, the reader should continue reading the additional text to determine if it helps to reveal the word's meaning. The context following the sentence reads: "Mother and father both agreed that they would let Anthony go to the game." Thinking about the unknown word in the earlier sentence leads the reader to recognize it as parents, because the latter sentence refers to mother and father, who are parents.

Rarely does a sentence alone provide sufficient context to unlock the meaning of unknown words: For example, "Although their sojourn was brief, it was enjoyable," "It was a moot point and the judge did not allow it," and "Most teachers today use an eclectic approach for teaching reading." If we consider the context supplied both before and after an unknown word, the meaning is more likely to be revealed.

The importance of context clues is recognized by the fact that it is usually the context in which the word appears that determines its meaning. Students may

know such words as aid, blue, mine, broadcast, and fence, and they can know several meanings for each word and still not be familiar with many others.

Students may understand what blue means in “The boy had a blue coat” but not be familiar with “The boy felt blue when his aunt left.” They may understand “Grandfather rode the horse” but not “The coach warned the boys not to horse around,” “That’s a horse of a different color,” or “The mayor accused the council of beating a dead horse.”

The relationships of words to each other and the subtle meanings that the same word conveys depend upon the context in which a word appears and the reader’s background knowledge. Following are several activities for promoting students’ interest in vocabulary development. While they all illustrate the importance of context in defining words, please note that context ranges from the highly concrete, such as labeling naming objects and pictures, to more abstract activities associated with guided writing.

Learning meanings and multiple words for the same object can be fascinating and highly motivating for young children. Many primary-grade classrooms that we visit have words written in context and displayed throughout the classroom. For example, the door in one classroom was labeled in the following manner:

This is the *doorway* to our room.

This is the *entry* to our room.

This is the *entrance* to our room.

This is the *gateway* to our room.

This is the *portal* to our room.

Different teachers help students realize that many words have several meanings according to how they are used. Many teachers we have observed illustrate this concept with simple words (such as can, stick, run, and set). As the teachers ask for different usages, they write the students’ responses on the board or a chart. At the same time, they attempt to fix the various meanings by using other words and concepts from stories the students have read and their experiential/conceptual backgrounds. For example:

I *can* spell my name. (Can means “able.”)

Mother is going to *can* some peaches. (Can means “to preserve.”)

*Can* it Joe. (Can means “stop talking.”)

If you are late one more time, the boss will *can* you. (Can means “to dismiss from a job.”)

Why don’t you trade in that old tin *can* and get a new car? (Can means “a battered old car.”)



Able readers integrate information as they read to construct meaning. If context is not enough to figure out the meaning of an unknown word, skilled readers use their language knowledge and word knowledge to help them infer meaning. However, knowing a word in its fullest sense goes beyond simply being able to define the word or get some gist of it from the context. Associating experiences and concepts with words contributes significantly to comprehension (Vacca, Vacca, & Mraz, 2011).

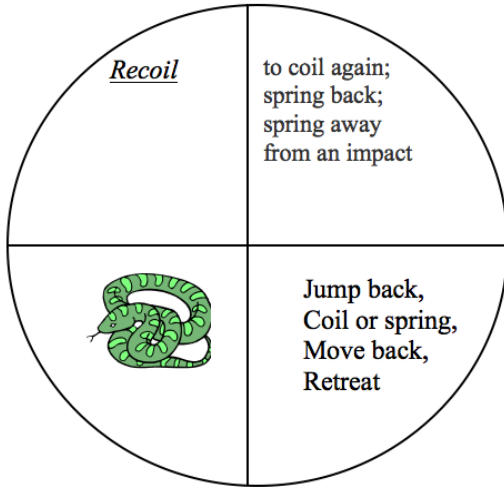
Instructional activities that visually display new words can be a beneficial means for increasing students' vocabulary knowledge. Some of those strategies—concept wheel/circle, semantic mapping, and webbing—are discussed below.

### Concept Wheel/Circle

A new word is visually represented in a way that illustrates the connection between existing conceptual knowledge and the new word. For example, the word *recoil* could be introduced in a way that emphasizes its relation to the study of reptiles. Students could brainstorm and discuss words that come to mind for recoil. The teacher would guide the discussion in a manner that helps students to conceptualize both the word and its varied meanings (meanings could range from snakes recoiling for self-protection, a spring on a mechanical device recoiling, or a person recoiling or pulling back from something out of uncertainty, and so forth). When the discussion is ended, the teacher lists words that appropriately fit with recoil on the whiteboard, overhead or doc-cam. Each student can be directed to look in a textbook at the use of the word in context, listen to a glossary definition read by the teacher, and then select three words from the list to help in remembering the word and making a connection to the new concept.

The concept wheel can be used in alternative ways as well. Students can be given a wheel without the vocabulary word and brainstorm and discuss what would be an appropriate word for the concepts. Teachers can use a wheel that is partially completed with words and have students suggest other words. Also, completed wheels can be used to have students identify the content area wheel and discuss what they know about the concepts represented. Figure X.1 represents an example of a concept wheel for the word *recoil* that uses the definition for the word, a list of brainstormed words and a picture clue to help remember the word.

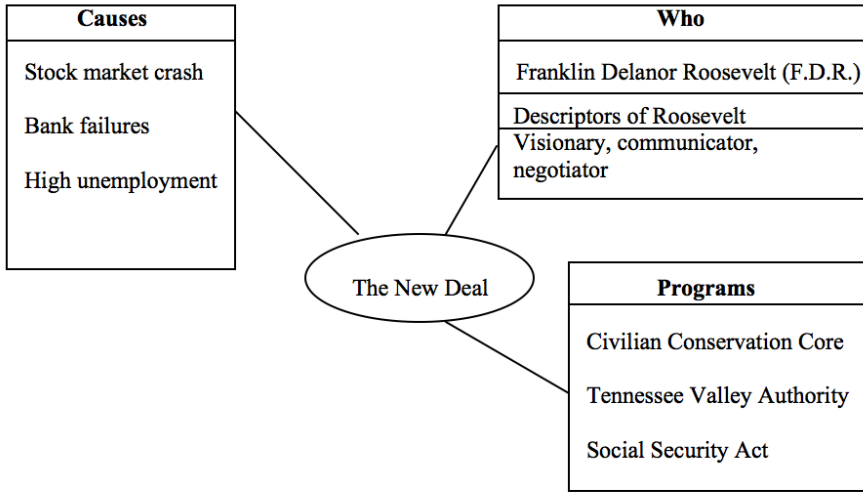
**Figure X.1** Concept Wheel for the word recoil



### Semantic Mapping

Semantic mapping can be used for explicit and active vocabulary instruction. Semantic mapping structures information categorically so that students can more readily see relationships between new words and concepts and their existing background knowledge. Upon completion of the semantic map, the teacher discusses and uses written examples with the students about how the new vocabulary words relate to words that they already know. Students thus understand better the content of the topic they will cover or the story they will read. The semantic map presented in Figure X.2 for the social studies topic of FDR's New Deal shows how teaching selected words prior to reading can help students activate their background knowledge, relate existing knowledge to new concepts, and understand how new words and concepts are related. Teachers should stimulate class discussion to guide students' thinking about the relationships between the target word and their experiences.

**Figure X.2** Semantic Map for F.D.R's New Deal



The procedure for developing a semantic map for vocabulary instruction includes the following:

- Selecting a word or concept that is central to a topic or story.
- Writing the central word on the chalkboard or a chart.
- Brainstorming words related to the central theme or topic and writing these words.
- Grouping the words into categories and labeling these categories.
- Noting additional words essential to the topic and placing these additional words in the appropriate categories.

## Webbing

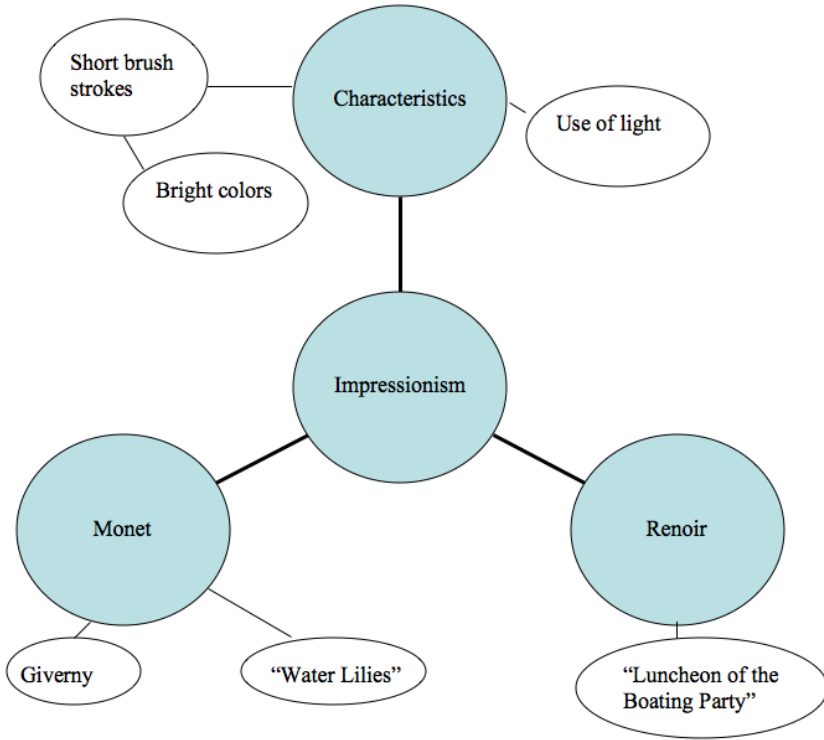
Webbing graphically illustrates how to meaningfully associate word meanings and how to make connections between what students know about the words and how the words are related. Webbing makes it possible for students to see the relationship between words and concepts that they have already read or experienced. To help promote concept acquisition and vocabulary knowledge, teachers can leave the center word blank. Students can begin to understand the relationship of words in the web by choosing and discussing words that might complete the center word. The web in Figure X.3 was done with the teacher directing the students to think of words that could be associated with Impressionist Art. As noted in the web, their responses ranged from specific artists and paintings to characteristics of the Impressionist movement. Webbing can be used to introduce a lesson to determine students' vocabulary and concept knowledge. Cells can be linked by a variety of relationships, such as synonyms, antonyms, expanded concepts, connotations, and preciseness.

## Semantic-Feature Analysis

Semantic-feature analysis can help students understand relationships among words and relate their background knowledge to the new words. Semantic-feature analysis is most appropriate for words related by class or common features. Figure X.4 is an example used during a study of vertebrates.

To implement a Semantic-feature analysis, list several familiar words that are related. Next, guide students in a discussion of features that are associated with those words. As students suggest features, write those ideas across the top of the board or chart, creating a matrix that the students can complete in terms of whether or not the features are present (+), absent (-), or unknown (?). As the students broaden and refine their concepts, add words and features to the list and analyze them with the students.

**Figure X.3** Semantic Web for Impressionism



Semantic-feature analysis can be used with narrative reading materials to analyze characters, settings, plots, and so forth. The strategy is also effective in the content areas when introducing new topics, reviewing topics, and integrating topics across different subject areas. The arrays can be developed and enlarged as students' knowledge backgrounds expand.

**Figure X.4** Semantic-Feature Analysis for Vertebrates

	Warm Blooded	Cold Blooded	Land-based	Water-based	Metamorphosis	Lungs	Live young
Fish	-	+	-	+	-	-	- +
Amphibians	-	+	+	+	+	- +	-
Reptiles	-	+	+	- +	-	+	- +
Birds	+	-	+	- +	-	+	-
Mammals	+	-	+	- +	-	+	+

### Teaching Relationships Among Words

Skilled readers integrate information as they read to construct meaning. If context is not enough to explain an unknown word, skilled readers may use their knowledge of prefixes, suffixes, and root words to determine the meaning. They may use their knowledge of related words to get the “gist” of the word that is new to them. They perform these operations so rapidly and automatically that they are often not aware of them.

To help students understand the relationships among words, use words that differ in degree (such as *tiny*, *minute*, and *small*) and ask students to discuss them and generate other words that fit the examples. An assortment of instructional strategies and activities can teach relationships among words. By building connections between “old” vocabulary words and “new” words found in their reading, students begin to understand relationships among words they encounter. Students are not asked to simply supply words that fit the example, but instead begin to make connections that build on their existing vocabulary knowledge. For example, Matthew just finished reading *The Last Dinosaur* and used *enormous* to describe the size of the dinosaur. His teacher asked him what else could be described as enormous. He responded by mentioning King Kong, the sky, and the Grand Canyon. Clearly, he knew the word and what it represented. This knowledge could lay the foundation for learning other words associated with *enormous*—*massive*, *gigantic*, *gargantuan*, and so forth.

Such discussion and activities that relate these new words and concepts to past readings and presents them in relation to text help to expand students' vocabularies in a meaningful way.

Teachers can provide students with several words that are related and ask them to identify other words appropriate to the given words. The words supplied by the students can be similar or opposite in meaning and should be based on their reading of both narrative and informational texts.

Similar meanings can include:

tall, large. . . (elevated, immense, soaring)

work, toil. . . (labor, function, job)

want, desire. . . (crave, prefer, hope)

Opposite meanings can include:

tall, large. . . (diminutive, petite, compact)

work, toil. . . (rest, recreation, sleep)

want, desire. . . (disgust, dislike, hate)

Combinations of meaning can include:

tall, petite. . . (elevated, compact, immense)

work, rest. . . (job, sleep, recreation)

want, need. . . (prefer, demand, requirement)

Direct the students to provide context and write their context sentence for each of the words. After the students understand the relationships between the words, have them provide additional words that retain similar meaning in the sentences. The following example is based on a science unit dealing with reptiles that the children had read that related to the concepts associated with big and small:

In our chapter on reptiles the authors discussed the rapid size changes that alligators go through. In the text there is a photograph of a zoologist holding a baby alligator. It was so \_\_\_\_\_ that she could hold it in her hands. It was an amazing difference between the size of the babies and the mother and it made us wonder how such a little thing could grow up to be so \_\_\_\_\_.

Students can supply words that relate to other stories they have read about size. For example, Annalyse might use the word gigantic to describe the mother alligator, while Addie might choose the word humongous to describe her. Teachers can direct students to think about words that are the opposite of those supplied for either sentence. Words such as minute, tiny, little, and so forth could be used to complete the first sentence.

Additional activities can be developed around the concept of related words. For example, write the word *remote* on the board. Have students develop two lists:

one that contains words that are similar in meaning to the word *remote* and one that contains words that are opposite in meaning.

For example:

<u>Related</u>	<u>Different</u>
distant	near
undiscovered	adjacent
inaccessible	close
isolated	occupied

Next, use sentences to illustrate the similarities and differences in word meanings. Note the changes in meaning for the words substituted for *remote*. Again encourage students to use their knowledge of stories they have read to construct sentences for the target word.

Bob thought the building was *remote*.

Bob thought the building was *inaccessible*.

Bob thought the building was *close*.

Bob thought the building was *near*.

### Word-Association Vocabulary Instruction

Word-association vocabulary instruction enables students to learn the meanings of several connected words. Students can add new words to their existing vocabulary and understand relationships between the concepts that words represent.

This approach can be followed in teaching synonyms, antonyms, context clues, roots, prefixes, suffixes, and concept classifications (such as animals, size, actions, and story themes). Word-association strategy applies to all school subjects. Following are a few suggested activities to help promote meaningful vocabulary growth.

The teacher identifies new words that students will encounter and are important for them to learn. Words that contain the same root, prefix, or suffix, and words in concept classifications can form the basis for expanding meaning vocabularies. Teach these new words by relating them to similar words the students already know. In content areas, such as mathematics, relate new words to known concepts in meaningful context and use examples that part of the students' background knowledge.

Research (Goerss, Beck, & McKeown, 1999) supports the notion that, in order to learn and retain new vocabulary, students need to be involved in active



learning that requires them to make associations between word learning and their experiences, as well as opportunities to practice, apply and discuss their word knowledge. In an interest area, such as ice hockey, new words can be connected to known words. For example using words such as *score*, *scoreboard*, *check*, *pass*, *save*, *hold*, *hook*, *net*, *penalty time out*, and *offside* students can illustrate word relationships with similar roots, prefixes, or suffixes.

Classify words that students know from their reading of literature, basal stories, and content area textbooks in terms of similar properties and introduce new words that relate to the known properties. For example, a part of thematic unit on World War II might use the following to provide an overview of some of the countries involved:

Country	Continent	Affiliation	Major Language
Great Britain	Europe	Allies	English
Canada	North America	Allies	English
Switzerland	Europe	Neutral	French, German, Italian, Swiss-German
Japan	Asia	Axis	Japanese

### Structural Features of Words

Instruction in structural features of words looks at visual patterns and meaning that changes as a result of adding inflectional endings (e.g., -s, -ed, -ing, and -ly), prefixes (e.g., ex- and pre-), and suffixes (e.g., -ment and -ous). Students often define new words by the extent to which the new word relates to other words and concepts already known to them. Connections between previously learned vocabulary words and new words encountered in reading help students understand relationships among words. When instruction is based on strengthening these connections, students are not asked to provide an abstract definition of a word, but instead are asked to make connections between the newly encountered word, their past experiences, and how these past concepts fit with the stories and informational texts they are currently reading.

Teachers can generate instructional activities for the area of structural features of words that build on what students know and generate several variations of a

known word to enhance the learning of new words. For example, teach affixes (prefixes, suffixes, and inflection endings) to help students relate the new to what they know. Using word families (derivations of known words, such as depend—dependable, undependable, dependent, and independent) can enhance understanding of the meaning relationships among derived words within a family and promote independent word learning.

Teachers can introduce prefixes and their effects on meaning by presenting sentences containing prefixes. Focus students' attention on what happens to the meaning of a known word when a specific prefix is used. The following story illustrates the use of the prefix un-

*Once upon a time, on a dark, dark night Addie and Annalyse set off walking to town and on the way they met a kind old woman. The kind woman would not reveal her name, but told the girls that they would meet a guardian in the woods who would not be so kind. Addie and Annalyse knew that the woman spoke true because they had met this creature before and they had never met anyone or thing as unkind and unfriendly as this guardian. Addie and Annalyse helped the kind old lady regather herbs and roots that the guardian had taken from her and then safely escorted her to her cottage. Along the way the kind old lady shared a secret for getting past the unfriendly and unkind guardian of the woods. Upon safely arriving at the cottage the girls helped the old lady unload her herbs from her basket and loaded the contents on the shelf and set off to complete their trip to town.*

1. Addie and Annalyse's actions were \_\_\_\_\_ to the old lady they met in the woods. (kind, unkind)
2. The two girls treated the old lady in a \_\_\_\_\_ way. (friendly, unfriendly)
3. It was \_\_\_\_\_ of the Guardian of the woods to take the old lady's herbs and roots. (kind, unkind)
4. Addie and Annalyse helped the old lady \_\_\_\_\_ her basket once they arrived safely to the old lady's cottage.(load, unload)

Teaching students how to recognize and analyze word parts that may be familiar to them before they read a text can serve to make vocabulary more comprehensible. When students express an interest in word-building using roots, prefixes, and suffixes, construct activities to extend their understanding of word families and the effect that affixes have on word meaning. To build words, read the definition for a word that students already know. It is important that they have meaning for the base-word. Then ask the students to think about what they know about the prefixes and suffixes. Give short definitions to make new words. The following example uses the prefixes and suffixes (-ed, un-, -ment, -able, im-) with the root words employ and impress:

*employ*

employed, unemployed, employment, unemployment, unemployable, employable

*impress*

impressive, unimpressive, impressionable, unimpressionable

Using the root words and one or more of the prefixes and suffixes provided, students might create the following list of words and their accompanying definitions.

employed: having a job

employment: occupation or activity

unemployed: not having a job

unemployable: not able to obtain a job

impressive: accomplished or noteworthy

impressionable: easily influenced

unimpressive: not accomplished or noteworthy

Provide opportunities for students to apply different prefixes in meaningful context. Depending on students' needs, the teacher can introduce the activity with sentences and then proceed to using connected text from stories that the students have read. Listed below are examples of sentences that illustrate the use of prefixes:

1. Brian thought the new student was not kind  
Brian thought the new student was \_\_\_\_\_. (kind, unkind)
2. The teacher said to write the story again.

- The teacher said to \_\_\_\_\_ the story. (write, rewrite)
3. The distribution of materials did not seem fair to the workers.  
The distribution of materials seemed \_\_\_\_\_ to the workers.  
(fair, unfair)

## Conclusion

Meaning vocabulary is a major factor in reading comprehension. The words that readers know represent the concepts and information that they have available to help them comprehend as they read. Readers who know a word in its fullest sense can associate experiences and concepts with the new word.

Providing students with strategies that enable them to visualize and connect between past experiences and new concepts is critical for effective vocabulary instruction. Vocabulary instruction should be ongoing. It should cut across grade levels and subject areas and be embedded before, during, and after the reading of texts and the introduction of concepts (Graves, 2011).

We support a position that recognizes both wide reading and explicit vocabulary instruction in vocabulary development. We feel that the key is to (1) select appropriate words that children will encounter while reading, (2) teach students to relate words to their own background knowledge, (3) provide students with opportunities to discuss word uses, attributes, and meanings and (4) use visual aids that will help students organize, synthesize and understand word concepts. Students must be taught strategies that will allow them to integrate new word meanings with their existing knowledge in order to build strong conceptual representations of vocabulary across multiple contextual settings.



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