Vocabulary, Grade K-6

Vocabulary

Introduction

Research shows that vocabulary knowledge is highly correlated with overall reading achievement (Davis, 1944, 1968; National Reading Panel, 2000). Research supports that a child's early environment affects how much vocabulary the child will acquire. Children from households with more resources will begin school with a more highly developed vocabulary than children who come from households living in poverty (Smith, Brooks-Gunn, & Klebanov, 1997). By the age of 3, children from middle-class households have vocabularies of about 1,000 words while children from households living in poverty have vocabularies of about 500 words (Hart & Risley, 1995). By grade 1, the former children know approximately 5,000 words, while the latter children know only about 3,000. By grade 4, the respective vocabularies are 16,000 words and 11,000 words (White, Graves, & Slater, 1990; Beck, McKeown, & Kucan, 2002). Research also indicates that one of the most significant factors influencing the difference between the reading performance of native English speakers and that of English learners is English language vocabulary, even if those English-language learners have a large vocabulary in their native language (Verhoeven, 1990; Garcia, 1991; Goldenberg, 2005). Given these word-knowledge disparities, it is of utmost importance that vocabulary words be selected in a targeted and purposeful manner and that effective strategies be used to teach these vocabulary words.

What does it mean to know a word?

Learning words happens incrementally and involves stages of word knowledge, especially for conceptually complex words (Nagy & Scott, 2000). Many researchers agree that there are four stages of word knowledge: (1) unknown; (2) knowledge that the word exists; (3) partial knowledge, which is a vague or general understanding of the word; and (4) complete knowledge, which is a comfortable understanding of the word's meaning that enables its use in writing and speaking in various ways (Dagle, 1965; Chall, 1983; Stahl, 1999).

Furthermore, a person's receptive vocabulary (the vocabulary we understand when hearing it in conversation or seeing it in print) exceeds a person's expressive vocabulary (words we use in our own speech and writing). Having a rich expressive vocabulary is crucial in expressing and exploring ideas in a deeper way; therefore it is necessary to move word knowledge from the first several stages to the last stage of complete word knowledge.

How are words learned?

Students must develop a schema for unknown words (Scott, 2005). To gain an understanding of a word, a student must know the meaning of the word, how the word is normally used or in what context the word is used, and how it relates to what the student already knows. In order to do so, the student must stop and recognize a word as unknown, have a desire to know the word and participate in the learning process, and incorporate the definitional and contextual information as well as new and known information. Learning words can be made more difficult depending on the conceptual complexity of the unknown words.

What is the connection between vocabulary knowledge and comprehension?

The powerful relationship between reading comprehension and breadth and depth of vocabulary knowledge is one of the most consistent findings in educational research. Time and again researchers have found that (1) readers who comprehend well generally have extensive vocabularies (see Anderson & Freebody, 1981; Nagy, Anderson, & Herman, 1987), and that (2) improving students' vocabularies improves their reading comprehension skills (see Beck, Perfetti, & McKeown, 1982; McKeown, Beck, Omanson, & Perfetti, 1983; McKeown, Beck, Omanson, & Pople, 1985). The National Reading Panel (2000) has recognized vocabulary as a key aspect of literacy necessary for reading comprehension. Because vocabulary knowledge is so critical to comprehension, vocabulary instruction should be integrated throughout any reading and language arts program.

Which words should be taught?

There are several ways to select which words to teach (see Graves, 2000; Beck, McKeown, & Kucan, 2002). Words that should be taught include comprehension words (essential to understanding a selection or theme being studied), useful words (not domain-specific but likely to appear in other contexts), academic words (typically used within the

school setting and across content areas), and generative words (will help students learn many other words, e.g., *company, companion, accompany*) (Blachowicz & Fisher, 2005).

Furthermore, when selecting words to teach, the following should be taken into consideration: whether or not the students already know the words, the reading selection and/or theme of study, the usefulness of the word outside of the selection or theme, whether or not the students can learn the word independently, and whether the words will excite an interest in word-learning in the students.

One way to select comprehension words is to analyze the selection by using the story or text structure (Blachowicz & Lee, 1991). This can be done by filling out a story or text map and then selecting the four to six words without which the selection cannot be retold or summarized. Then words that will likely be encountered in other readings but might not be central to this selection should also be selected.

How should vocabulary be taught?

Vocabulary instruction must do more than teach dictionary definitions for words; it must encourage students to use, reuse, and study the new words they encounter as they read and write. Researchers have found that students are better able to retain new words they learn if they are exposed to them multiple times and if the words are used in contexts that are meaningful to them (McKeown & Beck, 2004).

Studies have shown an average gain of 17% in word meanings known when there have been repeated readings of a text with explanations of word meaning (Robbins & Ehri, 1994; Senechal, Thomas, & Monker, 1995; Senechal, 1997; Hargrave & Senechal, 2000; Brabham & Lynch-Brown, 2002; Penno, Wilkinson, & Moore, 2002; Biemiller & Boote, 2006). In another study comparing extended and embedded instructions with a sample of 32 kindergarten students, the students who received extended instruction scored significantly higher on all three outcome measures than those students who received embedded instruction (Coyne, McCoach, & Kapp, 2007).

The Report of the National Reading Panel (2000) states that vocabulary should be taught both directly and indirectly using multiple methods of instruction. Teaching vocabulary should be done before, during, and after reading. Before reading, any concepts essential to understanding what is to be read and that are not well explained by context should be explicitly taught (Blachowicz & Fisher, 2005). Stahl has recommended that definitional, contextual, and usage information should be shared when explicitly teaching words (Stahl, 1999). During reading, students should monitor their understanding of words and stop and clarify any words they do not understand using various strategies. The teacher should model how to use the strategies and provide scaffolding as needed. Both during and after reading, target vocabulary words should be used in meaningful discussions, with the aid of teacher questioning. Students should also be encouraged to use in their writing any interesting words they learned through reading as well as any words explicitly taught. Laufer's (2003) work has shown that written interactions with new words are associated with long-term retention of word meaning.

As mentioned before, teachers must help students develop strategies for independent word learning and model how to implement these strategies both in selections used in the reading program and in self-selected reading material.

Word Relationships

People effectively learn new words by relating them to words they already know. An understanding of different word relationships, such as the following, enables students to quickly and efficiently secure new vocabulary.

- **Synonyms** are words with similar meaning. Using synonyms is particularly useful in helping define adjectives and adverbs (e.g., *big/tall; badly/poorly*).

- **Antonyms** are words with opposite meanings. Powell (1986) explains that using antonyms can be one of the most powerful tools in vocabulary instruction. He suggests drawing a distinction between polar antonyms and scalar antonyms. Polar antonyms are categorical (e.g., *husband/wife; buy/sell*), meaning that asserting one denies the possibility of the other. Scalar antonyms, on the other hand, allow nuances between extremes (e.g., *gigantic, big, large, small, tiny*).

- **Multi-Meaning Words** have more than one meaning (e.g., *run*, *dressing,bowl*). If a word appears more frequently in a language, it is more likely to have multiple meanings. Therefore it is important to introduce these meanings to students.

- **Shades of Meaning** of words show degrees of a concept or quality (e.g.*like*, *love*, *worship*).

- **Levels of Specificity** show how words are at different levels of precision (e.g., *living thing, plant, flower, daisy*).

- **Classifying and Categorizing** words allow students to sort words with related meanings (e.g., *colors, shapes, animals, foods*).

- **Homographs** are words that are spelled the same but have different meanings and come from different root words (e.g., *bear, count*).

- **Analogies** are pairs of words that have the same relationship (e.g., *ball is to baseball as puck is to hockey*).

Structural Analysis

Researchers have found that teaching students to identify the various elements of a word, such as the following, is a highly effective means of expanding their vocabularies (Nagy, 1999).

- **Greek and Latin Roots** can be found in a variety of English words. These words have common roots with different beginnings or endings (e.g., *telegraph, telephone*). Teaching words in morphological families allows students to learn new words by analogy with familiar words, which leads students toward independently figuring out the meanings of words.

- **Compound Words** are comprised of two or more words. It is important to remember that some words are defined by combining the meaning of the two parts (e.g., *sidewalk, birthday*) and some word meanings are related to, but not completely represented by, the meaning of the two morphemes (e.g., *cowboy, shipyard*). Also, some compound words, such as *moonstruck*, have idiomatic or figurative use.

- **Base-Word Families** are words that have the same base word (e.g., *care, careless, careful, uncaring, carefree*).

- **Affixes** such as prefixes and suffixes are attached to base words, either before or after the base word, and often change the part of speech. Knowledge of the meanings of common affixes can help students define unknown words they encounter.

Vocabulary Strategies for Unknown Words

Using vocabulary strategies to determine meaning, such as apposition and context clues, have been shown to be particularly effective with explicit instruction and guidance from the teacher.

- **Apposition** is a definition of a word within a text. The definition is often set off by commas or dashes for the reader.

- **Context Clues** can be used to infer the meaning of a word. It is best to teach contextual analysis throughout the elementary school years, moving from the familiar to the unfamiliar, and gradually increasing in complexity (Blachowicz & Fisher, 2005). Studies have shown that contextual analysis instruction is successful when involving good planning, explicit instruction, practice and feedback, scaffolding and gradually handing over the responsibility to students, and a metacognitive focus (Buikema and Graves, 1993; Kuhn & Stahl, 1998; Bauman, Edwards, Font, Tereshinski, Kame'enui, & Olejnik, 2002; Blachowicz & Fisher, 2005).

- **Structural Analysis** can be used to break down unknown words containing Greek or Latin roots, affixes, or compound words. Paired with formal word-analysis instruction, this strategy is quite valuable.

Keyword Method

Vocabulary learning can be supplemented with other modalities, such as the keyword method. The keyword method has proven to be very effective (Pressley, Levin, & Delaney, 1983) and has been used for ESL instruction (Mastropieri, 1988; McCarville, 1993). The keyword method involves imagery, which is used to connect words with their definitions. The method uses auditory and visual cues to boost the learning of information about word meanings. For example, the word rustle can be taught by telling students for the sound made when crumpling newspaper.

Conclusion

Teachers are faced with a student population that is steadily growing more diverse in its literacy backgrounds and abilities as well as learning styles. Furthermore, teachers are expected to make vocabulary instruction relevant and exciting to this diverse population, and to ensure that the knowledge gaps are greatly narrowed. Thankfully, much research has been conducted on best practices for teaching vocabulary that can help students develop a rich vocabulary repertoire. Such practices ensure that students have access to effective vocabulary strategies, extensive opportunities for vocabulary growth, and ample occasions to use new words in meaningful ways in writing, speaking, and in interacting with texts. By using these effective instructional methods, teachers can instill in their students a love of learning, allowing students to become passionate readers and express themselves clearly and concisely when speaking and writing.