INTEGRATED VOCABULARY INSTRUCTION:

Meeting the Needs of Diverse Learners in Grades K–5



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Integrated Vocabulary Instruction: Meeting the Needs of Diverse Learners in Grades K–5

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Contents

Page

Integrated Vocabulary Instruction: Meeting the Needs of Diverse Learners in Grades K–5 1

A Knowledge Base for Evidence-Based Instruction 2

What Do We Mean by *Vocabulary*? 2

Vocabulary Instruction is Important for All Students 2

What Does It Mean to Know a Word? 3

How Are Words Learned? 4

A Framework for Elementary Vocabulary Instruction 4

Teaching Specific Vocabulary 6

Which Words Should Be Taught? 6

Teaching New Words Directly: The STAR Model 7

Teaching to Build New Conceptual and Relational Networks 8

Synonyms 9

Synonym Webs 9

Synonym Feature Analysis 11

Antonyms 12

Using Imagery: The Keyword Method 13

Teaching Independent Strategies 15

Using Clues Within the Word: Morphological Analysis 15

Compound Words 15

Incidental Morphemic Analysis 16

Affixes 16

Root Words 17

Using Clues Around the Word: Contextual Analysis 18

Using References: The Dictionary 19

Differentiating Instruction 20
Vocabulary Development for English Language Learners 20
Vocabulary Development for Emergent Readers 21
Vocabulary Visits 21
Using Technology for Differentiation 23
Developing Word Awareness and Ownership 24
Word Play 24
Wide Reading 25
Vocabulary as a Schoolwide Focus 25
A Final Word 27
References 28

Integrated Vocabulary Instruction: Meeting the Needs of Diverse Learners in Grades K-5

We live in the "Age of Accountability." Part of the professional role of teachers is to make good instructional decisions and to be able to explain to others the foundation for that decision making using evidence from both exemplary practice and research. One area of particular significance to the curriculum is that of vocabulary; the connection between vocabulary and reading comprehension, as well as vocabulary and school performance in all content areas, is one of the most strongly established in educational research (Davis, 1944, 1968; National Reading Panel, 2000). The purpose of this monograph is to provide research-based information and classroom-based ideas to enhance vocabulary instruction. This monograph, aimed at the elementary school level, is designed to address the needs of the wide range of students that are seen in classrooms, classrooms in which an increasing number of students are entering with first languages other than English (U.S. Census, 2001).

The goal of this document is to provide the information that teachers and other colleagues in the school need to implement an integrated and comprehensive approach to vocabulary instruction. By *integrated*, it is meant that vocabulary is a core consideration in all grades across the school and in all content areas across the school day. By *comprehensive*, it is meant that vocabulary instruction encompasses much more than a list of words to teach at the beginning of the week. Rather, it involves a common philosophy and shared practices, based on a solid understanding of the knowledge base and supported by curricular considerations as well as classroom and school organizational procedures.

To help establish this integrated and comprehensive perspective, this monograph first presents a knowledge base for teachers with regard to the importance of vocabulary instruction, the nature of word learning, and the research base for teaching and developing vocabulary. Next, specific instructional strategies are described for teaching individual words, teaching word learning strategies, and fostering word consciousness which exemplify the integrated and comprehensive, differentiated perspective that have been developed. In education, as well as life, "context is all" and, therefore, the last section of this monograph will address the critical component of the overall classroom environment as well as the total school environment for word learning.

A Knowledge Base for Evidence-Based Instruction

What Do We Mean by *Vocabulary*?

More than 20 years ago, Chall (1983) made a clear distinction between the two types of vocabulary needed for reading: word-recognition vocabulary and meaning vocabulary. Word-recognition vocabulary consists of the words that a student can pronounce when seen in print, whether by sight or by use of word attack skills. Meaning vocabulary consists of words that a student can attach appropriate meaning to, or define. Recognition vocabulary is print-bound, whereas meaning vocabulary is not; students have many words in their speaking vocabularies that they have never seen or attempted to read in print.

Most teachers have probably encountered students who struggle with word recognition, in spite of strong listening comprehension skills and a strong conversational vocabulary. Conversely, they have probably worked with children whose word recognition is impeccable, leading many to believe that they are strong readers, when in fact they attach little meaning to what they read, because of a weak meaning vocabulary. Many people use the term *vocabulary* to refer interchangeably to word recognition and word meaning development. In fact, in the primary grades, many are concerned with vocabulary only as it relates to word recognition.

In this monograph, the term *vocabulary instruction* is used to refer to the teaching and development of students' understandings of word meanings. Further, this monograph contends that word meaning instruction is a critical component of the elementary school curriculum, beginning in the earliest grade and influenced by preschool and home experiences.

Vocabulary Instruction Is Important for All Students

Research indicates clearly that vocabulary knowledge is highly correlated with overall reading achievement (Davis, 1944, 1968; National Reading Panel, 2000). In addition to affecting reading performance, vocabulary knowledge affects a student's ability to participate fully in both social and academic classroom routines. In this regard, all students can benefit from vocabulary instruction, especially if that instruction is tailored to individual strengths and needs. In the areas of Reading and Language Arts, vocabulary instruction is critical to the improvement of comprehension and written expression. In the content areas, including Mathematics, Science, and Social Studies, vocabulary instruction is central to the development of new conceptual frameworks and the understanding of increasingly more sophisticated ideas. In short, vocabulary is directly related to knowledge acquisition. Words both express, and allow speakers to extend, their understanding of the world around them. In addition, words afford access to completely new worlds. Whatever a student's achievement level in a particular area of study, be it minimal, moderate, or advanced, vocabulary instruction will promote further learning.

Given the importance of vocabulary knowledge to learning, word knowledge disparities among children have long been a concern of researchers (Becker, 1977; Graves, Brunetti, & Slater, 1982; Hart & Risley, 1995). While the average child enters kindergarten with approximately 5,000 words in his/her meaning vocabulary, too many enter school with far fewer words, thus beginning their school careers at a disadvantage. Hart and Risley's (1995) long-term study of

vocabulary development in children during the first three years of life revealed significant differences based on parental income. Children in economically disadvantaged households were exposed to significantly fewer words, which was related to their own vocabulary use and rate of vocabulary growth during these formative years. Clearly, poverty is a factor in vocabulary development.

Another factor in vocabulary development is second language acquisition. Research indicates that one of the biggest factors influencing the discrepancy between the reading performance of native English speakers and that of English language learners is English language vocabulary knowledge, despite the fact that many English language learners possess a large vocabulary in their native language (Garcia, 1991; Goldenberg, 2005; Verhoeven, 1990).

Fortunately, the Report of the National Reading Panel (2000) supports the notion that vocabulary instruction that is appropriate to the age and ability of the student leads to gains in comprehension. These findings hold across grade levels, beginning as early as preschool, and apply to both native English speakers and those learning English as a second language (Collins, 2005; Stahl & Fairbanks, 1986).

What Does It Mean to Know a Word?

The process of word learning is incremental, involving gradations of word knowledge, particularly for conceptually complex words (Nagy & Scott, 2000). Many researchers agree on the following levels of word knowledge: (1) unknown ("I have never heard that word before"), (2) knowledge that the word exists ("I have heard that word before"), (3) partial knowledge ("I have a vague or general understanding of the word"), and (4) complete knowledge "I am comfortable enough with the word's meaning that I can use the word in my own speaking and writing, in many different ways") (Dale, 1965; Chall, 1983; Stahl, 1999). This continuum highlights the difference between receptive ("words I can understand when I see them in print") and expressive ("words I use in my own speech and writing") vocabulary, with an individual's receptive vocabulary exceeding his or her expressive vocabulary. Think about the number of words that a person understands when hearing them spoken or read them written in context, contrasted with the number of words he or she actually uses in conversation and writing. For those words that one uses confidently, while expressing and explore ideas, deep knowledge is possessed.

The overall goal of a comprehensive vocabulary program is to expand both receptive and expressive vocabularies, and to continually move words from the receptive level to the expressive level. An additional goal is to provide many opportunities for children to acquire "deep" knowledge of words, the ability to understand and use words flexibly and appropriately in many different contexts. Miller and Gildea (1987) refer to two stages of word learning. In the first stage, a new word is identified and assigned to a broad semantic category. In the second stage, which takes more time, distinctions are made within a semantic category. Deep knowledge, which is characterized by an understanding far beyond a single definition, occurs in this second phase of word learning.

Deep word knowledge is based on multiple, varied, and rich experiences with a word and its underlying concept. As learners obtain increasingly deep knowledge about a word, their conceptual framework for that word grows and changes to reflect their understanding of the ways in which the word (concept) is related to other words (concepts). As a teacher once expressed, "I always thought I knew what my parents meant when they told me they loved me, but it wasn't until I had children of my own that I really understood what they meant by the word 'love,' in that context." This is the kind of deep knowledge that leads to increases in reading comprehension. This, of course, has implications for instruction.

How Are Words Learned?

How difficult it is to learn the meaning of a word depends on at least three things: (1) characteristics of the word learner, (2) characteristics of the word itself, and (3) level of word learning desired. Though words vary in their inherent difficulty, all word learning requires a metacognitive approach in which students (1) attend to the word and recognize it as unknown, (2) desire to know the word and actively engage in the learning process, and (3) integrate both definitional information and contextual information, as well as new information and known information. For example, to gain an understanding of the word *exasperate,* a student would need to know what the word means (to make somebody very angry or frustrated, often by repeating an annoying behavior), how the word is typically used or in what context it typically comes up (children often exasperate adults, especially their parents), and how it relates to what she or he already knows (e.g., older siblings may often feel exasperated by their younger siblings). Scott (2005) refers to this as developing a schema for the unknown word.

The difficulty of the word-learning task also differs based on the conceptual complexity of the word(s) to be learned. One relatively simple type of word learning is learning a new word for a concept that is already known. For the child with a younger sibling, the earlier example of *exasperate* might be this type of word. Word learning is considerably more difficult when both the word and its referent are unknown, as is usually the case when students first learn the word *photosynthesis.*

Finally, different tasks require different levels of word knowledge. An important decision for the teacher to make is whether partial or full word knowledge is needed for the student to successfully complete the task at hand, be it comprehending text material, conducting a science experiment, or working a mathematics problem. As was stated earlier, however, it is important that all students, regardless of current achievement in a particular subject area, obtain depth of knowledge on the words that are important to content area concept acquisition as well as those words that enable academic task completion and the development of interpersonal skills and healthy social relationships.

A Framework for Elementary Vocabulary Instruction

When considering everything that is involved in learning the meaning of a word, as well as the sheer volume of words students need to know, it is not surprising that students' vocabularies develop through a variety of channels. They learn words when knowledgeable others such as teachers, parents, and peers explicitly tell them word meanings; they learn words from the

contexts of what they read, hear, see, and experience in their lives through games with peers, Social Studies lessons, casual conversation, school-based reading groups, television, and many other venues; they learn words by strategically figuring them out based on the context, their knowledge of word parts, and their ability to use resources such as the dictionary, glossary, and thesaurus.

Because there are so many ways in which students acquire word knowledge, and because deep knowledge acquisition occurs over time, both teaching and development can be discussed as equally important parts of a multidimensional vocabulary program. The Report of the National Reading Panel (2000) states that vocabulary should be taught both directly and indirectly and that the most effective approaches utilize multiple methods of instruction. In other words, it is important to both teach vocabulary intentionally and explicitly, and to create a learning environment that fosters a great deal of incidental learning. Further, teachers must help students develop strategies for independent word learning and support them in becoming aware of when and how to implement these strategies in self-selected situations.

Considering that both intentional explicit instruction and scaffolded incidental learning take place in a sound vocabulary program, the remainder of this monograph addresses the teacher's responsibility to do the following:

- Teach specific vocabulary through explicit instruction and use of new words.
- Teach independent strategies that students can use to unlock the meanings of words through instruction in strategy content (e.g., affixes, context, and references) and processes.
- Differentiate instruction based on the needs of English language learners, emergent readers, and the opportunities afforded by technology.
- Develop general vocabulary by structuring an environment that builds word awareness through play, the availability of good books to encourage wide reading, and teacher modeling of word interest.

Teaching Specific Vocabulary

Teachers are often asked to make a list of word study that happened during one day in their classroom. A typical response from a fourth-grade teacher was as follows:

- Teach the suggested words prior to the reading selection from the basal.
- Brainstorm synonyms for the word *said* as part of a mini-lesson in writing.
- List word families as part of spelling instruction.
- Teach the meaning of *quadrant* for word problems in math.
- Have the Mexican-American and Korean-American students in her class teach the rest of the students the Spanish and Korean words for *plains, rivers, clouds, mountains, rain* as part of a Social Studies on the Great Plains.
- Develop a semantic web for the Great Plains, including words learned so far in the unit.
- Talk about *honesty* in relation to one student having "borrowed" a marker from another student without permission.
- Mention the meanings of some difficult words in the teacher read aloud at the end of the day.

For each of these teaching events, the nature of the learning task was somewhat different. In some cases, students were learning unfamiliar words (the Spanish and Korean words) for familiar concepts (e.g., *plains, rivers.*), while in others they were learning entirely new concepts (e.g., *quadrant).* In addition, it might be expected that students would remember some words and use them almost immediately (e.g., synonyms for *said),* while students might recognize other words (e.g., the basal words) in a story but not choose to use them in their own writing. In addition to the wide array of word learning goals teachers bring to each school day, students bring a wide array of learning styles, and cultural and linguistic experiences. This section presents a variety of approaches that can be used flexibly according to instructional goals and students' needs.

Which Words Should Be Taught?

The first challenge in teaching specific word meanings directly lies in deciding which words to teach! Several frameworks for this selection process exist (Beck, McKeown, & Kucan, 2002; Graves, 2000.) In addition, the following questions may be useful in helping the instructor make this selection: How important is the word to the reading selection or theme of study? How useful is the word outside of the selection or theme? Is this a word that students might learn independently, perhaps through context? Is this a word that will heighten students' enthusiasm for word learning? In general, it has been found that four types of words are good candidates for explicit instruction (Blachowicz & Fisher, 2005): comprehension words, useful words, academic words, and generative words.

Table 1 lists an example of each word type from the following sentence that might be found in a fiction or nonfiction piece involving the Civil War:

> "In contrast to the wounded soldier who was sent home, the homesick Rebel soldier was sent to be reunited with his regiment."

Table 1. Four Types of Words to Teach Explicitly

Word Type	Explanation	Example
Comprehension Word	Essential to understanding the selection and/or critical to a unit of study	Rebel
Useful Word	Not critical to a particular domain, but likely to be encountered in other contexts	Homesick
Academic Word or Phrase	Causes much trouble for students lacking school experience	In contrast to
Generative Word	Provides a portal to further word learning or strategy instruction (e.g., includes a common prefix)	Reunited

All of these types of words are candidates for instruction provided they are not words students already know and they are not explicitly explained by the context. Many teachers use Knowledge Ratings as part of their Before Reading routine to help them decide on the words they do not need to teach because they are well established in their students' vocabularies. This simple process invites students to select one of the following ratings for each word to be taught: Can Define/Use, Heard It, or Don't Know (Blachowicz & Fisher, 2005). Similarly, teachers always check on important words explained in context as part of their After Reading routine to make sure that students were able to infer their meanings. However, no matter how carefully words are selected, it will always be necessary to differentiate instruction for the students in the classroom and the nature of the word-learning task.

Teaching New Words Directly: The STAR Model

In the authors' work with teachers, the STAR model of explicit vocabulary instruction is often suggested (Blachowicz, 2005). STAR stands for the following:

- Select
- Teach
- Activate/Analyze/Apply
- Revisit

For good instruction, the teacher's first task is to *Select* the best words to receive instructional attention. One way to select comprehension words, those words that are essential to the understanding of a selection, is to use story or text structure to analyze the selection (Blachowicz & Lee, 1991). After drawing a story or text map, select the four to six words without which the

selection cannot be retold or summarized. When these words are chosen, look for other words that have a likelihood of being encountered some other time in reading but that might not be central to this selection. (See Table 1 for examples of comprehension and useful words.)

Teach is the second part of the STAR model and it is helpful to think of the teaching to be done before, during, and after reading. Before reading, it is important to make accessible any concepts that are essential to understanding what is to be read and that are not well explained by context. A teacher might choose to explain *rebel* by giving a few sentences containing contextual information, asking students to be active in generating some aspects of a definition and asking them to use the word while giving feedback, and finishing with a summary or elaborative definition. Stahl has suggested that definitional, contextual and usage information should all be shared when explicitly teaching words (Stahl, 1999). He gives examples of presenting a word in context and discussing its possible meaning, asking for a definition or providing one when none is forthcoming and then asking students to use the words in a personal way. There are many excellent resources of teaching ideas to help teachers find other engaging ways to do so (Blachowicz & Fisher, 2005).

Active Analysis and Application, the third step of the model, refers to work done by the students with the new word. During reading, it is useful to "assign" each new word to a student, a pair, or a team. Their role is to find that word when it is used, mark it with an adhesive note or paper clip, and be ready to read how the author used it in context, analyze its meaning and present a definition to the class (using references if necessary) and, finally, use it in a personal context.

In the last step in the model, *Revisit*, the critical words are used in discussion for comprehension. Because they have been chosen as essential to understanding the text, they will come up naturally in discussion and teacher questioning, writing after reading, and other tasks, ensuring that they are heard, read, written, and used. These and the "good to know" words can then be (1) connected to what students already know (creating synonym sets, for example: a group of related synonyms); (2) demonstrated through acting, pantomime and in art; (3) used to answer decision questions such as "Would a homesick girl like to travel or stay home? Why or why not?" (For more on this, see Beck, McKeown & Kucan, 2002); (4) used in new contexts, and (5) practiced for usage with usage stems (e.g., "Someone who is homesick would…"). In addition, students may revisit new words through review, games, writing, and in many other ways. It is useful to have students keep personal vocabulary notebooks for recording new words, as well as related writing, illustrations, graphic organizers, and semantic maps.

Teaching to Build New Conceptual and Relational Networks

In the STAR model, text structure is used to select comprehension words to teach directly. In addition, it is beneficial to provide direct instruction for words that are semantically related. By focusing on the semantic relatedness of words, teachers help children to build new conceptual and relational networks. This section examines three specific ways in which words are semantically related—synonymy, antonymy, and morphology (using units of meaning within words).

Synonyms

It is known that synonyms are especially useful in helping define adjectives and adverbs, such as big and tall or badly and poorly. However, as can be seen from these examples, all synonyms have a slightly different meaning than the target word. While a big tree is usually a tall tree, people would not normally think of a big mushroom as being tall. If words did not differ slightly in meaning, why would there be a need for two words? Yet, understanding these fine shades of meaning can be problematic for students. Two instructional techniques can help—synonym webs and synonym feature analysis.

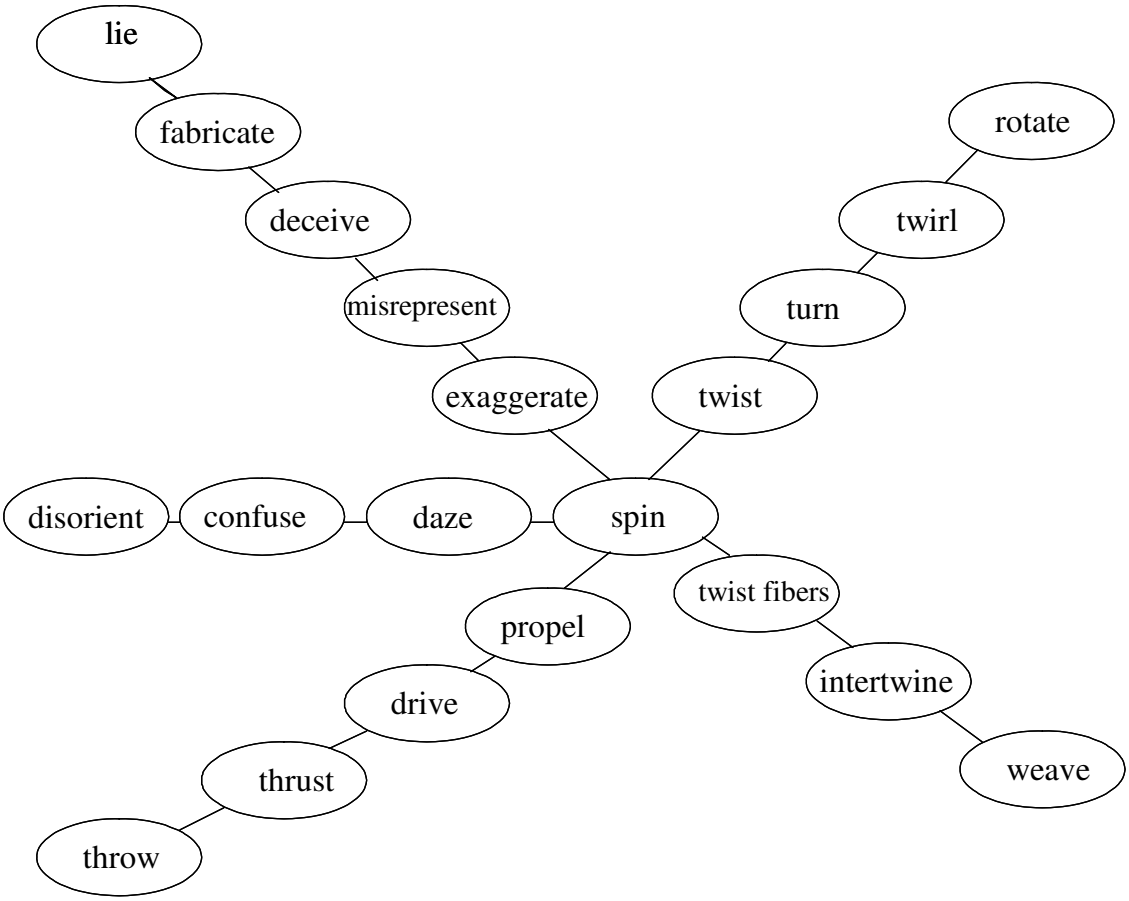
Synonym Webs

A synonym web can be thought of as a particular type of semantic map. Where a semantic map includes all types of related concepts, a synonym web refines this examination to relationships that are only synonymic. Synonym webs are particularly useful with words that have multiple meanings (Paul & O'Rourke, 1988).

Figure 1 shows a synonym web for the word *spinning*. To complete such a web:

- Students brainstorm various synonyms and use a thesaurus, when appropriate, to identify others.
- The teacher then works with the students to determine which words "go together." This requires that the students categorize the words in some way and share their understandings of how the words are related.
- The words are connected on a web to show their relationships
- Students create personal webs for their vocabulary notebooks or on the computer using a program such as Inspiration.

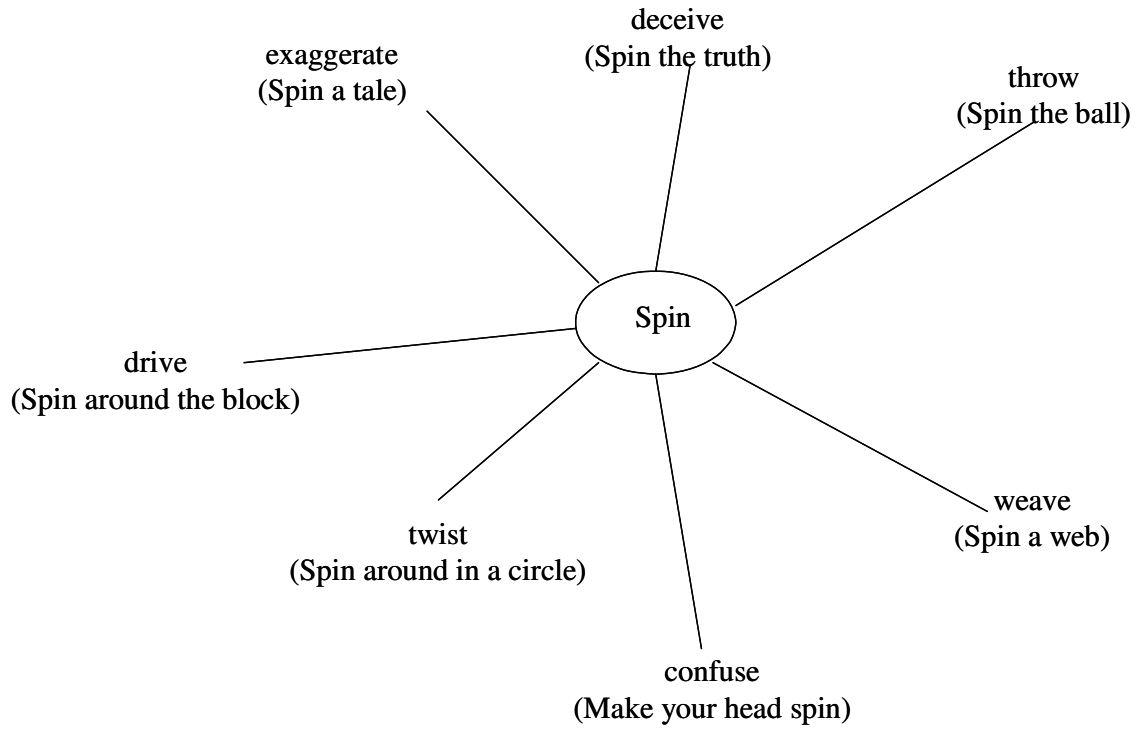
Figure 1. Synonym Web for *Spin*



While this activity makes clear the synonymic connections, it does not distinguish between the denotations and connotations of words (see the following sections). However, students can talk about this as they construct the web.

An alternative synonym web can be developed with usage attached to each synonym (see Figure 2). The advantage of this web is that it reminds students of appropriate uses of the word. The disadvantage is that it does not show the immediate connections between the synonyms. As with many webbing activities, the discussion that goes along with the webbing may have the strongest impact on students' learning. The usage web may be more helpful, therefore, for less advanced students who need the usage to remind them of class or group discussions about appropriate contexts for using the word.

Figure 2. Usage Web for *Spin*



Synonym Feature Analysis

Since even synonyms have slightly different meanings, it is important for students to learn the difference between the denotations and the connotations of words. The *denotation* of a word is its general or literal meaning. For example, while *clothing* and *raiment* may have the same denotation, the connotation is very different. Thus, *clothing* is "what people wear," but the word has connotations that would normally include the mundane or utilitarian, such as outdoor clothing. The *connotation* of a word is what may be suggested by or associated with the use of the word. The connotation for *raiment* is something splendid, such as clothing worn by princes and princesses on formal occasions, even though the denotation is still what people wear. Students often use words inappropriately when they understand the general meaning of a word, but not its connotation. Therefore, a student might write, "He put on his raiment to go out in the rain." Synonym feature analysis is a technique that helps students distinguish between the denotation and the connotation of words.

Baldwin, Ford, and Readence (1981) suggest a method of using feature analysis that utilizes a thesaurus. They suggest that, before developing the feature analysis, teachers draw students' attention to connotative differences between synonyms by presenting words in a sentence frame. The teacher writes a sentence frame for a word (for example, *gathered*), and the students use a thesaurus to substitute possible synonyms in the frame. Examples include the following:

- The friends *gathered* in front of the ice cream stand.
- The friends *collected* in front of the ice cream stand.
- The friends *harvested* in front of the ice cream stand.

- The friends *accumulated* in front of the ice cream stand.
- The friends *assembled* in front of the ice cream stand.
- The friends *congregated* in front of the ice cream stand.

The teacher and the students then discuss the differences they notice between the meanings of the sentences, and they decide which sentences are acceptable and which are not. Sometimes sentences result that students find amusing, as in the third sentence above. Once students understand the denotative meaning of the word, the teacher and students together can create a semantic feature matrix (see Blachowicz & Fisher, 2005, for numerous examples). If the teacher then provides an *appropriate* sentence context for each synonym, attention can be drawn to distinctive features. For example, the teacher might provide the sentence, "Congress *assembles* in Washington after each election." The students can note that Congress does not *accumulate* in Washington because people do not *accumulate.* In addition, when Congress *assembles,* it is a more formal *gathering* than when people *congregate.*

As students complete the matrix, they can add distinguishing features that help them remember when to use one synonym or another. There may be differences of opinion as to the distinguishing characteristics, but this allows for good discussion where students have to justify their thinking. Finally, it may be appropriate to "explore the matrix" (Baldwin, Ford, & Readence, 1981). The teacher can ask questions that explore the use of each synonym. For example, "If you wanted to describe how people *gathered* for a wedding, which would be the best word? If you were *gathering* signatures for a petition, which would be the best word to describe what you were doing?" Baldwin, Ford, and Readence maintain that this system of presenting words in context, determining distinguishing features, and then reinforcing them in new contexts is a more effective and naturalistic way of instructing students in connotations than traditional methods which tend to present words in isolation.

Teaching connotative meanings is extremely difficult. Even effective users of the English language may have difficulty verbalizing why they use one synonym rather than another in certain contexts. For learners with special needs, particularly English language learners, exercises that make connotative differences between words as clear as possible can help develop confidence in language use.

Antonyms

Although many words do not have antonyms (for example, *tree*), the use of polarity in defining words sets clear parameters in meaning. If it is known that something is an opposite, then it is also understood along which dimensions, or by which features, the two words differ. Thus, knowing *big* is the antonym of *small,* a person knows that size is the characteristic in which they are opposites. If one knows that *gather* is the antonym of *disperse,* he or she knows that the dimension on which they differ is aggregation.

Powell (1986) argues that the use of antonyms can be one of the most powerful tools in vocabulary instruction. He notes that semanticists identify three main types of word opposition: contradictories (complementaries), contraries, and reciprocal (converse) terms. Contradictories

are mutually exclusive (e.g., *single/married; part/whole*). Contraries allow for gradations (e.g., *big/small; transparent/opaque*). In reciprocal terms, one word reverses or undoes the meaning of the other (e.g., *buy/sell; gather/disperse*). However, for instructional purposes, Powell (1986) suggests drawing a distinction between polar antonyms and scalar antonyms.

Polar antonyms are categorical and allow no intermediate terms (e.g., *husband/wife; buy/sell*). In other words, the assertion of one denies the possibility of the other. Both contradictories and reciprocals would fall into this category. Scalar terms, in contrast, allow gradations between extremes (e.g., *gigantic, big, large, small, tiny*). One of the instructional techniques that are possible with scalar terms is a semantic gradient. In this technique, students arrange words on a gradient from one end of the scale to the other, such as:

Hot————————————Cold

Placing tepid and cool on this line would show their relationships to other terms on the scale.

Powell (1986) suggests an alphabetic-generative activity that requires students to use their vocabulary knowledge and a dictionary, thesaurus, or synonym/antonym dictionary. The steps of the process are as follows:

1. The teacher selects words beginning with the same letter.
2. The teacher prepares a two-column table with antonyms of the target words listed in the first column.
3. Students use the second column to fill in antonyms for each target word, without using references, for a period of five minutes.
4. Students then consult references to complete the table.
5. The teacher engages students in a discussion and explanation of the results.
6. Tables are retained in student vocabulary notebooks for future reference.

For example, a teacher might select *fail, forbid, forget, fraction,* and *front* as target words. She or he then presents the antonyms to the students, without the target words—in this example *succeed, allow, remember, whole,* and *back*. The students have to guess the target words, knowing that they all begin with the letter *f*. For younger students, the activity can be done with the whole class or in groups. For older students, the teacher can use a word list where she or he wants students to learn the meanings of the words she gives them, rather than the words beginning with the same letter. Students enjoy puzzles such as this and can easily learn to construct them for each other using a synonym/antonym dictionary or a thesaurus.

Using Imagery: The Keyword Method

It is important to recognize that, although vocabulary learning has to be verbal in nature, it is useful to engage other modalities to reinforce and supplement learning. One of the strongest techniques for linking word meanings and images is the keyword method, which has a long history of effectiveness for teaching the definitions of specific words (Pressley, Levin, &

Delaney, 1983). In addition, this approach has received much attention in the literature for ESL instruction and developmental education (Mastropieri, 1988; McCarville, 1993).

In the keyword method, imagery is used to connect words with their definitions. The method is a mnemonic device that uses both auditory and visual cues to enhance the learning of information about word meanings. One recommended procedure for teaching the method to students is using the steps of recoding, relating, and retrieving (Mastropieri, 1988), as described below.

Recoding. Recoding involves selecting part of the target word that looks like, or sounds like, a word with which the student is familiar. For example, for the word *apex,* a student might select the word *ape.* For the word *corpuscle,* a student might select *corpse.* In other words, students recode the original word into a word that they can easily picture.

Relating. The next step for students is relating the recoded word to the definition of the target word using imagery. For example, since the definition of *apex* is a highest point, a student might relate the recoded word *ape* to the definition by imagining an ape at a very high point, such as King Kong on the Empire State Building. The definition of *corpuscle* is a blood cell, so a student might imagine a corpse traveling around the arteries of a body reaching out with "dead" arms to pick up oxygen or attacking disease-carrying germs in the form of monsters.

Retrieving. The last step is retrieving, or recalling, the meaning of the target word. When a student sees the word, the first step is to think of the keyword for that word (*ape* or *corpse*). Next, the picture or image related to that word has to be recalled—the ape on a high place, or the corpse in the bloodstream. Finally, the image must be linked to the definition.

Teaching the keyword method begins with modeling the process using familiar words. Mastropieri (1988) includes an account of teaching morphemes to middle-school students with learning disabilities, who then applied the meanings to figuring out the dinosaur terms *ornithopoda, theropoda, paleopoda, brontosaurus,* and *pterosaurus.* Because the keyword method uses a mnemonic device, it does not result in an extended understanding of a word's meaning. However, it does provide a beginning from which students can develop a more elaborated understanding through subsequent exposures to the word.

Teaching Independent Strategies

As was stated earlier, it is impossible to directly teach the meaning of each and every word teachers wish students to learn. Therefore, it is important to allocate time in the teacher's program of vocabulary development to the teaching of strategies for independent word learning. There are three strategies that students can use to figure out word meanings on their own: morphological analysis, contextual analysis, and references. For each, students need to be taught both *content* and *process* elements with the goal being that students can decide when to use a particular strategy and can monitor the degree to which the strategy is useful for a particular word.

Using Clues within the Word: Morphological Analysis

Morphology, also known as structural analysis, refers to the study of word parts, such as the Greek roots *tele-* and *graph-* in *telegraph.* Structural analysis draws students' attention to the morphemes that compose a word, and from an analysis of the meanings of the individual morphemes, students are helped to understand the meaning of the whole word. A morpheme is the smallest unit of meaning in a language. The following words have two morphemes each: *cats* (*cat* and the plural *s)* and *uncut* (*un* plus *cut*). Some words, such as *immoveable,* have several morphemes. There is a general distinction between free morphemes, which can stand alone (for example, *cut*), and bound morphemes, which need to be attached to another morpheme (for example, *-ing* in *cutting,* or *un-* in *uncut*). Free morphemes are commonly called root words and can bind together to form compound words, such as *airplane.* Bound morphemes are affixes—prefixes and suffixes—attached to root words. This section describes instruction that relates to compound words, incidental morphemic analysis, affixes, and root words.

Compound Words

Students can have strange ideas about how compound words get their meanings. Gleason (1969, reported in Lapp & Flood, 1986) found that one small boy thought that an *airplane* was so called because it was a *plain* thing that went in the *air.* Another child believed it was the quickness with which it was consumed before school that made the meal *breakfast.* What both of these children understood, however, was that they could try to work out a word's meaning from its parts. A good place to begin instruction about structural analysis, therefore, is to have students generate as many compound words as they can or to provide a list for them. Once the list is generated, ask students to divide them into the following categories:

- Words where the meaning is a combination of the two parts (e.g., *sidewalk, birthday*).
- Words where the meaning is related to, but not completely represented by, the meaning of the two morphemes (e.g., *cowboy, shipyard*).

Notice that there may be some words where idiomatic or figurative use has changed the meaning (for example, *moonstruck*), but these are uncommon. Students can then discuss how words in the second category may have developed different meanings. Students may also draw pictures to show a possible meaning as compared to the real meaning. This activity can introduce the concept of how word meanings may change over time and can prepare students for the idea that spellings, as well as meanings, change (see Templeton, 1983, and below).

Incidental Morphemic Analysis

Manzo and Manzo (1990) argue that morphemic analysis is best taught incidentally. They recommend watching for words in reading assignments that may be unfamiliar to students but that have familiar word parts. As these words are encountered, they suggest the following procedure:

1. Present the word with helpful morphemic elements underlined. For example, *seis mo graph.*
2. Ask students to use the underlined words to determine the meaning if they can and to explain their reasoning. If they correctly predict the word meaning, write it under the word and skip steps 3 and 4.
3. Give extra "level-one clues" to the students by writing easier words using the same morphemes written underneath. Ask for predicted meanings.
4. Give extra "level-two clues," which are the morpheme meanings, and ask for predictions until they determine the correct meaning.

It can be seen that although this is incidental instruction, the method includes using familiar words to help students make analogies with the new word.

For some students, it may be appropriate to teach affixes more formally. This instruction usually starts in Grades 1 and 2 with inflectional endings and segues to prefixes and suffixes in subsequent grades.

Affixes

Knowledge of the meanings of common affixes may also help students generate the meanings of new words that they encounter. Fortunately, words with common affixes (such as *return* and *unhappy*) are a part of most children's speaking vocabularies. This means that instruction can begin from what students know and proceed to the unknown.

Graves and Hammond (1980) argue that there are three reasons for teaching prefixes: first, that there are relatively few prefixes, and many are used in a large number of words; second, that most prefixes have relatively constant meanings that are easily definable; and third, that prefixes tend to have consistent spellings. Harris and Sipay (1990) report the most commonly used prefixes, noting that according to some calculations four prefixes (*un-, re-, in-,* and *dis-*) account for about half of the common prefixed words in English, and that 20 prefixes account for nearly all prefixed words.

For teaching prefixes, Graves and Hammond (1980) used the following context and definition procedure that transferred to new words that seventh-grade students had not previously encountered during instruction:

- Present the prefix in isolation and also attached for four words (e.g., *con-, construct, converge, conference, connect)*

- Define the prefix. For example, *con-* means put together.
- Use the whole words in sentences.
  - Builders construct houses.
  - The train and the bus converged on the intersection.
  - The conference on dieting attracted 2,000 people.
  - He connected the TV and DVD player with a cable.
- Define the words.
  - To construct means to put or fit together.
  - To converge means to come together at a point.
  - A conference is a meeting where people come together.
  - To connect things is to join together.
- After completing and discussing the above steps, give students an opportunity to find other words exemplifying the prefix.
- Have students add examples to vocabulary notebook.

The study revealed that this method of instruction was more effective than spending the same amount of time teaching the students just the words, without separating the prefix.

Irwin and Baker (1989) recommend teaching one prefix at a time and constructing original words with the students. They suggest the following:

1. Explain the prefix, for example, *mono-*.
2. Have students construct a word family list such as *monotony, monocycle, monocle,* and *monologue*.
3. Develop original words and definitions with the students (for example, "one-headed" would be *monoheaded*).
4. Have students create their own new words and illustrate them. Create an *Our Own Words* dictionary.

Irwin and Baker emphasize that this is an activity to demonstrate how prefixes work and the knowledge gained should be applied to meaningful reading tasks.

Root Words

Breen (1960) analyzed one list of words commonly used by elementary school children and found that only 82 Latin roots and 6 Greek roots occur 10 or more times in children's vocabulary. Templeton (1983) suggests that instruction should begin with the Greek roots first, since they are easier to locate within words, although typically instruction begins with Latin roots. For example, it is easier to work with *tele-* as in *telephone* and *telegraph* than it is with the Latin *regere,* which takes the forms *reg* (as in *regular*), *rect* (as in *direct*), and *rul* (as in *ruler*).

Templeton (1983) suggests that, after the most common Greek roots, the Latin roots that have the most stable form and meanings should be the focus of root word instruction—namely *spect* (to look), *press* (to press), *port* (to carry), *form* (to shape), *pose* (to put or place), *tract* (draw or pull), *spir* (to breathe), and *dict* (to say or speak). A good procedure is to work by analogy in a manner similar to that outlined for affixes. The teacher could begin with a word the students know (such as *porter*) and develop with the students a list of words that have the same root (*export, transport, teleport,* for example). The methodology is similar for all word families, whether teaching affixes or root words.

The advantage of teaching words in morphological families is that students learn new words by analogy with familiar words, which is what teachers want them to do when they come across an unfamiliar word. However, the research on the advantage of teaching root words is sparse, and there seems to be no agreement about the grade levels at which particular morphemes are best taught.

Using Clues Around the Word: Contextual Analysis

Despite the fact that most words are learned from context (Anderson & Nagy, 1992), contextual analysis is not an easy strategy to master. Like any other word-learning strategy, it is best taught over the entire spectrum of the elementary school years, moving from the familiar to the unfamiliar, and increasing in complexity over time. While several studies have provided intensive instruction in contextual analysis with mixed results (Jenkins, Stein & Wysocki, 1984), recent instructional studies suggest that successful context-use instruction involves: good planning, explicit instruction, practice and feedback, scaffolding that leads to more student responsibility, and a metacognitive focus (Baumann, Edwards, Font, Tereshinski, Kame'enui, & Olejnik, 2002; Blachowicz & Fisher, 2005; Buikema & Graves, 1993; Kuhn & Stahl, 1998).

It is believed that the following content is important for students to learn regarding contextual analysis, or the use of context cues (sometime called clues), as an independent word- learning strategy. The following points were modified from those that were initially reported by Graves, Watts-Taffe, & Graves (1999):

- Sometimes a word is clearly defined in its context but most often, the context provides only hints or clues as to the word's meaning.
- Context clues include words, phrases, and sentences that tell something about an unknown word.
- Clues can occur before the unknown word, after the unknown word, or both and, often, there is more than one clue to the word's meaning.
- The most useful clues are usually within the same sentence as the unknown word, but helpful clues can appear in other sentences or even in other paragraphs. Illustrations can also provide clues.
- Contexts vary in the degree to which they are helpful. Some contexts provide no clues to the meaning of the unknown word and some even provide misleading clues. Therefore,

the last step in using contextual analysis is to ask, "Does this meaning make sense to me in the context of what I'm reading?"

Sharing this information with students, along with examples from texts they encounter across subject areas, is the first step in teaching them about contextual analysis. The next step is to teach them the process for using this information. A simple procedure used by Watts and Truscott (1996), among others, includes the following steps:

- Identify the unknown word.
- Look within the sentence to locate possible clues.
- If necessary, look in the sentence just before and the one just after the sentence in which the unknown word appears.
- If a student thinks there are enough clues to take a guess at the word's meaning, he or she should do so. Then, check to see whether the guess makes sense in the sentence.
- If a student is "clueless," so to speak, then consult another resource, such as the dictionary or a peer, for the word's meaning.

It is often helpful to remind students that the larger context of their reading (i.e., what genre of literature they are reading or whether they are reading a content area textbook) can also provide general clues. When teaching students a procedure for using context clues, it is important that teachers model their own use of the strategy, provide students with time to practice in teams or in pairs with teacher support and feedback (guided practice), provide time for independent practice, and frequently remind students of when and where they can apply the strategy, as they work toward complete independence and self-monitoring. These principles are based on Winograd & Hare's (1988) direct explanation approach to teaching reading strategies.

Using References: The Dictionary

Every teacher who has watched a student struggle in looking up a word knows that using a dictionary can be a complex and difficult task. Stories of dictionary use often take on a "children say the dandiest things" aura: the student whose only meaning of *sharp* is about good looks feels vindicated by finding *acute as* one meaning for sharp in the dictionary ("*that sure is acute boy in my class"*). Another, noting that *erode* is defined as *eats out*, produces a sentence *"Since my mom went back to work my family erodes a lot."* (Miller & Gildea, 1987). Aside from providing humorous anecdotes for the teacher's room, dictionaries and dictionary use are coming under closer scrutiny by those involved in instruction. Students do not automatically understand how dictionaries work or how they can most effectively take information from them.

For morphology instruction, contextual analysis, and work with dictionaries, it is wise to remember to work from the known to the unknown. As students engage in learning any one of these processes, it is important for them to understand the underlying rationale. This is best achieved through exploration of the "how-to" with familiar words and phrases. Once they have mastered the process with easy words, they can practice with more and more difficult words until the process becomes automatic.

Differentiating Instruction

Vocabulary Development for English Language Learners

Limited knowledge of English vocabulary may affect the school performance of English language learners in at least four ways: the development and maintenance of social relationships with other students, participation in academic learning routines, comprehension as a part of reading instruction, and comprehension as a part of content area instruction. Each of these areas offers not only challenges, but also opportunities, for vocabulary learning.

Those who study language acquisition often distinguish between social language proficiency and academic language proficiency, noting that social language is sometimes more easily acquired (Cummins, 1994). One approach to teaching both social language and the language associated with classroom routines for learning is to make these routines explicit and predictable, using the same language to explain what students are to do each time they do it. Over time, help support the students in using these words as they interact with other students during the completion of various tasks. In this way, they are not only able to follow classroom procedures, but they take ownership of the academic language used to describe these procedures (Fassler, 2003). In addition to providing rich explanation to elaborate and contextualize word meanings, use nonverbal cues such as facial expressions, gestures, illustrations, and other visuals to support word learning (Watts-Taffe & Truscott, 2000).

Recent research indicates that ELL students require instruction in both basic vocabulary words and more sophisticated words. Basic words in the realm of academic language might include *book, page, paper,* and *word.* Sophisticated words that a teacher might use as part of his or her instruction might include *summary, evaluate,* and *literature discussion.* Although it may be tempting to keep vocabulary instruction for ELL students at the basic level, ELL students, like all others in the class, need and will benefit from rich instruction in sophisticated words (August, 2005; Collins, 2005). Rich instruction for ELL students includes the same components relevant to native language speakers, definitional, contextual, and usage information, with the addition of further elaboration. And like native speakers, ELL students need opportunities to actively engage with new words through acting out, talking with others, or answering engagement questions such as: Can a tiger be *dangerous?* As with all students, concrete words are more easily learned than are abstract words, with an ELL student's prior knowledge and culture causing some words to be abstract that are not so for native English speakers born in the United States. Thematic approaches, in which the development of conceptual networks is a part of the instruction, are useful. In addition, figurative language and idiomatic expressions are difficult for ELL students and should be taught explicitly.

Finally, it is important to distinguish between ELL students' expressive vocabularies and the range of words they understand when received in context. Their receptive vocabularies and corresponding thoughts will exceed what they are able to express, especially if they enter the classroom with large vocabularies in their native languages.

Vocabulary Development for Emergent Readers

Some teachers are amazed when they hear that storybook reading with young children is not always a positive experience. They associate the activity with undivided adult attention and often plenty of cuddles! However, deTemple and Snow (2003) draw the contrast between talk around shared storybook reading that is cognitively challenging and talk that is not. There has been substantial research on the nature and effects of storybook reading in both home and school settings (Neuman & Dickinson, 2001). Some of the findings include:

- Children can learn the meaning of unknown words through incidental exposure during storybook reading.
- Children learn more words when books are read multiple times.
- Children do not benefit from being *talked at* or *read to*, but from being *talked with* and *read with*.
- Children learn more words when books are read in small groups.
- In a school setting, the effect of reading storybooks on vocabulary is relatively small for children under 4 years old, while relatively large for children over 5.
- With traditional storybook readings, the vocabulary differences between children continue to grow over time.

If "traditional" storybook reading in schools does not develop vocabulary well, is there some better way to do it?

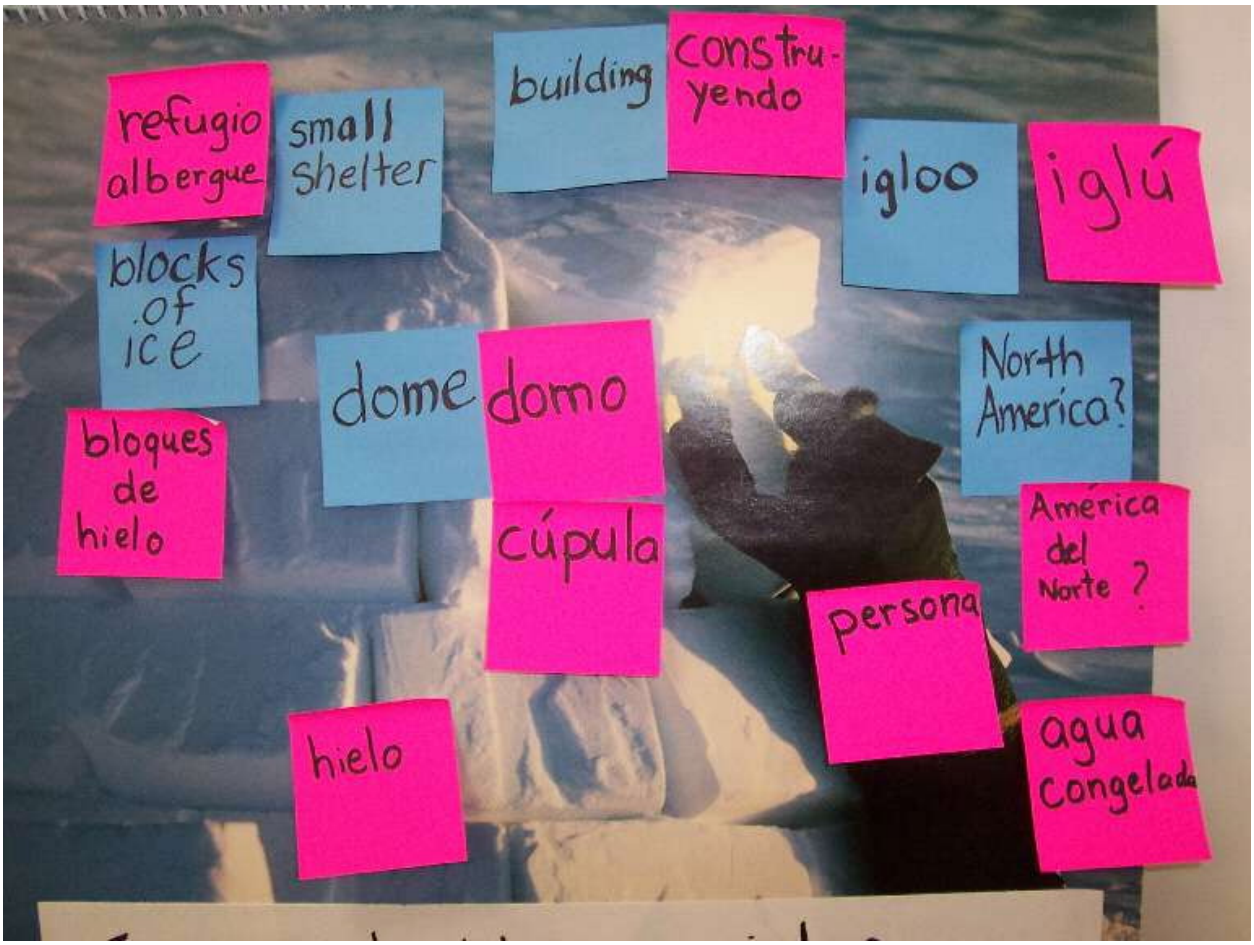
Most researchers agree on several principles related to teaching vocabulary with read-aloud storybook reading in schools. First, there should be some direct teaching of vocabulary during storybook reading in school settings. Second, adult/child discussion should be interactive and discussion should focus on cognitively challenging ways to interact with the text rather than literal, one word or yes/no questions. The students need to be able to contribute to the discussion in a substantial way and smaller groups of five or six allow for this type of interaction. Third, the rereading of texts in which vocabulary is repeated can maximize learning. Lastly, the nature of the learning that occurs is different with familiar and unfamiliar books. In an initial reading the children may focus on the plot or storyline. In subsequent readings, the reasons for characters' actions and especially unfamiliar vocabulary may become the focus of their interest.

Vocabulary Visits

Related to issues of genre, much new research on young students and their learning suggests that the primary curriculum is ripe for content learning and that there now exist many more resources for content reading for young children (Duke, Bennett-Armistead, & Roberts, 2003). One strategy of using content area trade books to build vocabulary is "Vocabulary Visits" (Blachowicz & Obrochta, 2005). "Vocabulary Visits" are virtual field trips in which vivid visuals and books are used to develop concepts and vocabulary for primary grade students.

Teachers assemble thematic text sets that because of their nature, have a repeated conceptually related vocabulary (e.g., *weather: storms, hurricane, thunder, lightning, damp)*. They locate or create an engaging visual blown up to chart size to stimulate discussion of what can be seen, heard, smelled, tasted, and felt—the senses that students use on an actual field trip. For example, "What do you see?" (lightning, flash, storm); "What do you hear?" (crash, boom, thunder), "What can you feel?" (wet, rain, damp, soggy). These can be constructed as dual language charts to scaffold the learning of English language learners in the group (See Figure 3).

Figure 3. Dual Language Vocabulary Chart



The process involves students in brainstorming to activate what they already know, and then active listening to content books. The teacher works with students to make a chart where conceptually related words are displayed. These labeled charts are used for "active listening" where students are called upon to signal "thumbs up" when they hear some of the news words. They also add to the chart as they are read the other books in the text set. Students also take part in semantic sorting and writing activities. "Vocabulary Visits" are motivating, and develop concepts and both oral and written vocabulary for young students.

Using Technology for Differentiation

In his excellent review of the potential of electronic texts for transforming early reading instruction, McKenna (1998) presents a research foundation for the use of electronic texts for literacy learning. As noted above, a primary way in which young readers are exposed to new vocabulary is within the context of supported read-aloud storybook reading. The language of even very simple storybooks is more advanced that the language used in talk (Cunningham & Stanovich, 1998). When adults and more expert readers share a storybook, they make the ideas and vocabulary of the text accessible through interactive discussion (Snow, 1991) that includes asking questions, adding or clarifying information, and urging the listener to respond in active meaningful ways (Whitehurst, Arnold, et al, 1994; Whitehurst, et al, 1999). As noted earlier, increased activity in storybook reading has been found to be linked to increased vocabulary learning in young learners (Senechal, Thomas & Monker, 1995; Hargrave & Senechal, 2000).

While the studies cited by McKenna in his review (1998) were primarily focused on the development of word recognition, there are several studies that have focused on electronic texts and meaning vocabulary (Blachowicz, Beyersdorfer, & Fisher, in press) Many electronic books for school use have animation cues, which are intended to provide a rich context for word learning. Higgins and Hess (1999) found that these cues were more effective for learning when adult facilitation of the type noted above was provided. Two questions that naturally evolve from this and other research that has been somewhat equivocal on the use of electronic texts without mediation (Matthew, 1997; Moore & Smith, 1996) are, "What types of mediation are most effective in facilitating vocabulary learning from electronic texts? Can this type of mediation be provided within the text itself?"

One study addressing the latter question used videodisc technology where students could access mediation in the form of definitions and illustrative sentences. Results indicated that students knew when to ask for help but were not able to judge whether definitions or illustrative sentences would be most helpful in expanding their word knowledge (Gildea, Miller, & Wurtenberg, 1990). Three other studies look at the issue of facilitation from another angle. Koren (1999), working with second language learners, found that facilitation which called for active inferencing on the part of the learner was one key to word learning from electronic text. Students learned more from tasks that required inferencing than they did from glossed texts. Pawling's (1999) case studies of high school students found that metacognitive reflection was an important part of learning and that the students welcomed working on and responding to electronic text where "no one was there to make fun of your answers."

Lastly, a study by Xin and Reith (2001) found that using video to anchor text by presenting a prior knowledge video that highlighted new vocabulary words which were then mediated by instructional sentence comprehension and cloze tasks, resulted in greater learning for all, but most of all for learning disabled students. In all, electronic texts that provide or couple their oral and written presentations with facilitation that calls on the students to actively engage with the words is both motivating and productive.

Developing Word Awareness and Ownership

Vocabulary learning is long lasting when students use words in meaningful ways. Different types of instruction, coupled with different amounts of repetition, results in different types and depths of learning. Since the goal is to have students gain control of vocabulary to use for their own expression, students need many experiences that allow them to encounter and use words in meaningful ways.

Coupled with fostering student ownership of words is the development of students' word consciousness. Word consciousness refers to an awareness and interest in words and their meanings and involves both metacognition about words and motivation for learning (Anderson & Nagy, 1992; Graves & Watts-Taffe, 2002). There are many ways to foster word consciousness in the classroom. One teacher encourages word consciousness by having each student select a word that he or she has encountered to teach to the rest of the class. When teaching the word, the student needs to provide definitional and contextual information, as well as a visual to go with the word. One student presented the word *flair,* saying that she had been told by her teacher that she has a real flair for writing. She told her peers that flair means a natural talent or ability and on a word card she created, which was posted in the classroom, she drew a picture of her writing notebook.

Word Play

Teachers all know the value of play in learning. Word play—games, riddles, jokes and puzzles—is not only highly motivating, it has a strong research base (Blachowicz & Fisher, 2004):

- Word play is motivating and an important component of the word-rich classroom.
- Word play calls on students to reflect metacognitively on words, word parts, and context.
- Word play requires students to be active learners and capitalizes on possibilities for the social construction of meaning.
- Word play develops domains of word meaning and relatedness as it engages students in practice and rehearsal of words.

In one highly controlled study of vocabulary learning in the middle grades (Beck, Perfetti, & McKeown, 1982), a curious phenomenon surfaced. Students in one classroom, out of all the classrooms involved in the research project, learned more incidental vocabulary— words no one was attempting to teach. When trying to locate the source of this learning, the researchers were unable to pinpoint any instruction or materials that could account for the difference. Then, one researcher noted a poster of interesting words in the classroom. When the teacher was asked about it, she noted that it was the "word wall"—a place where students could write new words they encountered in reading, in conversation, on TV, or in their daily experiences. If they could write the word, talk about where they heard or saw it, and use it, they received points in a class contest. Very little expense, instructional time, or effort was involved, but the students became "tuned in" to learning new words in a way that positively affected their learning. They actively watched and listened for new words and shared them with their peers. They were motivated word learners.

In word play, category games, such as Scattergories, are the "play" versions of techniques this monograph discussed earlier for developing semantic relationships. Picture games such as Pictionary

that use art to display meaning, acting out games such as Charades, and synonym games such as Password and Taboo all emphasize semantic categories and relatedness and provide for practice and rehearsal. In addition to the obvious active learning involved, word play provides a vehicle for use and rehearsal, the creation of a personal record including visualization in graphics and drawing (Pressley & Woloshyn, 1995) and kinesthetic representations in drama (Duffelmeyer, 1980). Discussion, sharing, and use of the words are necessary components of active involvement, as is feedback and scaffolding on the part of the teacher. These are good examples of why word play develops word learners.

Wide Reading

Though oral language development and talk are important avenues for vocabulary development, books and other written materials are also critical, as much as vocabulary development during school years is a result of an exposure to books and concepts (Nagy & Herman, 1987). Not only do books provide a motivating source of vicarious experience, the vocabulary level of primary books is of a higher level than the language used in conversation by the educated parents of those "lucky" children (Cunningham & Stanovich, 1998). This may seem surprising, but consider what most early morning parent and child interactions are like. "Time to get up." "Got your lunch." "Let's go…" Compare that with these lines from Kevin Henkes' lovely book *Chrysanthemum* (1991) in which he describes meeting a new teacher:

> That morning the students were introduced to Mrs. Twinkle, the music teacher. Her voice was like something out of a dream….The students were speechless. They thought that Mrs. Twinkle was an indescribable wonder. They went out of their way to make a nice impression. (Unpaged.)

Books provide the grist for great vocabulary learning and wide reading is the process that mills them into personal vocabularies. Cunningham and Stanovich (1998) estimate that fifth-grade students who engage in just 10 minutes of independent reading a day read 622,000 more words per year than a student who does no independent reading. Increase that reading to 20 minutes a day and the discrepancy is almost 2 million words more read per year. Wide reading is a must.

Vocabulary as a Schoolwide Focus

Attention to vocabulary should be a school and curriculum goal with all teachers calling on students to use new vocabulary in writing and discussion, where feedback is available. Creating personal wordbooks and dictionaries with sections for each content area is a good first step to word ownership. In addition, all-school vocabulary projects can also emphasize vocabulary across the curriculum. In one school district, teachers worked together to create a list of essential subject area vocabulary that was sortable by grade and by content area (Cobb, 2003). Academic words, like "compare and contrast" and "classify" were included when teachers discovered these were contained in the directions of their instructional materials but not explicitly taught to students. Content area words like "circle" were included and carefully placed before the introduction of "diameter." This process not only sensitized all teachers, including content subject teachers, to the vocabulary they needed to address, it also stimulated a sense of "we're all in this together" that made vocabulary an all-school and all-district goal.

In another school, each class, from kindergarten to eighth grade, took turns with WOW—Words of the Week. In preparation for their week, the class chose 10 interesting words to share with the rest of the school. A team of two to three students were responsible for knowing their word and for posting it somewhere in the school where it was relevant. For example, the word "energetic" was chosen by a group of third graders and they posted their word in the school gym on a word card.

Their names were posted on the word card and any student in the school could ask the students what the meaning was and take a guess as to why it was posted where it was. On Friday, as part of the morning announcements, each team announced their word, told its meaning and why they posted it where they did. Again, this made vocabulary a focus of the school and engaged the whole school in a common enterprise.

A Final Word

This monograph provided an overall comprehensive perspective on vocabulary instruction in the elementary grades. Then it gave examples of several ways to build a teaching repertoire and for differentiating vocabulary instruction when a teacher wants instruction to be explicit. Later, this monograph suggested ideas for building the environment for incidental word learning by flooding the classroom with words and building word awareness.

Vocabulary instruction occurs in classrooms every day at a variety of levels and for a variety of purposes. After all, words are the currency of education. In addition, teachers are increasingly faced with a diverse group of learners in terms of their current word knowledge, linguistic background, learning styles and literacy abilities. It is up to teachers to make word learning pervasive, enjoyable, meaningful, and effective. It is hoped that the research-based, comprehensive, and integrated model that has been proposed will make this challenge achievable in the classroom and school!

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