

Building Vocabulary in Remedial Settings

Focus on Word Relatedness

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Significant research suggests that one difference between achieving and non-achieving students is their level of vocabulary development (Elley, 1988; Hart & Risley, 1995). While general principles of word learning, such as the need to connect new learning to prior knowledge and the importance of developing an active learner, hold true for all students, some students may require particular attention because of special needs. For struggling readers with limited vocabularies it may be appropriate to make vocabulary the focus of instruction simply to develop their knowledge of word meanings. We are not maintaining that the meanings of all the words that students need to know in school can be taught but we do believe that students can benefit from being taught vocabulary without any other instructional purpose. Further, playing with language and being interested in words per se have benefits in many areas of the curriculum and beyond school (Nagy & Scott, 2001; Blachowicz & Fisher, 2003). For these students, careful and systematic planning and instruction are the keys to successful vocabulary learning. In this article, we introduce some strategies and techniques that we have found, in our clinical work, are especially appropriate for older struggling readers, although they can also be used with the general student population as well.

The Importance of Building Categories

As we learn vocabulary, the process of categorization is a way of ordering and organizing concepts. We suggest that part of vocabulary learning is making associations. For learners with special needs, we feel that this process needs to be strengthened through careful use of categorization and classification (O'Rourke, 1974). Such an approach should be systematic in terms of selecting the words to be learned and in grouping words for instruction according to some criteria.

Under such a system, for example, younger students would not learn the words *bed*, *potato*, *table*, *chair*, *carrot*, *cabbage*, *couch*, and *beans* on the same day, but would focus on vegetables for one day and furniture on another, building knowledge about a category along with the new words. Older students would not learn *telephone*, *polygamy*, *polymorphous*, *telegraph*, *polytechnic*, *telephoto*, *telescope*, and *polytheism* at the same time, but would learn about the roots *poly-* and *tele-* and the words that use them as a root on different occasions. By categorizing words using some criterion, students are able to more easily see and learn the connections between them. Some experts advocate the use of lists of core words that students in each grade level or those belonging to a particular

population should learn, but we believe that these lists can be misused, and teachers are better able to select words for their particular students that will meet specific needs. So, while making these connections between words is important for *all* students, making them explicitly and systematically can be particularly important for those who have special needs.

For learners with special needs, we offer the following guidelines for instruction:

1. Vocabulary should be addressed as a separate subject for instruction, as well as in relation to other areas of the curriculum.
2. Careful attention should be paid to the selection of appropriate words for systematic instruction and reinforcement.
3. Meanings should be made explicit and comprehensible through demonstration, discussion, usage, and further discussion.
4. Multiple modalities and avenues of expression should be used in instruction and learning.
5. Attention should be paid to creating categories, such as semantic, thematic, or morphemic, for example, and not teaching isolated words.

In the following sections we share strategies that we have found successful in our remedial work at The Reading Center of National-Louis University (www2.nl.edu/reading_center). The strategies we describe are ones focusing on word relatedness:

- building word fluency
- developing categories of relatedness for synonyms, antonyms and analogies
- building morphological categories
- using imagery to categorize

Building Word Fluency

Readence and Searfoss (1980) outline a technique that encourages students to use categorization to learn vocabulary. The task initially seems very simple—to name as many words as possible in one minute. In the beginning, the task can be demonstrated with one student before the class works in pairs. The teacher needs a watch or a clock with a second hand and pencil and paper. With the chosen student, the following directions can be given:

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Abbreviation

ESL: English as a Second Language

I want to see how many words you can name in one minute. Any words will do, like *story*, *book*, or *friend*. When I say “ready” you begin and say the words as rapidly as you can and I will count them. Using sentences or counting numbers is not allowed. You must use separate words. Go as rapidly as you can. (Readence & Searfoss, 1980, p.43)

The teacher can tally the words as the student says them. If students hesitate for 10 seconds or more, she can clue them to look around the room or to think about an activity the class did recently. Sophie, a fourth-grade student, managed the list in column 1 in Table 1 when she tried this the first time. Once the students have had a chance to work in pairs to see how many words they can name, the teacher asks for them to time her. The teacher models naming words in *categories*, which is much easier and faster than choosing random words. When Sophie had practiced thinking in categories, she was able to generate the longer list in column 2 in Table 1.

TABLE 1. Sophie’s Word Lists generated in 1 minute	
Before Categorization	Thinking in Categories
tree fish computer picture	Computer Stuff CD rom printer mouse
bee eye you see	Birds albatross robin crow
touch feel flour table chair bear flowers window	Tools wrench knife hammer screwdriver nails nuts bolts
cars books door	Buildings tar roof bricks signs chair radiator playground
	Transportation car bus truck

Students can practice this every day and graph their increased ability to name words. They might use these rules for scoring:

1. No repetitions, no number words, no sentences;
2. One point for each word; and
3. One point for each category of four words or more.

Once students are familiar with the activity, the teacher can ask them to name words on a particular topic or theme—animals, science, or families, for example. Word fluency could also be used with a unit of study to reinforce vocabulary that has been taught in another way. Students in groups can also take turns to say a word on a particular topic that has been studied, for example, the Revolutionary War. If they do not say a word in 10 seconds, they lose a “life” out of three “lives.” The student who remains alive longest is the winner.

List-Group-Label

Readence and Searfoss (1980) also outline a technique called List-Group-Label, which they attribute to Hilda Taba (see also McKenna, 2004). The name of the technique summarizes its procedure, which asks students to list words on a particular topic, group them, and then specify the criterion they have used for grouping with a label. For example, the teacher could ask students to think of words to do with *danger*. The list might include:

- | | | | |
|--------|--------|--------|---------|
| enemy | alarm | fire | red |
| shout | snake | scare | cry |
| siren | fright | shoot | wolf |
| poison | warn | escape | run |
| bug | safe | peril | shelter |
| hazard | die | | |

Students might select *enemy*, *snake*, *wolf*, *poison*, and *bug* as being things that are dangerous. Others might select *shout*, *cry*, *shoot*, *run*, *alarm*, and *scare* as things that they do if there is danger. The teacher can collect different categories of words (allowing words to be in more than one category) and display them. If certain words do not fit in any category, a miscellaneous category can be created, or students can brainstorm words that might go with them to create a new category. Readence and Searfoss recommend keeping the list to about 25 words, depending on ability and grade level.

These two categorization exercises allow students to practice and develop their vocabularies without having to be concerned with definitions or supplying meanings. The categorizing in itself supplies sufficient structure for students to begin to learn meanings with which they are unfamiliar or to refine their understanding of meanings partially known and develops automaticity as well.

Developing Conceptual Vocabulary Through Word Relatedness

This section addresses teaching word meanings through focusing on the semantic relatedness of words. The idea seems almost tautological—when you relate a word to a meaning, then you must be talking about semantic relationships. What we mean, however, is that a teacher chooses a group of words for instruction based on its semantic relatedness rather than on some other criterion (such as theme or orthographic similarity). Three specific criteria will be examined—synonymy, antonymy, and morphology (using units of meaning within words). In addition, we look at analogies as a way of demonstrating the semantic relation between particular words.

Synonyms

We know 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, we 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? Understanding these shades of meaning is something that can be problematic for students. Two instructional techniques that are extensions of ideas we presented earlier can help—synonym webs and synonym feature analysis.

Synonym Webs. The idea of a synonym web is similar to a semantic map, but it refines the idea of a semantic web, which includes *all* types of related concepts, to an examination of relationships that are *only* synonymic. This type of web is

particularly useful with words that have multiple meanings (Paul & O'Rourke, 1988).

Figure 1 shows a synonym web for the word *loose*. To complete such a web, students

- Brainstorm various synonyms and use a thesaurus 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 computer using a program such as Inspiration.

Although this activity makes clear the synonymic connections, it does not distinguish between the denotations and connotations of words (see the following sections). Students can, however, 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. We have tried a combination of the two types of web, but found that it becomes cumbersome and confusing to many students.

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Figure 1. Synonym web for *loose*.

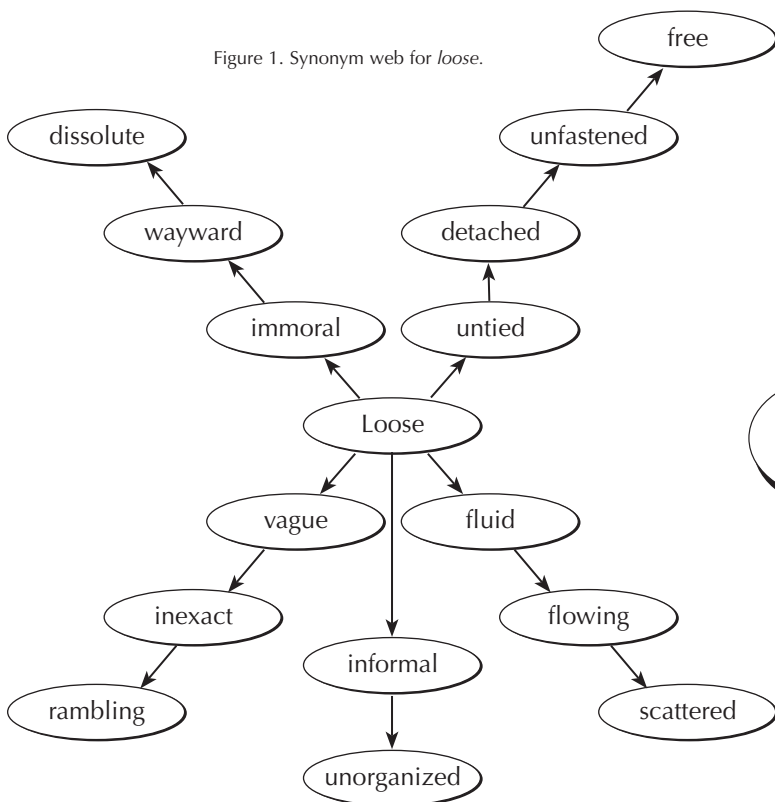
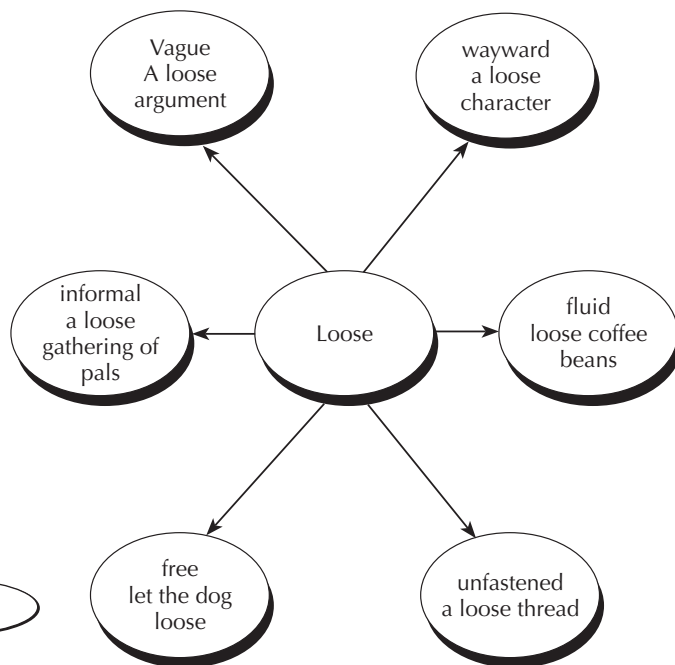


Figure 2. Synonym web for *loose* with usage.



Word	Done with people	Done to things	Formal	Deliberate	Work	etc.
gather	+	+	?	+	?	
collect	+	+	?	+	?	
harvest	-	+	?	+	+	
accumulate	-	+	-	-	-	
assemble	+	+	+	+	?	
congregate	+	-	-	+	?	

Figure 3. Feature analysis for *gather* and its 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.

Connotations: 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. So a student might write, "He put on his raiment to go out in the rain."

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. For example,

- 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.

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*. Also 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 ESL students, 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 you know that something is an opposite, then you understand along which dimensions, or by which features,

the two words differ. Thus, knowing *big* is the antonym of *small*, you know that size is the characteristic in which they are opposites. If you know that *gather* is the antonym of *disperse*, you know 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 (*single/married*; *part/whole*). Contraries allow for gradations (*big/small*; *transparent/opaque*). In reciprocal terms, one word reverses or undoes the meaning of the other (*buy/sell*; *gather/disperse*). However, for instructional purposes, Powell suggests drawing a distinction between polar antonyms and scalar antonyms. Polar antonyms are categorical and allow no intermediate terms (*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 (*gigantic, big, large, small, tiny*). One of the instructional techniques possible with scalar terms is a semantic gradient. In this technique, students arrange words on a gradient from one scale to the other, such as hot _____ cold. Placing tepid and cool on this line would show their relationship to other term. We give an example of a related process in our section on analogies below.

Powell (1986) suggests an alphabetic-generative activity that requires students to use their vocabulary knowledge and a dictionary, thesaurus, or synonym/antonym dictionary. The teacher

- Selects words beginning with the same letter
- Prepares a two-column table with antonyms of the target words listed in the first column
- Students first work on the table without references
- After 5 minutes they may use references to complete it
- Discussion and explanation follows
- Tables are retained in their vocabulary notebooks for reference.

An example might be if a teacher selects *fail, forbid, forget, fraction, and front* as target words. She 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 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.

Analogies

Hofler (1981) suggested a way of using scalar terms to teach analogies to students. He used a word line, which is similar to a semantic gradient. The teacher can demonstrate how to develop an antonym analogy, a synonym analogy, and

a degree analogy in relation to the words on a particular line. Then students can use a thesaurus or dictionary to construct their own word lines and analogies and try them out on each other. With many scalar terms, there may be some discussion as to which term goes where on the word line, for example whether *murky* or *gloomy* is closer to *dark* on the word line in the figure. This discussion, as with those about synonyms in the activities described earlier, can help students clarify their understandings of terms.

Making Connections Through Morphology

As part of vocabulary instruction, structural analysis of words can draw 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. For example, *cats* has two morphemes: "*cat*" and the plural marker "*s*."

A word may have several morphemes, but 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, whereas bound morphemes are affixes (prefixes and suffixes). Two free morphemes can bind together to form compound words, such as *airplane*. There is no agreement about the best way to structure lessons for teaching morphemic analysis, so in this section, we describe instruction that relates to compound words, incidental morphemic analysis, affixes, root words, and teaching spelling and morphemic analysis together.

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 you 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. Once you have the list, ask students to divide them into the following categories:

1. Words where the meaning is a combination of the two parts (for example, *sidewalk, birthday*).
2. Words where the meaning is related to, but not completely represented by, the meaning of the two morphemes (for example, *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 how word meanings may change over time and can prepare students for the idea that spellings, as well as meanings, change (see Templeton, 1983).

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Incidental Morphemic Analysis. Manzo and Manzo (1990) suggest 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. The procedure suggested is:

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 go on to 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.

You can see 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.

Affixes. Knowledge of the meanings of common affixes may help students generate the meanings of new words that they encounter. Fortunately, words with common affixes (such as *return*) are a part of most children’s speaking vocabulary. 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. White et al. (1989) 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 (see figure 4).

For teaching prefixes, a context and definition procedure might be useful (Graves and Hammond, 1980):

- 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 2000 people.
 - He connected the TV and DVD 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, students find other words exemplifying the prefix.
- Students add examples to vocabulary notebook.

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

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

Prefixes	Suffixes
1. un- (not)	-s, -es
2. re- (again)	-ed
3. in-, im-, il-, ir- (not)	-ing
4. dis-	-ly
5. en-, em-	-er, -or (agent)
6. non-	-ion, -tion, -ation, -ition
7. in-, im- (in)	-able, -ible
8. over-	-al, -ial
9. mis-	-y
10. sub-	-ness
11. pre-	-ity, -ty
12. inter-	-ment
13. fore-	-ic
14. de-	-ous, -eous, -ious
15. trans-	-en
16. super-	-er (comparative)
17. semi-	-ive, -ative, -tive
18. anti-	-ful
19. mid-	-less
20. under-	-est

Figure 4. 20 Prefixes and 20 Suffixes. From White, Sowell, & Yanagihara (1989)

TABLE 2. A page from an "Affixionary"

The prefix "con-" means "together"	
construct	Builders construct houses.
converge	The train and the bus converged at the intersection.
conference	The conference attracted 2000 people.
connect	He connected the TV to the DVD with a cable.

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

A similar dictionary-type activity has been suggested by Lindsay (1984). Students construct their own "affixionaries" in which affixes are listed alphabetically, with one page for each affix. The entry on each page might have the definition at the top, followed by words using the affix and sentences that have examples of the words. Table 2 shows what this might look like for the *con-* words used above. Students may choose to list the prefixes and the suffixes separately to avoid confusion.

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*). A list of the most useful root words appears in Table 3 (see page 36).

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 families is that students learn new words by analogy with familiar words, which is what you 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.

Spelling and Morphemic Analysis. Templeton (1983) points out how morphemic analysis helps with spelling. His sophisticated recommendations for instruction begin, for example, with showing how silent consonants make sense when studied in relation to morphemes (such as *sign/signal*, and *condemn/condemnation*). His five-stage sequence of instruction includes:

1. Silent/sounded consonants in related words,
2. Absorbed or assimilated prefixes (for example, the ad- in attached),
3. Alternation patterns in related words that involve a change in vowel sound (for example, sane/ sanity, and admire/admiration),
4. Roots and combining forms, and
5. Alternation patterns in related words that involve a change in spelling (for example, assume/ assumption).

Many spelling series for the older grades combine instruction in morphemic analysis with vocabulary instruction. Since spelling is not our focus here, we will leave the reader to consult the original article or other references if interested (see Bear, Templeton, Invernizzi, & Johnston, 2000).

Making Connections with Imagery

It is important to recognize that, although vocabulary learning has to be verbal in nature, other modalities can be used to help reinforce and supplement learning. One of the strongest techniques for linking word meanings and images is the keyword method, which has received much attention in the literature for ESL instruction and developmental education (Mastropieri, 1988; McCarville, 1993).

A Final Word

In this article we have shared ideas for building students' funds of relational vocabulary. We have suggested that focusing on semantic categories (words related to transportation), relational categories (words that are similar, opposites, gradations of meaning, words that share morphological units) and words connected by visualization are all ways to extend word knowledge of struggling readers. Though these words may be selected apart from the everyday demands of the curriculum, they are not taught in isolation but in connection to one another and to larger categories of meanings and of the ways words "work."

We, and others, have written extensively in other pieces on the importance of play in learning of new words (Blachowicz & Fisher, 2001; 2004). The constraints of this article limit our ability to extend that discussion here but we would like to emphasize that relational vocabulary instruction lends itself to word play, puzzles, games, puns, riddles and jokes. In our clinic, we include word play in each clinical session. The instructional and motivational aspects of play cannot be underestimated in the success of any word learning program.

References

- Baldwin, R. S., Ford, J. C., & Readece, J. E. (1981). Teaching word connotations: An alternative strategy. *Reading World*, 21(2), 103–108.
- Bear, D. R., Invernizzi, M., Templeton, S., & Johnston, F. (2000). *Words their way*. Columbus, OH: Merrill/Prentice Hall.
- Blachowicz, C., & Fisher, P. (2001). *Teaching vocabulary in all classrooms*. 2nd ed. Columbus, OH: Merrill/Prentice Hall.
- Blachowicz, C. L. Z., & Fisher, P. (2003). Vocabulary instruction. In B. J. Guzzetti (Ed.), *Literacy in America: An encyclopedia*. Santa Barbara, CA: ABC-CLIO.

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TABLE 3. Common affixes and their meanings

PREFIXES	Meaning	Examples
ab	away from	absent
act, ap, at	to, toward, near	advance, appeal, attract
bi	two	bicycle
com, con, col, co	with, together	combine, conference, collide, cooperate
de	from, reverse	defect, decompose
dis	not, opposite from/of	disappear, disconnect
em, en	in, into	embed, enroll
ex	out, former, beyond	explode, ex-wife, exceed
in, im	in, into, not	inside, immoral, incorrect
mono	one	monorail
ob, op	against	obstruct, oppose
post	after	postdate
re	back, again	return, replay
sub	under	submarine, subsoil
super	over, greater than normal	supervise, superstar
trans	across	transcontinental
tri	three	triangle
un	non, opposite of	unequal, unpopular
SUFFIXES	Meaning	Examples
al	referring to	optical
ble	likely to be	lovable, divisible
ence, ance, ancy	act or state of	difference, acceptance, truancy
er, or	someone who does	teacher, actor
ful	full of, tending to	powerful, forgetful
ian	someone who is an expert at	musician
ic, ical	like, referring to	symbolic, logical
ist	someone who does/believes	pianist, abolitionist
less	without	painless
ly	in the manner of	safely
ment	result of, act of	punishment
ness	state of being	happiness
ous, ious	like, full of	nervous, tedious
tion, sion	act of	permission, action
ty, ity	quality of	tasty, rapidity
ward	in the direction of	backward

- Blachowicz, C. L. Z., & Fisher, P. (2004). Putting the “fun” back in fundamental. In E. Kame'enui & J. Baumann, *Reading vocabulary: Research to practice*. New York, NY: Guilford Press.
- Breen, L. C. (1960). Vocabulary development by teaching prefixes, suffixes and root derivatives. *Reading Teacher*, 14, 93–97.
- Elley, W. B. (1988). Vocabulary acquisition from listening to stories. *Reading Research Quarterly*, 24, 174–87.
- Graves, M., & Hammond, H. K. (1980). A validated procedure for teaching prefixes and its effect on students ability to assign meanings to novel words. In M. Kamil & A. Moe (Eds.), *Perspectives on reading research and instruction* (pp.184–188). Washington, DC: National Reading Conference.
- Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore, MD: Paul H. Brookes Publishing Co.
- Hofler, D. B. (1981). Word lines: An approach to vocabulary development. *The Reading Teacher*, 35, 216–218.
- Irwin, J. W., & Baker, I. (1989). *Promoting active reading comprehension strategies*. Englewood Cliffs, NJ: Prentice Hall.
- Lapp, D., & Flood, J. (1986). *Teaching students to read*. New York, NY: Macmillan.
- Lindsay, T. (1984). The affixionary: Personalizing prefixes and suffixes. *Reading Teacher*, 38, 247–248.
- Manzo, A., & Manzo, U. (1990). *Content area reading: A heuristic approach*. Columbus, OH: Merrill.
- Mastropieri, M. A. (1988). Using the keyboard method. *Teaching Exceptional Children*, 20 (Winter), 4–8.
- McCarville, K. B. (1993). Keyword mnemonic and vocabulary acquisition for developmental college students. *Journal of Developmental Education*, 16(3), 2–4, 6.
- McKenna, M. C. (2004). Teaching vocabulary to struggling older readers. *Perspectives on Language and Literacy*, 30(1), 13–16.
- Nagy, W., & Scott, J. (2001). Vocabulary processes. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr. (Eds.), *Handbook of reading research: Volume III* (pp. 269–283). New York, NY: Longman.
- O'Rourke, J. P. (1974). *Toward a science of vocabulary development*. The Hague, The Netherlands: Mouton.
- Paul, P. V., & O'Rourke, J. P. (1988). Multimeaning words and reading comprehension: Implications for special education students. *Remedial and Special Education*, 9(3), 42–52.
- Powell, W. R. (1986). Teaching vocabulary through opposition. *Journal of Reading*, 29, 617–621.
- Readence, J. E., & Searfoss, L. W. (1980). Teaching strategies for vocabulary development. *English Journal*, 69, 43–46.
- Templeton, S. (1983). Using the spelling /meaning connection to develop word knowledge in older students. *Journal of Reading*, 27, 8–14.
- White, T. G., Sowell, J., & Yanagihara, A. (1989). Teaching elementary students to use word-part clues. *The Reading Teacher*, 42, 302–308.

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