TEACHING NEW WORDS FOR WHICH STUDENTS ALREADY HAVE A CONCEPT

Rebecca J. Palmer
University of Minnesota

(This is the third in the series of articles on the work in teaching vocabulary being done by Professor Michael Graves of the University of Minnesota, Minneapolis, and his graduate students. The fourth article will appear in the fall MEJ.)

This paper, the third in the present series of papers on types of vocabulary to teach, discusses the teaching of words which are in neither students' oral vocabulary nor in their reading vocabulary but for which they have an available concept.[1] Say, for instance, that students come across the word lackadaisical, one which they have neither spoken nor written before. Though they may be able to sound out the word and break it into its various parts correctly, coming up with something like "lak a day zi kal," this alone is not enough to provide the meaning. From sounding out lackadaisical, students are likely to come up with meanings for words that sound like parts of it. Does lackadaisical have to do with a missing daisy? Or a missing day? Is it anything like dazed or a day's cycle? No. The problem with understanding lackadaisical doesn't lie with discovering its sound; the problem is to discover its meaning. However, if students already have concepts similar to the meaning of a new word, establishing a link won't be so difficult a task. In this case, if students understand inactive and unexcited, they are likely to be able to understand lackadaisical quite easily.

[1] A paper by M.F. Graves, MEJ Spring 1978, discusses words which are in students' oral vocabulary but which they cannot read; a paper by R. J. Ryder, MEJ Fall 1978, discusses new meanings for words which are already in the students' reading vocabulary but have more than one meaning.

A closer look at words for which students already have a concept, but for which they lack an appropriate meaning follows in the sections ahead. Among the topics to be discussed are the importance of learning these words, examples of such words, the extent to which these words need to be taught, the importance of these words for various ages and grades, the importance of these words for different ability levels, how to identify words of this sort, and teaching these words.

The Importance of Learning These Words

Is it important for students to understand new words like lackadaisical, illuminate, or scrutinize? Is it worthwhile spending precious class time on these sorts of new words when students already have other words which mean much the same as the new ones? Much evidence exists which shows that a varied vocabulary can pay off. Most important to students is the fact that knowing more words can lead to success in school and on the job. Scores on intelligence tests, college entrance exams, and other standardized tests correlate highly with vocabulary knowledge. Furthermore, a broader vocabulary has been shown to have links to job promotions. According to Thomas and Robinson (1976) in their book on improving reading:

> Did you know that big vocabularies and big paychecks seem to go right along together — and the same goes for small ones? More than any other factor studied, vocabulary appears to be related to money making success.... Foremen had better vocabularies than the men who worked under them. Section managers had better vocabularies than foremen. And so on up the ladder. (pp.14-15)

Perhaps less enticing to students, but equally enticing to teachers, is the fact that bigger vocabularies mean students will comprehend material easier and faster and will generally succeed at reading tasks. Reading is most enjoyable to students if they are successful at it. And trying to read something, even if

they are greatly interested in it, becomes cumbersome if too many unknown words block the message. So, though this may overstate the case, spending time learning words like lackadaisical, illuminate, and scrutinize in the present can help shape one's success in the future.

Examples of Such Words

Examples of words for which students have the concept but do not know are found in magazines, newspapers, and books. There are long ones: antidisestablishmentarianism, mulligatawny, mosstrooper; there are short ones: sans, curt, mulct; there are new ones: robotics, futurist, space shuttle; and there are old ones: exuberant, grandiose, obsolete. And they are all hard initially simply because neither the written word nor its spoken equivalent carries any meaning for students.

Extent to Which These Words Need to be Taught

Luckily, readers are often able to assign sensible meaning to words on their own through the use of context clues, dictionaries, past experiences, or the "ask thy neighbor" approach. Suppose students don't know what illuminated means. But from looking at the context they find:

> The thoughts of Confucius have illuminated the minds of the Chinese people for centuries.

Context here lets students know that the word is a past tense verb or action word describing what effect Confucius' thoughts had on the Chinese people. Students do not do this consciously, of course, but as native speakers they do understand the type of word that "fits" the sentence. Students will probably fit in words like "helped" or "changed" in the place of illuminated.

By using a dictionary the student finds:

illuminated: to give light; enlighten.

From past experience and knowledge students may recall hearing someone talk about Confucius' many wise sayings and this knowledge combined with the definition of the word will provide an adequate meaning.

Or, finally, they may use the "ask thy neighbor" approach,

"Hey, Ralph, what's this word mean?"

"It means lit up, dummy."

Though informal methods of vocabulary instruction like the ones above are often helpful and eliminate the need to teach some words, formal systematic classroom instruction is very often the most effective way of insuring that students assign a correct, meaningful label to an important new word.

Importance of These Words for Various Ages and Grades

Some teaching of words of this sort is probably done at all grades, but teaching the connections between the old concepts and the new words becomes increasingly important as students advance through the grades. Whereas in the primary grades the vocabulary of reading materials were closely controlled, it no longer is for students in the higher grades. And this is rightly so. Until students become fluent in reading, having words in the material be ones which they already know simplifies the beginning reading task; once students decode the word they have the meaning. But expanding vocabulary beyond what one already knows is an important learning goal, as we have already seen. New words for which students lack a meaning but have a similar concept are often the key to understanding a classroom assignment or a world situation. Students in the junior or senior high who come across the words "in tandem" (meaning "together with" or

"along with") will need the meaning to understand the present reading as well as future readings.

Importance of these Words for Different Ability Levels

As the number of new words increases with age, so too do the differences between age-mates. That is, the number of new words used in texts starts increasing dramatically in the middle and secondary grades and so too do the differences in the vocabularies of individual students in these grades. The teaching task begins to be distinctly more complicated. Some readers possess a broader word background than others and hence don't need to be taught certain words. Other readers are under a severe handicap because of their lack of word power and must be taught a good many more words. Unfortunately, this means that not only do better readers know more to begin with, but they can handle more difficult words in a given lesson because of the additional background they have to call upon. For the poorer students it's a Catch-22 situation: There's more for them to learn, and they are less capable of learning it.

Poorer readers, moreover, will be able to handle fewer words and will need more teaching and reinforcement in order to establish strong associations between the new words and their meanings. Poorer readers also need to be taught to make full use of any available contextual and structural clues. Most good readers, of course, already make use of these clues, which together with their wide reading habits has led them to acquire their expansive vocabularies in the first place.

Briefly then, time spent teaching new vocabulary for which students already have a concept is extremely worthwhile for all students but becomes most important as students reach the middle and upper grades. In the higher grades,

the number of such words used in texts increases, and students' individual knowledge of such words becomes very different. Good readers need to be taught fewer words, but can probably be taught much more difficult ones. Poorer readers can handle fewer new words and will need more instruction and reinforcement. But all students will benefit from vocabulary instruction with this sort of words.

How to Identify Words of This Sort

There are a number of possible sources for finding words of this sort to teach. Among them are teachers' intuitions, students' queries, word lists, and the material you will be using. Almost certainly, the vast majority of the words to be taught should be culled from the content you're going to cover, for there are so many of these words that might be taught that if teachers don't restrict themselves to those in the content that is to be covered, the teaching task will be impossible. A brief preview of upcoming reading material will immediately limit your sample of words to teach. But even choosing words from your materials alone leaves too much. Consequently, you will have to use other sources as a way to limit the words to teach. Most likely, the teacher can, from past experience, determine which words will be most important to the subject matter and important to the text. Teachers are also likely to have some ideas of what their students do and do not know and hence can make some choices based on that information. Or the teacher can test students from time to time to discern what they know. Testing should be done occasionally to sharpen teachers' intuitions, since students' knowledge is not stable from one class to another or one year to the next. The teacher can also ask students what they do and do not know, but again,

students should be checked from time to time to be certain that students actually know what they say they know.

Another important factor to consider when choosing words is frequency. Usually, words which are important to the text and the subject matter will be more important to the student if they are more frequent rather than less frequent. The learning of words that appear more frequently in the language is more likely to be reinforced, and thus such words are more likely to be retained and used.

To help teachers determine frequency, the Carroll Word Frequency Book (Carroll, Davies, and Richman, 1971) is useful. In constructing this resource, Carroll and his associates sampled from a total of five million running words in reading materials used in grades three through nine. The final list contains 86,000 words. The Carroll list ranks each of the 86,000 words from most to least frequent and gives the frequency with which the words appear in the written language. For example, the frequency book indicates that the word whooping ranks 10,000th out of 86,000 words and occurs once every 77,000 words on the average. One problem with the Carroll text is that it does not distinguish between different meanings of a word. So though there are different meanings for whooping (as in whooping cough versus whooping crane) the word is listed only once, with no distinction made for meaning.

Another resource useful in selecting words to teach is The Living Word Vocabulary (Dale & O'Rourke, 1976). This text lists 43,000 words for grades 4 through 6, their meanings, and the grade level at which 67 to 84 percent of the students tested knew each word and its accompanying meaning. For the word

whoop or whooping, for instance, there are four meanings, so the word is listed four times as shown below.

Grade	Score	Word or Phrase	Meaning
6	73%	whoop	a loud gasping noise
6	78%	whoop	yell
4	90%	whooping cough	a children's disease
8	73%	whooping crane	a large white & black bird

Thus we can assume that approximately 73% of the students in an average sixth grade would know the meaning of "a loud gasping noise." While the book doesn't indicate the percentage of students in other grades who know the word with that meaning, commonsense suggests that a smaller percentage of the students below sixth grade would know the word and a larger percentage of the students above sixth grade would know it.

Both the Living Word Vocabulary and The Carroll Word Frequency Book can be useful in helping to decide which words to teach. One caution, though. One shouldn't teach an entire list. Instead pick words out of texts, and pick ones important to the text. Then teach them before students read the text. It is simply easier for students to "learn words if they live them" (Thomas and Robinson, 1976).

Teaching These Words

Drill and repetition usually are not enough to insure that students really learn a word before they come across it in their reading. According to Spache and Spache (1973),

> Words are not learned as of a certain date because of a certain number of repetitions. Rather, words are thoroughly understood only as a group of associations is built around each word, associations which include multiple meaning, and visual, auditory, and perhaps kinesthetic imagery. (p. 511)

There may be times when you simply want to supply students with a meaning though.

If a word is a particularly infrequent one, such as poltroon, meaning "a coward," it may not be worth the time it takes to help students thoroughly learn it. Or if there are too many new words in a piece, such as in Hamlet or Macbeth, spending time on all of them is too tedious and boring and probably would result in teaching too many for students to retain anyway. Finally, we sometimes want students to read for enjoyment, and time spent teaching vocabulary may be deflating; all the student needs is a definition (exuberant means "very happy") to be able to go on. And certainly a good deal of the time when reading for enjoyment, the student need not be taught all of the words to understand what is read.

Most of the time, though, we do want to preteach words which we want students to retain. Then they will not only understand the word the first time they see it in context but they will remember it in subsequent sightings. Various theories of memory show the need for the human mind to immediately organize and classify incoming information, to put it into a proper slot so to speak if the new information is to be remembered. (Norman, 1976; Rumelhart & Ortony, 1977; Kintsch, 1977) As an instructional method it is effective to present new words in some sort of organizational group, such as words pertaining to Australia — outback, down under, boomerang, aborigine. More difficult words can be presented in a group with members of an old category students already understand. You can surround the new word neophyte with words which mean something similar — new, young, beginner, and novice.

Presenting the words in a context similar to or the same as one students will encounter when they read is another aid and helps arouse associations.

Also, to test the learning of new words, it helps to test them in context.

In general, there is a three step procedure for preteaching vocabulary for which students lack a meaning but have a concept. First, provide the word in an appropriate context. Next, relate the word to student's past knowledge. And finally get students to invoke some sort of concrete images related to the word. These steps are easy to follow and only require that a few minutes be spent on each word that will be taught. As an example, the words lackadaisical and outback will be taken through all three steps below.

Lackadaisical

Step one. Provide the word in an appropriate context. Suppose that it appears in the following context:

> Dr. Andrews assigned Monica to stuff the envelopes with anti-smoking literature. Unfortunately, Monica had assumed that she would be answering phones and greeting people at the Club's Cancer Society Booth. Not getting the job she wanted made Monica rather lackadaisical about stuffing the envelopes.

This passage provides certain contextual clues which can aid in pinning down meaning. Helping students to spot contextual clues is important, since they can use such clues outside the classroom to assign meaning. The syntax of the context in this passage indicates that lackadaisical is an adjective. Again, this is not to say that students will identify it with the word "adjective," but they will know from its position in the sentence that it denotes an adjectival sort of meaning, a trait of Monica's. From the meaning of the context, students could guess such adjectival synonyms as angry, sloppy, disenchanted, and uncaring and go on reading. But if students are to really retain the word, and if the teacher is to ensure that students have an accurate meaning, the word will have to be taught.

Step Two. Relate the word to students' past knowledge.

Here the teacher can provide the meaning, in this case "unexcited" or "inactive." Students already understand these words and have used them before. They can substitute what they already know in the place of the new word and make sense of the passage.

Step Three. Invoke concrete images about the word.

To make lackadaisical more concrete, the students can think of how they might use the word. Have they ever been lackadaisical? Have they ever wanted to go to a movie with friends, but instead had to mow the lawn or clean up their room? Were they then perhaps lackadaisical about completing the chore? What other situations can students think of where someone might be lackadaisical? The more concrete images that the teacher can arouse in students the more solid the learning will be.

Outback.

Step One. Provide the word in an appropriate context. Assume that outback appears in the following sentence:

> The outback in Australia is very barren and peopled with uncivilized tribesmen.

To teach the word, you could ask students to guess the possible meaning of the underlined word or leave the word out of the sentence and ask them to guess what word is missing. (Likely guesses are words like "desert" or "wilderness.")

Step Two. Relate the word to students' past knowledge.

In this case, the teacher can tell students that the new vocabulary word has to do with Australia and get them to discuss what they know about Australia. As a further measure, the teacher can get students onto a more familiar, but related topic; they could talk about things like the boondocks, the sticks, and the wild

here in the United States.

Step Three. Invoke concrete images about the word.

The most graphic way to imprint the word outback in students' minds is to bring in a film about Australia or have books and pictures available. Use these as supplements to teach the word.

These then are some methods of teaching these words. After being exposed to these methods and encountering the words in their reading several times, students will have cemented the words in their memory.

Conclusion

In summary, words for which students already have a concept but lack a meaning are abundant in the reading material of middle and upper grade students. Since there are too many possible words to teach, teachers need to restrict themselves to those words found in material they will be using and important to the text and the subject matter. In addition, teachers can use their own intuitions, students' questions, and word lists to pare down the number of words to teach. Once the words have been chosen, a few minutes of classroom time needs to be taken for preteaching the words. Each word should be first set in context, then related to students' past experiences, and finally given concrete interpretation.

Words for which students already have a concept but lack a meaning can certainly be learned. But learning the associations between a new word and an old concept will take more than one exposure to the word and will require more than simply giving students the meaning of the word. Of course, this takes time. But the few minutes of classroom time spent on preteaching and reinforcing these

words can lead to a lifetime of knowing and using them. It certainly seems worth the effort.

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