Initiating Assessment of Student Needs in Content Areas

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INITIATING ASSESSMENT OF STUDENT NEEDS IN CONTENT AREAS

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As students move through the elementary grades they encounter more and more reading in the content areas: social studies, science, mathematics, and English. Most teachers are aware of the burden that vocabulary and concept load place upon each student's ability to understand what he/she has read. Although teachers usually group students according to reading ability to facilitate basal reading instruction, there is often little or no effort expended to meet individual or group reading needs in the content areas. One reason for this neglect may be that teachers lack systematic ways of assessing students' mastery of the technical vocabulary in the content areas.

Harris and Jacobson (1972) have compiled lists of words that may be helpful for assessing technical vocabulary at the elementary level. The words represent concepts that ". . . are specific to a particular content area or which have a special meaning in that area in addition to a general meaning" (p. 2). Their lists for each of four content areas are based upon two different series of content area books frequently used in elementary schools. A random sample of twenty words from the lists prepared by Harris and Jacobson is included at the end of this article. You may want to use these lists for assessing student knowledge of the technical vocabulary in these four content areas.

The Harris and Jacobson lists are one technique for assessing student vocabulary needs; however, a more effective method is to prepare your own lists. It is not necessary for students to be able to pronounce each word in material they are reading. However, at each level of each content area, there are some very basic concepts that must be understood by the students. The technical vocabulary representing these basic concepts can become the word lists for assessing student vocabulary needs.

After you have chosen the vocabulary words, type them on an index card. Ask each of your students to pronounce all the words on the list. As the student says each word, observe his/her facial expression and note hesitations, repetitions, uncertainties, regressions, and mispronunciations (including incorrect stress and accent). Also, judge whether or not the pupil is able to move down the list smoothly at a minimum rate of one word every two or three seconds. If the pupil exhibits the behavioral characteristics noted above and/or is unable to say the words at the minimum rate, it is possible that he/she will have trouble in the particular content area being assessed.

The above procedure has been adapted from Aukerman (1972). It has the advantage of being easy to administer in a minimum of time. The

results should be viewed as an initial step in identifying students who are likely to have difficulty with particular content area books. This initial step will make it apparent that you have students who will need your help if they are to profit from the information contained in their content area books. If a student is unable to pronounce a representative sample of the technical words in a particular content area, he/she may find it difficult to learn from such books.

Merely pronouncing words should never be confused with reading (generating meaning), for the ability to pronounce a word successfully may be the result of successful application of phonics rather than a comprehension of the word's meaning. The concepts represented by some content area words may be beyond the student's present knowledge of the world, so you must remain ready to provide the necessary background and/or the appropriate experiences that will enable the student to build meaning for the concept in his/her mind. You may find Smith and Barrett (1974), Schulwitz (1975), and Duffy (1975) helpful in providing strategies and techniques to foster growth and refinement of vocabulary in content areas.

To summarize, it is recommended that you take a few minutes to select a representative sample of the technical vocabulary in a particular content area and ask your students to pronounce the words. Using vocabulary from your own content area books is far superior to using "ready made" word lists. As you determine student needs in content areas and take steps to meet those needs, the results of your labors will be evidenced by the improved attitudes and achievement of your pupils. And the best time to begin your efforts is now. Reflect and act!

Informal Tests of Specialized Vocabulary in Four Content Areas

Social Studies	Science	Mathematics	English
1. battleground	acid	octagon	proofread
2. economic	cytoplasm	denominator	singular
3. lawmaking	offspring	perpendicular	contraction
4. prosper	galaxy	composite	nonfiction
5. confederate	quartz	geometry	alphabetical
6. homeland	botanist	median	bulletin
7. sheik	muggy	chord	hyphen
8. document	eardrum	kilometer	editor
9. fertilize	laser	divisor	overwork
10. cooperate	impurity	rectangular	abbreviation
11. tribesmen	atmospheric	axis	limerick
12. waterway	tadpole	inequality	suffix
13. nationalist	comet	simplify	factual
14. census	piston	quadrilateral	autobiography
15. resin	mercuris	pyramid	respectable

16. capitol	saliva	distributive	interrogative
17. stronghold	chemical	multiplication	preposition
18. panhandle	species	radius	synonym
19. fortification	gravitation	finite	classic
20. cultural	extinct	abacus	define

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