

Reading Horizons

Volume 21, Issue 3

1981

Article 5

APRIL 1981

A Non-Traditional Technique for Testing Vocabulary

Frederick A. Duffelmeyer*

*Iowa State University

Copyright ©1981 by the authors. *Reading Horizons* is produced by The Berkeley Electronic Press (bepress). https://scholarworks.wmich.edu/reading_horizons

A Non-Traditional Technique for Testing Vocabulary

Frederick A. Duffelmeyer

Abstract

The close and very significant relationship between knowledge of vocabulary and reading ability has long been recognized (q.v., Strang 1938, Davis 1944, Smith 1950, Klare 1963, Davis 1972). Perhaps Strang expressed this relationship most succinctly when she wrote: "Vocabulary is like the warp threads running through the entire developmental reading program. It is prerequisite to, as well as result of, effective reading."

A NON-TRADITIONAL TECHNIQUE FOR TESTING VOCABULARY

Frederick A. Duffelmeyer
IOWA STATE UNIVERSITY, AMES, IOWA

The close and very significant relationship between knowledge of vocabulary and reading ability has long been recognized (q.v., Strang 1938, Davis 1944, Smith 1950, Klare 1963, Davis 1972). Perhaps Strang expressed this relationship most succinctly when she wrote: "Vocabulary is like the warp threads running through the entire developmental reading program. It is prerequisite to, as well as result of, effective reading."

Thus, a prime responsibility facing our schools is deliberate guidance in vocabulary growth. However, instruction is only one stage in the overall process. Teaching/learning activities should be followed by accurate evaluation. Therefore, guidance in vocabulary development includes learning whether instruction has resulted in a clear understanding of the words studied.

Perhaps the most efficient way of evaluating whether a student knows the meaning of a set of words is to administer a vocabulary test. In a familiar kind of test the stimulus word is to be matched with the nearest synonym among four or five alternatives. When a student can make the proper match, he/she is credited with understanding the word.

Among the first to point out the shortcomings of this method of testing vocabulary was Cronbach (1943), who noted that the student may know a definition verbally without having an ability to apply it properly. He maintained that instead of requiring the student to match one word with another word, a vocabulary test should determine "...whether each word has meaning for the student in life situations..." (p. 528).

Russell (1954), who maintained that the most critical problem in testing vocabulary is that of unthinking verbalization, voiced a similar opinion

when he stated: "The difficulty caused by manipulating words without much meaning attached cannot be completely overcome in any verbal group testing situation, but it can be met in part by placing words or concepts in as meaningful a situation as possible..." (p. 325)

The views of Cronbach and Russell are reflected in a verbal reasoning test developed by Cook et al (1963), called "Word-in-Context". For each word on a word list that the examinee classifies as "I have never seen this word before and have no idea what it means," the examinee is given a set of three contexts in descending order of difficulty as a basis for inferring a given word's meaning. After reading each context, the examinee renders a verdict on the meaning of the word. The authors remark that this method of testing verbal reasoning "...provides a test situation which is similar to, if not identical with, a frequently met real life situation" (p. 228).

Ideas expressed by Russell, Cronbach, and Cook et al are consistent with another long-recognized relationship--the relationship between experience and word meaning; namely, that meanings arise out of experience. From an instructional standpoint this implies that the meaning of a word is made clear by indicating an experience associated with it. From the aspect of evaluation, the fact implies that if a student clearly has the meaning of a word, he/she should be able to associate it with an experience.

The task called for on the traditional type of vocabulary test, i.e., matching a word with a synonym, does not require the student to associate a word with an experience, and therein lies its greatest shortcoming. What is needed is a type of test that requires the student to select a word for which a given situation or expression of an idea is appropriate. A task of this sort would correspond to what Cronbach (1942) elsewhere termed the "application" level of word knowledge behavior--the student can "recognize that an illustration of the word, as commonly employed, is properly named by that word" (p. 207).

The vocabulary-testing technique which follows would seem to satisfy this stipulation. Briefly, it requires the student to match the description of a situation or the expression of an idea with a word to which the situation or idea alludes. Since this task differs rather significantly from the usual task of matching word with synonym, it may be referred to as a "non-traditional" technique for vocabulary testing.

Suppose you wanted to test a student's knowledge of a set of words that included the word "prefer". A non-traditional vocabulary test item for "prefer" might resemble the following:

For some people a vacation means nothing more than not having to go to work. For other people, a vacation means going hundreds of miles away from home. If I had a choice between the two, I'd rather go somewhere.

- a) notice b) prefer
c) think d) realize

Note that the word "prefer" does not appear in the paragraph. The student's task is to select the word to which the paragraph alludes.

In constructing viable test items of this type, the same guidelines that govern the construction of traditional test items apply (see Seashore and Eckerson, 1940; Cureton, 1963; and Ebel, 1972). In addition, the teacher must be careful to formulate a given paragraph, or "stem", in such a way that it alludes to the key word only. Another important consideration in the formulation of paragraphs is that they depict situations which are within the students' realm of experience.

The fact that a paragraph context needs to be formulated for each word that is to be tested means that more teacher time (say 5-10 minutes more per item) would be involved than would be in constructing traditional test items. Certainly the time factor detracts from this technique's appeal; however, when one considers the potential for minimizing students' display of superficial knowledge, the additional time would seem to be justified.

Additional examples of non-traditional vocabulary test items are shown below:

Jim woke up very early in the morning. It was still dark outside. That afternoon he and his family were going to fly across the ocean in a jet plane. Jim was looking forward to the flight. He wished it were time to go to the airport.

- a) tired b) nervous
c) eager d) thoughtful

When Mary arrived at the party she could hardly believe her eyes. At one end of the room was a long table covered with many kinds of salads, vegetables, meats, and desserts. She was hungry now, but she wouldn't be hungry after the party.

- a) feast b) picnic
c) breakfast d) snack

This method of testing vocabulary comes much closer to Cronbach's and Russell's ideas of what a vocabulary test should accomplish than the traditional type of vocabulary test, because it requires the student to associate the meaning of a word with a life-like situation. As such it demands a firm grasp of the concept underlying a word, and therefore provides the teacher with reliable word knowledge information needed to move students closer to the ultimate goal of using a word in real-life situations.

REFERENCES

- Cook, J., A. Heim and K. Watts. "The Word-in-Context: A New Type of Verbal Reasoning Test" British Journal of Psychology. Vol. 54, No. 3 (Aug. '63) pp. 227-237.
- Cronbach, Lee. "An Analysis of Techniques for Diagnostic Vocabulary Testing" Journal of Educational Research Vol. 36, No. 3 (Nov. '42) pp. 206-217.
- Cronbach, Lee. "Measuring Knowledge of Precise Word Meaning." Journal of Educational Research, Vol.36, No. 7 (Mar. '43) pp. 528-534.
- Cureton, Edward. "Note on Vocabulary Test Construction." Educational and Psychological Measurement, Vol.23, No. 3, (Autumn '63) pp. 461-466.
- Davis, Frederick. "Fundamental Factors of Comprehension in Reading" Psychometrika, Vol. 9, No. 3 (Sept. '44) pp. 185-197.
- Davis, Frederick. "Psychometric Research on Comprehension in Reading" Reading Research Quarterly, Vol. 7, No. 4 (Summer '72) pp. 628-678.
- Ebel, Robert. Essentials of Educational Measurement. Englewood Cliffs, N.J. Prentice-Hall, Inc., 1972.
- Klare, George. The Measurement of Readability. Ames, Iowa: Iowa State University Press, 1963.
- Russell, David. The Dimensions of Children's Meaning Vocabularies. Berkeley: Univ. of Calif. Publication Vol. 11, No. 5 (1954), pp. 315-414.
- Seashore, Robert and Lois Eckerson. "The Measurement of Individual Differences in English Vocabularies" Journal of Educational Psychology V 31, #1 (Jan '40)
- Smith, N.B. "Reading: Concept Development" Education Vol. 70, No. 9 (May '50) pp. 548-558.
- Strang, Ruth. Problems in the Improvement of Reading Lancaster, PA: Science Press Printing Co., 1938.