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# WHAT TEACHERS SHOULD KNOW ABOUT TEST-WISENESS

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(NOTE: In reviewing selected studies from three decades, the 1950's, 1960's, and 1970's, the author assembles support for teachers who would consider test-wiseness in dealing with their reading tests and others.)

There are very few states where testing in the public schools is not on the increase.

Data received from tests is also receiving more attention from a more diverse audience than ever before.

All educators should be concerned with what the research has said on the subject of testing and more specifically, test-wiseness.

Test-wiseness is just one aspect of the topic of testing; however, it is one that classroom teachers can help students with as a planned part of their evaluation process.

The research on test-wiseness is frequently oriented toward the substantive content of standardized tests. The literature reviewed here will deal more specifically with research studies like that presented by Oakland (1971) in which he states the following:

Familiarity with the format and language used in standardized tests and possession of the abilities which are prerequisite to taking standardized tests pertain to a person's test-wiseness. Deficiencies in one or more of the abilities prerequisite to taking a test will attenuate the results, thereby depreciating the test's effectiveness to discriminate validly only those variables it was designed to measure.

Oakland determined that there were thirteen specific skills that could be enhanced by curricular materials. Four

of these are presented here because they have value for classroom teachers. Each of these has to do with format awareness or format familiarization. Oakland lists the following as related to format awareness:

1. Begin with a few items and options per page and gradually increase them in number until the page is similar in appearance to an actual test page.
2. Gradually increase the number of options per frame from two through five.
3. Progress from big pictures and words with a few on a page to small pictures and words with several on a page, again until the final page is similar to an actual test page.
4. Use both dotted lines and heavy black lines to separate the criterions from the options.

While format awareness is only one aspect of the test-wiseness topic, it is one that classroom teachers can easily prepare to deal with in their classroom testing activities. Preparing students for the format characteristics of any test needs to be given special attention.

The investigators interested in test-wiseness instruction generally discuss, at some point in their research, the advantages which experienced examinees have over their inexperienced counterparts. This relationship is described by Vernon (1964) who supplies data revealing that students who are already somewhat sophisticated examinees gain about half as much from practice or coaching as do those who are less familiar with tests. Vernon writes: "Such familiarization probably improves performance partly by reducing anxiety and carelessness, partly by inducing the set of working quickly, taking careful account of instructions and not wasting time on the difficult ones." (p. 216)

An early study by Vernon (1954) provides insights into what some early studies have cited as possible deficiencies when distinguishing between practice approaches and coaching approaches to the improvement of test scores. Coaching is where the subjects are told the right answers. Practice is where the subjects learn only from their own experiences. The early literature on test-wiseness offers a great deal on both approaches. Many of these studies dealt with test repetition. Most used intelligence tests. Some of the investigations were designed to deal with repeated practices

over a few days' time while others used months or even years. Cronbach (1954) is typical of these earlier studies. He summarizes the data and states that practiced, uncoached groups gain about 6 IQ points after taking from four to eight tests without special explanation.

Gains in scores are also found on retesting with parallel forms of the same test (C.F. Peel, 1951 & '52; Muntyan, 1947; Snedden, 1931; Watts et al, 1952) although the effects of practices on parallel tests tend to be smaller than those of repeating the same test. Watts et al, for example, in an experiment involving London children, found that the mean IQ on the eight parallel test was only 6 points higher than on the first. More recently, Kreit (1967) examined the effects of test practice on the acquisition of test-taking skills of third grade pupils. Four different group intelligence tests were administered to the experimental group, while the control group received only pre- and post-tests. Significant improvement in test-taking skills was apparent for the experimental group, presumably due to its increased exposure to a variety of tests. The relationship between intelligence and increased test-wiseness was not significant. Investigations by Moore, Schultz and Baker, 1966; Wahlstrom and Boersma, 1968; and Slakter and Doehler, 1969, also found that test-wiseness skills can be developed through systematic instruction.

Millman and Setijadi's (1966) study demonstrated the disadvantage under which students operate when taking a test with an unfamiliar format. Comparisons were made of the performance of Indonesian and American students on tests using open-ended and multiple choice questions involving arithmetic computation and vocabulary. The Indonesian students did less well on the multiple choice items than they did on the open-ended questions. This differential performance presumably was due to their having had no prior experience with multiple choice items. Thus test-wiseness may be an important source of variance when comparing the scores earned by two groups whose test-taking experience differs markedly.

A publication by the Maryland Department of Education of 1975, provided booklets useful to classroom teachers in helping students acquire test-taking skills. Emphasis was placed upon overcoming format problems. The booklet provided instructional techniques to facilitate overcoming this

concern. Part IV of this report presented the following:

1. simulate test taking conditions,
2. establish a plan,
3. provide practice throughout the year.

An investigation by Sabers, 1975, also places priority on test-taking skills. In Part III of his research, test-wiseness is discussed; Part IV presents practice exercises on format. Item types used in the Metropolitan Achievement Test are presented. Crehan, et al, (1974) also considers the test-wisness skills needed for success on standardized tests. His study was a longitudinal one. Crehan, et al, investigated test-wisness with respect to (a) grade differences, (b) grade by sex interaction, and (c) stability. In summarizing the analyses of the matched longitudinal data, there appears to be no evidence for an interaction between sex and grade, and little evidence for a relationship between sex and test-wisness. Test-wisness is a stable characteristic over the grade levels studied. The educational implications discussed include the following: (a) the stability of test-wisness adds to the stability of aptitude or achievement tests, (b) students penalized on test scores because of low test-wisness tend to be penalized not only on different tests over time; i.e., the student low in test-wisness tends to be penalized every time he takes a test which includes a test-wisness component, and (c) since there seems to be little possibility of completely removing the effect of test-wisness from standardized tests, to say nothing of teacher-made tests, perhaps more thought should be given to the teaching of test-wisness to students low in test-wisness. This same concern for providing specific concern to standardized tests is discussed by Tinney (1968). He selected two schools on the basis of census information to represent high and low socioeconomic levels. Two classes of fifth grade students in each school were randomly assigned by sex to experimental and control groups. The experimental groups received five consecutive daily lessons of 30 minutes duration. Tinney selected five skills. One skill attended to the typical format and purpose of comprehension test questions. The instructional approaches were over the format characteristics of the New Developmental Reading Tests. Callenbach (1973) also developed lessons which considered specific skills and characteristics of a particular standardized test. In both of these

instructional situations, it was found that test-wiseness skills could be taught and that scores were increased as a result of instruction aimed at pre-selected test-wiseness skills.

The studies reviewed support at least two generalizations: (1) test-wiseness instruction has been successfully carried out in various investigations and significant gains in scores have been reported, (2) format familiarization has been identified as operative in the instructional approaches dealing with test-wiseness.

Therefore, those teachers and others who administer tests and those who review the results should consider the degree to which test-wiseness characteristics might have been operative had a planned effort been undertaken to provide special instruction.

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