

Affective Assessment Is Necessary and Possible

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Five principles will help teachers better understand students prior to instruction and judge how well students have achieved affective objectives.

Well-meaning educators often observe that, important as they are, affective objectives cannot be measured. They *can* and they *should* be. You can gather evidence that students are, or are not, acquiring affective characteristics by following five principles of affective assessment (see Anderson, 1981, for additional information).

1 Know Why You're Assessing

Two major purposes for assessing affective characteristics are: to gain a better understanding of students prior to instruction, and to examine the extent to which students have acquired the affective objectives of a course or curriculum.

In the first situation, affective characteristics are means to ends. They are assessed so that instruction can be altered for particular students or types of students with the hope that such alterations will lead to increased learning, often cognitive in nature, on the part of students. In the second situation, affective characteristics are ends in themselves. That is, specific programs are designed and implemented in order to help students achieve affective objectives.

Whether affective characteristics are important as means or ends has consequences for the type of characteristics assessed. If they are viewed as means, those chosen for assessment must relate to one or more of the available alternative classroom settings or teaching

styles, to the cognitive objectives of the course or curriculum, or both. If they are viewed as ends in themselves, then the characteristics selected for assessment must conform to the goals and objectives of the course or curriculum.

2 Know What You're Assessing

Affective characteristics refer to human qualities that are primarily emotional in nature: attitudes, interests, values, preferences, self-esteem, locus of control, and anxiety are but a few. To be considered assessable, affective characteristics must be: (1) emotions or emotion-laden qualities, (2) fairly consistent across a variety of situations, (3) directed toward some object or target, and (4) experienced with a certain degree of intensity. As specific, different affective characteristics, however, they can differ in their target (for example, attitudes toward school versus attitudes toward teacher); intensity (anxieties are more intense emotions than are preferences); and/or directionality (whether one approaches or avoids the target).

The meaningfulness of assessment is greatly enhanced if the various components of the affective characteristics are defined. First, the particular object or target should be identified. Is the target of anxiety to be school, mathematics, or tests? Furthermore, does school refer to all activities and experiences in school or only the academically-related ones?

Second, the degree of intensity of the affective characteristics should be specified. Does the intensity simply require awareness of the target? Or is the affective characteristic sufficiently intense so that some type of response directed toward, or away from, the target is required? Perhaps the affective character-

istic is so intense that a student possessing the characteristic would be impelled to seek out the target.

Third, the endpoints representing the directionality of the specific affective characteristics should be determined. These opposite endpoints may be like-dislike for one characteristic, want-don't want for a second, and approve-disapprove for a third. Specifying the target, intensity, and directionality helps the assessor understand and communicate to others the affective characteristic to be assessed.

3 Know What Instruments Are Available

Once the purpose of assessment and the nature of the characteristic being assessed have been determined, the next step is to examine available instruments. The majority of instruments are self-report in nature. That is, students read each statement on the instrument and respond in a way that is congruent with their feelings. Fortunately, in recent years, the number of such affective instruments has increased and some valuable compendiums have been produced, including:

1. Bills, R. A. *A System for Assessing Affectivity*. Tuscaloosa: University of Alabama Press, 1975.

2. Brookover, W. B., and others. *Measuring and Attaining the Goals of Education*. Alexandria, Va.: Association for Supervision and Curriculum Development, 1980.

3. Borich, G. D., and Madden, S. K. *Evaluating Classroom Instruction: A Sourcebook of Instruments*. Reading, Mass.: Addison-Wesley, 1977.

4. Cohen, L. *Educational Research in Classrooms and Schools*. New York:

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Harper and Row, 1976.

5. Robinson, J. P., and Shaver, P. R. *Measures of Social Psychological Attitudes*. Ann Arbor, Mich.: Survey Research Center, University of Michigan, 1973.

Similarly, companies are showing renewed interest in publishing affective instruments. Recently, for example, Scott, Foresman, and Company of Glenview, Illinois, published the *School Attitude Measure*, an individually-administered, student self-report instrument. With this single instrument it is possible to assess three different, specific affective characteristics: motivation for schooling, academic self-concept, and locus of control. The nature of the statements on these three scales is different so as to reflect the differences in affective characteristics themselves. The following sample statements are illustrations:

1. Often I don't want to go to school because I have more important things to do (Motivation for Schooling).

2. When I try, I can learn almost everything my teachers teach (Academic Self-Concept).

3. No matter what I do I can't make my school experiences any better (Locus of Control).

Psychological Corporation, Publishers Test Service, and Science Research Associates have also published a variety of affective instruments appropriate for use in schools.

4 Know How Good the Instruments Are

Just because an instrument is published does not make it good. Those who use the instrument must examine its technical quality for five attributes: communication value, objectivity, validity, reliability, and interpretability.

Communication value means the extent to which the instrument is understood by the person responding to it. The communication value of an affective instrument is enhanced to the extent that the directions are clear and the items are written at the reading level of the majority of the persons responding to the instrument.

Objectivity is the extent to which the scoring or coding of responses is free from scorer (or coder) error or bias. If an affective instrument is to be objective, a set of scoring rules (or a scoring

key) must be present and the qualifications of the persons doing the scoring must be specified.

Validity refers to the extent to which the instrument provides information about the characteristic it was designed to assess. The instrument's validity information comes from two sources. First, one can examine the procedures used to design the instrument. If the procedures appear sound and/or if persons other than the author of the instrument were brought in during its design to make judgments concerning the statements and their interrelationships, the validity of the instrument is enhanced.

Second, one can examine the data obtained from previous administrations of the instrument. Correlations of scores on the instrument with scores on other related instruments provides information relating to validity of the scale. Similarly, differences in scores between groups of students known or suspected to differ in their possession of the characteristic can be examined. Thus, empirically established interrelationships and differences enhance the validity of the instrument.

Reliability refers to the consistency of the information obtained. In many ways reliability of affective instruments is more important than reliability of cognitive tests. Unlike cognitive tests, affective instruments do not have right or wrong answers. Rather the "correctness" of affective instruments stems from the consistency of responses made by the student. Internal consistency estimates of reliability (for example, split-half, alpha) for good affective scales tend to fall into the 0.80s. Such numbers indicate a high degree of consistency of responses to the items within a given instrument. Consistency of responses over time (or stability) is reported by authors of several instruments. When stability estimates are reported they tend to range from 0.60 to 0.90, depending on the time interval and the nature of the affective characteristic being assessed. Such evidence supports the assumption that the instrument does, in fact, assess typical ways of feeling—a critical component of affective characteristics.

Finally, interpretability refers to the extent to which the instrument provides information that can be understood by interested parties. In general, scores obtained on affective instruments are made meaningful by comparing them with other information. Thus, interpretability is likely to be high if the author of the instrument provides additional

data that can aid in making meaningful interpretations. Such data would include: (1) the distribution of scores of large groups of same-age students to whom the instrument has been administered, (2) mean scores of groups of students known (or suspected) to differ to some extent on the affective characteristic being assessed, and (3) information about the point on the scale itself at which the directionality of the affective characteristic changes from approach to avoidance, from positive to negative.

5 Know How to Interpret the Scores

Correct interpretation always requires examination of the scores within the context of the purpose of the assessment (Principle 1) and the nature of the characteristic being assessed (Principle 2).

If the purpose of the assessment was to examine the extent to which students attained important course objectives, then the interpretation must focus on whether or not the objectives were attained. Some preset score indicating achievement of various objectives would aid in this type of interpretation. If, on the other hand, the purpose of the assessment was to determine the type of instruction to be received by particular types of students, then the interpretation must focus on differentiating types of students who would be more and less likely to benefit from different approaches to instruction.

Correct interpretation must also be consistent with the nature of the characteristic being assessed. If the affective characteristic is interest, then the higher scores may be interpreted as indicating greater interest. On the other hand, higher scores on an anxiety instrument may be interpreted as indicating debilitating levels of anxiety.

If, indeed, affective characteristics are important both as means and ends of education, then the assessment of these characteristics is equally important. We need to understand students' affective characteristics in order to provide proper instructional conditions and to evaluate the effectiveness of our affective education programs.

Reference

Anderson, L. W. *Assessing Affective Characteristics in the Schools*. Boston: Allyn and Bacon, 1981.

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