

Raising the Question #8

Assessment: Is It Just Measurement?

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Until relatively recently, communication instructors were expected to develop a syllabus that would describe the policies and procedures which would be followed in the class, what content would be taught in the course, and how the students would be evaluated. Typically, these syllabi were distributed to the students, and a copy was retained by the instructor (for possible future use) and sometimes placed in a file in the office of the department. And that was that. There usually was no review or evaluation of the syllabus beyond that, but in some cases, peers evaluated the syllabus as a part of faculty reviews. These reviews generally involved just making sure the above three elements were present. It was assumed that the instructor would follow the syllabus, teach the class well, and fairly evaluate the student's work. This procedure still is followed in many institutions.

Times have changed for instructors in many institutions, from elementary school to the university. Two new terms have been introduced to the instructional vocabulary that have caused considerable concern in the academic community. These terms are *learning objectives* and *assessment*. These terms reflect concepts that have become commonly recognized in the elementary and secondary schools as a function of the *No Child Left Behind* legislation. More and more colleges and universities have begun to apply these concepts in higher education. The response of faculty at all levels has been highly diversified, from considering these concepts to be totally irrelevant and of no value to viewing these concepts as center pieces for improving the quality of instruction at all levels. Whether one loves or hates these concepts and what they stand for, learning objectives and assessment are here to stay.

Let me simplify what these terms represent. Learning objectives refers to the perceived need to determine specifically what student outcomes are expected from either a single class or a whole instructional program before either is implemented. Assessment refers to the perceived need to measure and evaluate the degree to which the learning objectives are met in either a single class or a whole instructional program during the instructional process or after its completion. As an example,

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presume one is going to teach a public speaking class. One of the learning objectives of the course may be to reduce the stage fright of the student speaker. The assessment could be a measure of stage fright prior to the course and another measure of stage fright at the end of the course. This learning objective and its assessment are presumed to provide evidence of the degree to which the instruction in the course has been effective.

At this point, it may seem to be a simple process: create the objectives, teach the content related to those objectives, and assess the level of learning. When I first heard about the new assessment movement, I was the chairperson of the Department of Communication Studies at West Virginia University. I did not see this movement to be a danger in any way. Instead, it was another academic mandate that would consume my faculty members' time unnecessarily and get in the way of both their teaching and research. To put it mildly, I was not a supporter! At the next monthly meeting of the chairs of the various departments in the College of Arts and Sciences, the primary topic on the Dean's agenda was assessment. I found out quickly that many other chairs felt like I did. We riled against initiating another administration-initiated, bureaucratic-halfwit waste of time and money like we had experienced frequently in the past. When the Dean (who did not seem very favorable to such a program) informed us that we did not have any other option than to institute an assessment program (a mandate from above), my opposition solidified. Nevertheless, the Dean established two committees to deal with this issue. One committee was constituted of chairs in the hard sciences and mathematics. The other committee (to which I was appointed) was constituted of chairs in the humanities and social sciences.

Our first meeting turned into a gripe session (not surprisingly). However, the second committee meeting included a person from Educational Psychology, who did an excellent job explaining what was involved in such a program. The committee members learned that developing a learning objectives/assessment program would be much easier for the social sciences departments than it would be for the humanities. At least we (the social science chairs) understood the concept of learning objectives, and some of us already employed them in our classes. The chairs in humanities were not converted, and explained that they were teaching appreciations, not content information. They insisted that their faculty seldom were really sure what was going to be discussed in a given day because student input was very important. They insisted that this was a good thing and should not be changed. After this meeting, it was decided that each department would be expected to develop a program of assessment on its own.

While the department I chaired had a focus on the social science approach, the field of communication also embraces humanistic approaches. Many communication departments (and schools or colleges) include humanistic programs as one of their approaches, or focus on only humanistic approaches. Hence, in our field, it is important that we recognize that developing assessment programs is much more difficult for some departments and faculty members than others. I eventually learned that those of us who have a background in Education have a much easier task than many of our colleagues.

My background had actually prepared me well for the task of developing learning objectives and assessment measures for courses and programs in the field of Communication. (I have a B.S. in Education, M.A. in Speech with a minor in Elementary Education, and an Ed.D. in Speech Communication with a minor in Educational Psychology which focused on learning theory and quantitative research methods.) Our doctoral students were already getting much of the information related to learning objectives and assessment (although we never called it that) in their program. In addition, our two off-campus M.A. programs (Instructional and Organizational) were built on learning objectives and regular assessment for each class and for the M.A. program as a whole. I had been converted without recognizing it, and so had some of my faculty, colleagues, and graduate students. Labels make a big difference in one's willingness to adopt change!

Our colleagues in the field of Communication can be leaders in the assessment movement. In general, we (both scientific and humanistic) know what we want students to learn. In many cases, however, we have not taken the time and effort to put our learning goals in writing. I believe this is because so many of us simply have never learned how to do this effectively. Guidelines which make identifying learning objectives much easier are, and have been for over a half-century, readily available. The most respected books in this area were written by Bloom (1956) and Krathwohl, Bloom, and Masia (1964) and are available in just about every college and university library in the U.S. They explain that there are three kinds of learning objectives: cognitive learning (content/information), affective learning (attitudes, beliefs, and values related to cognitive learning), and psycho-motor learning (performing specific behaviors). They expand this discussion to identify levels of each area of learning (example for cognitive learning: from remembering dates or places to being able to synthesize information to generate new knowledge).

Assessment skills have already been mastered by many people in this field. However, many are not aware they have them. Assessment in this context has nothing to do with how much your house is worth! It just refers to measurement. Those of us who do quantitative research are already dependent on our skills to find or develop measuring instruments to use in our research. Many relevant measures have been developed by communication researchers.

The most important concern when developing a measure is to be very clear about what is to be measured. The history of rhetorical sensitivity illustrates this concern. The theory behind this construct was very enticing, and it drew the attention of many researchers, particularly those of us with a background in rhetoric as well as quantitative methods. The measure for this construct, unfortunately, suffered from extremely low reliability and poor face validity. Research on this construct declined rapidly. Most researchers blamed the decline on the measure; however, the problem was the fuzziness of the construct itself. For fuzzy constructs, it is impossible to develop a high-quality measure.

The same basic principle applies to assessment. If the learning objectives are fuzzy, it is not possible to develop quality instruments to measure them. Hence, it is critical that before assessment measures are developed, the learning objectives must be clear

and concrete; ambiguity cannot be tolerated. Hence, we need to consider how to develop clear, concrete learning objectives. The first step is determining what learning is the objective. There are two types of learning with which communication faculty will most likely need to confront: affective and cognitive learning.

Affective Learning and Teacher Evaluation

When discussing affective learning, we are most likely to be concerned with student affect toward the subject matter of the course. If students do not like the subject matter, there is much less probability they will learn the subject being taught. This is likely to be a major problem particularly in required courses (courses students would not take unless forced to do so) and courses in which they have performed poorly in previous experiences (such as math, English, and public speaking). However, instructional behaviors of the teacher will have a major impact on whether students develop positive or negative affect in any course.

Because teacher instructional behaviors have such a large impact on student affect toward a course, many people confuse affect for content with affect toward teacher. Affect for teacher (commonly referred to as teacher evaluation) is not affective learning, and needs to be assessed separately. It is quite possible for a student to dislike the subject matter but like the teacher, or vice versa. However, instructional communication research has determined that both affect for the course and affect toward the teacher are strong predictors of cognitive learning.

Assessment of affective learning can be relatively simple. A simple measure that can be used for this is the General Belief Measure (McCroskey & Richmond, 1996). This measure was designed to be used for multiple purposes. It is composed of six bipolar scales (e.g., *Good–Bad*). The instructions ask the students to indicate how he/she feels about (in this case) “taking an interpersonal communication class.” It has high alpha reliability (over .90), good face validity, and has worked well in a wide variety of research studies. To assess a given course, it should be administered the first day of class and near the last day of class. Either the difference scores between the two measurement periods or just the second measurement can provide appropriate assessment data.

Teacher evaluation data can be obtained by using this same scale. The only difference is that the important data are those obtained at the end of the course. You can use the target for the student’s responses as either “my teacher in this class” or the teacher’s name. This will work well as a direct evaluation of the teacher, but if data are intended to identify specific weakness or strengths of the teacher, the same scale can be used with multiple targets for the student’s response (e.g., “my teacher’s sense of humor,” “my teacher’s knowledge of this subject matter,” “my teacher’s fairness in grading”). Most teacher evaluation measures developed by institutions should be avoided because they lack reliability and often are invalid. For instance, many institutional measures ask questions about issues that are irrelevant to the teacher’s subject matter or assess methods which do not apply to the specific course.

Cognitive Learning

In today's educational arena, considerable cognitive learning assessment is conducted by means of so-called standardized tests. In theory, this appears to be an attractive alternative. Some outside company creates the tests and often scores the results. Assuming that the content taught is consistent with the cognitive learning objectives for the course, this approach offers a viable option. Unfortunately, this is rarely the case. Only if the test-maker provides the cognitive learning objectives to the teacher and the teacher shares those objectives with the students does this method approach validity. The instrument must demonstrate high reliability estimates (above .80 minimum) to provide valid assessment.

In addition, when the teacher bases instruction on the provided learning objectives, the teacher often is criticized for teaching to the test. This criticism is not justified. Learning objectives define for teachers what should be taught and what students are supposed to learn. If all the teachers of a particular course teach whatever they want and ignore the specific learning objectives, there is zero validity in the assessment of actual cognitive learning. Teachers often complain that the tests are not relevant to the courses they teach—and they are correct.

When standardized tests are not available (or are unreliable or invalid), the most common approach used is referred to as *teacher-made tests*. Almost everyone who has taught has employed teacher-made tests. Unfortunately, most teachers, particularly those who teach in higher education, have never been taught how to develop reliable and valid tests. One of the most common complaints of students who take teacher-made tests is that the test is not fair. Their complaints are usually accurate. These tests typically are not based on cognitive learning objectives that have been shared with the students. If students do not know what they are supposed to learn, most likely they will not learn it. The assessment of students' cognitive learning is invalid. It is vital that the teacher have clear, understandable cognitive learning objectives to provide the students and to guide the teacher's instruction. While multiple-guess and true-false tests are easy to correct by machine, it is difficult to develop tests of this type that have high reliability and validity. Short-answer questions are likely to be more valid when the cognitive learning objectives are available to students, and the teachers address the objectives in their instruction. These tests, of course, take longer to score and are often subject to rater fatigue and potential rater biases which reward verbosity, correct punctuation, neatness, and spelling. Several strategies can reduce such biases, such as creating first a model answer or outlining key points students are expected to provide and preassigning points to various parts of an answer.

Conclusion

Assessment is here to stay. We use it wisely, or it is worse than worthless. To make assessment beneficial, it must be visible to all involved. The instructor must be able to obtain or create the affective and cognitive learning objectives, and have these approved by their superiors. The students must be apprised of the cognitive learning

objectives. The teacher must include the cognitive objectives in their teaching. The tests must be based on the cognitive learning objectives. Assessments must be made on the affective learning of the students. Appropriate assessments must be used to evaluate the quality of instruction of the teacher. Assessments must be made with regard to the cognitive learning of each student and all students in a class collectively. The same thing applies to assessments of complete programs, just on a larger scale.

Learning objectives and assessment have the potential of increasing the quality of education at every level. However, to accomplish this goal, it is necessary that all of our faculty learn about and implement learning objectives in their classes. They must also learn enough about measuring instructional outcomes to be sure assessment is based on valid measures. Short of this, assessment is just another waste of valuable resources.

References

- Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives: Handbook I. Cognitive domain*. New York: Longman.
- Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (Eds.). (1964). *Taxonomy of educational objectives: Handbook II. Affective domain*. New York: Longman.
- McCroskey, J. C., & Richmond, V. P. (1996). *Fundamentals of human communication: An interpersonal perspective*. Prospect Heights, IL: Waveland Press. Retrieved June 19, 2007, from http://www.jamescmcroskey.com/measures/belief_generalized.htm

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