

11/12/86

ASSESSMENT SEMINAR

K. Patricia Cross

Harvard Graduate School of Education

Dick has presented the ultimate challenge--asking people who are programmed to talk for fifty minutes to say what they have to say in ten minutes. The only way I can see to do that is to stick to a script. I will take roughly five minutes to analyze the problem and five minutes to propose one possible solution.

There is at present a wide gulf between what people are saying about assessment and what we are doing or proposing to do. Most authorities on the subject of assessment advise that assessment should be used to improve the educational program. Bill Turnbull of ETS (1985, p. 25), for example, has written that "the overriding purpose of gathering data is to provide a basis for improving instruction, rather than keeping score or allocating blame." And the report of the Education Commission of the States (1986, p.32) asserts that "Assessment should not be an end in itself. Rather it should be an integral part an institution's strategy to improve teaching and learning...." But the assessment programs now in force are strong on collecting data and rather weak on using it to improve teaching and learning.

In the jargon of the trade, almost everyone advocates formative evaluation, but most of us are planning summative evaluation. Summative evaluation keeps score and tells us what is wrong, but at some point we need to think about how we relate the

results of assessment to the improvement of education. Most people assume that if we know what students are failing to learn, we can take steps to fix it. I'm not so sure. So far most of the emphasis in both assessment and the reform reports is on the curriculum i.e., what is taught. There is very little attention to how it is taught. Yet with mounting emphasis on problem solving, critical thinking, and development of the higher level cognitive skills, how students are taught is at least as important as what.

While it is relatively easy to get the faculty to talk about the curriculum, we in higher education find it very difficult to do much about the improvement of classroom teaching. The classroom is considered holy ground in academe. It is the mystery box of higher education, and we are reluctant, for a number of reasons, to probe too deeply into what goes on there. In fact, I suspect that one of the reasons for the popularity of institutional assessment is that it permits us to demonstrate our willingness to take action to improve education without actually entering the classroom. Yet our entire educational system is built on teachers meeting students in classrooms, and most of any institution's budget is allocated to the costs of instruction. It seems to me that sooner or later we must address the question, How can we use the results of assessment to improve classroom teaching?

We can do what most of the "value added" assessment designs do and encourage teachers to "teach to the test." That is a reasonable thing to do if the test truly measures the educational aspirations of the college. But the better the test,

i.e., the more it measures student growth and the development of higher level cognitive skills, the more most faculty will discover they don't really know how to teach to that test.

The beauty of the much admired assessment program promoted by Alverno College is that assessment is tied to instruction from the beginning. Faculty are the assessors; and they have become keen observers of student learning as it is taking place in the classroom. Alverno's assessment is strongly formative; the assessment itself is an on-going educational process. The unique and important contribution of the Alverno plan is that connections are specified from the beginning between instruction and assessment, between teachers and learners, between courses and the total college experience, between feedback on performance and student development, between external assessment and self assessment. Teachers use assessment to educate.

While many administrators admire Alverno's comprehensive and integrated assessment process, there is considerable skepticism that it can be transported to the larger, more complex, more independent faculty relationships that exist on most campuses.

This then, briefly is the problem. If there is little or no connection between assessment and the improvement of instruction in comprehensive summative assessments, and the nice neat formative designs, such as Alverno's, are considered not transportable, how can we improve instruction through assessment?

I have tried to grope my way toward one possible solution by proposing that the missing element in most assessment designs today is classroom assessment. I believe that since for

good reason, we cannot tell college and university professors how to teach, we have to give them the tools and skills to assess their own effectiveness as teachers in their own classrooms.

I would like to work with a sub-group of this body to discover, devise, create, measures or "feedback devices" that would show teachers what students are learning in their classroom. In this proposal, students are the respondents, learning outcomes constitute the data, and classroom teachers are responsible for selecting the outcomes considered relevant to their own subject matter and teaching goals, and for using the results to evaluate and improve their effectiveness as teachers.

Classroom assessment is not a new idea. Some of you will remember the extensive work done on formative and summative evaluation by Ben Bloom and his colleagues at the University of Chicago in the 1960 and 70s. At that time national Blue Ribbon Commissions were quite busy formulating educational goals and objectives not very different from those put forth today by various national panels. Teachers (elementary and secondary) were then encouraged to write "behavioral objectives" that moved toward these goals and most importantly could be measured.

This massive effort resulted in objectives that many--eventually most--people considered trivial and silly. The model behavioral objective stated by Robert Gagné, for example, was "Given two numerals connected by the sign +, the student states orally the name of the number which is the sum of the two."

The goal was to state the objective so precisely that the measurement of it was easy and always the same. The upshot, however, was to trivialize and distort learning goals to serve

41

measurement.

Maybe it is time to turn that around now and make measurement the servant, i.e. to keep the integrity of the learning goals and find better ways to measure them. It should be possible for classroom teachers to assess the learning that is taking place in their classrooms while there is still time to do something about it.

Some assessments could be extremely simple. A physics teacher at University of California, Berkeley finds great value in what he calls "minute papers." Four or five times a semester he stops class one minute early to ask students to write the answers to two questions: What is the most significant thing you learned today? What question is uppermost in your mind at the end of this class session? He says it provides excellent feedback on whether students are understanding and whether there are important questions to which he should respond.

Other classroom assessments might be more involved. Suppose the goal is for students to be able to apply the concepts of economics to current issues. At its simplest level, a concept or term might be taught in one class period and students asked to apply it in written or oral form the next week--not for grading the student but for seeking answers to questions such as these:

1. Which students failed the task? They might be interviewed. Did they lack prerequisite skills? Did they fail to read the assignment?

2. Where did the majority of students fall short? Are there better ways to teach that concept?

3. In classes with multiple sections, controls exist

for finding out how much was forgotten in a week. Are there ways of teaching relationships that would result in better retention?

4. Are students able to perform low level cognitive tasks, such as defining the term, but unable to function at the higher level skills of analysis and application?

The point of classroom assessment is to help college faculty members give analytical attention to student learning, and to involve faculty directly in the uses of assessment to improve instruction.

My proposal is for a study group that would start out to improve instruction through the intelligent use of assessment.

The rationale for classroom research as I have thought about it is based on the following assumptions.

1. If we want to affect education in process, we need to know what is going on in the mystery box of education--the classroom.

2. The most appropriate person to study classroom practices and their effect on student learning is the classroom teacher himself or herself.

3. Teachers who have designed their own classroom ^{evaluations} assessments are likely to consider the data relevant and useful and therefore to use the results of ~~the assessment~~ in the improvement of instruction.

4. Most faculty development programs now in operation analyze teacher behaviors. Classroom assessment offers an interesting alternative to instructional improvement through focussing attention on student behaviors and reactions.

5. There is nothing so esoteric about ^{CA} assessment that anyone capable of teaching at the college level cannot conduct good classroom ^{assessment}.

6. Classroom assessment will be strengthened by relating it to departmental assessment and to institution-wide assessments. It should be considered supplemental to and not a replacement for institution-wide assessment.

7. Teachers of the various disciplines contribute to institutional goals in different ways. The physics department has different learning goals for students ^{than} the history department, and it makes sense to assess learning that is appropriate to the subject matter of the discipline.

8. There is a ^{very} good chance that ^{small} changes in level of CA insts will add up to some real reform in sweeping policy changes at state & national levels.

11/12/86