2. Teacher Training In Assessment: Overcoming The Neglect

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The current state of teacher training in assessment has been thoroughly documented in previous chapters. The resulting picture is one of neglected and irrelevant training in an arena of professional activity that forms the basis of sound instruction. The decisions teachers must make cannot be made well without sound achievement data. The decisions students make about themselves cannot be made well if those students do not receive sound information on their achievement. The decisions made by those in leadership positions cannot be made well without the sound achievement information that comes from sound assessment. Obviously, high-quality assessment is crucial to the development and presentation of sound educational programs. And yet, we see before us a picture of professional development for educators that is almost completely devoid of assessment training.

Our recently completed, decade-long task analysis of classroom assessment has revealed that teachers typically spend a third of their professional time or more involved in assessment-related activities. They use assessments almost continuously to inform a wide variety of decisions and to serve other purposes that directly influence the quality of the learning experiences provided to students (Stiggins & Conklin, 1992). If school improvement efforts are to succeed, they
must include a component that teaches teachers how to use this massive amount of in-class assessment time productively.

In this chapter, I plan to add a few brief insights from the Pacific Northwest to the emerging portrait of teacher training in assessment. Our picture is not different from those already described. It is a picture of neglect. Very few teachers in our region are offered the opportunity to participate in relevant classroom assessment training.

Next, I will discuss some of the possible reasons for this unfortunate neglect. Why has so critical an area of professional competence been given so little attention in teacher preparation for so long?

The third issue I will address is that of the mismatch between (a) what teachers need to know about assessment in order effectively to manage classroom assessment environments and (b) what they are taught about assessment during their professional preparation, if they are offered any training at all. Our analysis of the task demands of classroom assessment has yielded a clear framework of classroom assessment competencies for teachers. I will compare the assessment training currently offered to these essential competencies.

Then to conclude, I will discuss the actions we need to take to eliminate the mismatch. Given the neglect of training and the irrelevance of training when offered, what do we do to provide relevant, helpful training to teachers? How do we revise training priorities to make this training attractive to teachers? And how do we let policy makers know that resources must be allocated to provide this previously neglected training?

**Assessment Training in the Northwest**

In our investigation of the current status of teacher training in assessment in the Pacific Northwest, we examined teacher certification regulations to determine requirements for assessment training, and we analyzed the assessment courses offered in the major teacher training programs of the six-state region, which includes Alaska, Hawaii, Idaho, Montana, Oregon, and Washington (Stiggins & Conklin, 1988). Within these states, we reviewed 27 undergraduate and graduate teacher training programs across 14 teacher training institutions. These programs produce 75% of all of the teachers graduated annually in the region. Our analysis asked whether assessment courses were offered, whether they were required for graduation, and what content is covered in these courses.

Only one of the six states (Oregon) explicitly requires assessment training for certification. All others require graduation from an accredited teacher training program. In addition, many require
candidates for licensure to attain a certain minimum score on the National Teacher Examination (NTE).

Our analysis of a sample NTE reveals that only 11 of the 339 test items address assessment issues, and only 4 of these deal with assessment issues that are directly relevant to classroom assessment for teachers.

Our analysis of the teacher training curriculum reveals that only 13 of the 27 programs currently offer an assessment course and only six programs required completion of that course for graduation. From this, we concluded that the vast majority of teachers currently practicing in the region probably received no assessment training whatever as part of their professional preparation. Further, our analysis of the content of that training reveals that, even when training is offered, it fails to match the training needs of those who must develop and use assessments on a day-to-day basis in the classroom. Before discussing this mismatch, however, I want to explore some of the possible reasons why assessment training is so totally neglected in so many programs.

Reasons for Neglect

We have been able to identify at least five possible reasons why assessment training is so frequently excluded from the teacher training curriculum. In fact, the true origin of this problem probably resides in some combination of these and we may never be able to disentangle the contribution of each. But each possible reason implies some actions we can take to remedy the situation. So it is in our best interest to strive to understand each.

One possible reason for our neglect of assessment training might be our tendency to focus on process rather than outcomes in the management of education. For example, high school graduation decisions traditionally have been based on the completion of certain credit hours rather than the attainment of certain outcomes. In this case, the assumption is made that, if the credits are completed (the process variable), the outcomes will take care of themselves. For another example, schools often define the teacher’s job in process terms, such as when teachers are evaluated in terms of whether they complete the textbook in the allotted time or not. This definition of good teaching assumes that covering the material at a certain rate (the process variable) will produce maximum learning (the desired outcome). Yet another example can be found in our procedures for accrediting schools. The accreditation decision traditionally has rested on the
evaluation of such factors as faculty credentials, student/teacher ratios, adequacy of facilities, etc. Again, the assumption is made that proper process leads naturally to desired outcomes. In an environment where process-oriented evaluations of students, teachers, and programs rule the day, training in the assessment of outcomes may not be regarded as central to the evaluation task and therefore may not be included in professional preparation programs.

Another possible reason for the absence of assessment training in teacher training programs may be the fact that these courses often have a reputation as being somewhat more academically demanding than typical education courses. In my teaching experience, I see many teachers put required assessment courses off to the very end of graduate programs due to their anxiety about such courses. Over the years, perhaps these tougher academic standards have made such courses unpopular with students and other faculty, and thus have resulted in their elimination from programs.

A third, more subtle reason for the neglect of this kind of training may be the fact that the systematic assessment of outcomes may be seen as being too risky by school personnel. If schools are very clear about their achievement targets, and are clear and public about their assessments of those outcomes, there is always the chance that someone in the community will disagree either with the target or the assessment. Or there is always the possibility that students will be found to have learned already what we had planned to teach them before we have a chance to teach them. Or further, there is the danger that either we and/or the public might discover after instruction that students failed to learn to hit the target. Under any of these circumstances, time and energy will need to be expended with the hassles of defending our priorities, reorganizing our efforts, individualizing instruction, and/or revising programs. In this kind of environment, educators may regard it as safer and easier to keep the achievement targets vague and to keep our assessments broad and out of focus. Further, we may regard it as safer simply to remain naive about key assessment issues. Systematic assessment training may not be a high priority for educators concerned about public review or the possibility of change.

Yet another possible explanation for the neglect of assessment training may be the assumption on the part of educators that the quality of assessments in the classroom is assured from outside the classroom; that is, quality assessment is assured by means beyond the control of the teacher. For instance, textbooks often are accompanied these days by their own quizzes, unit tests, and even computerized test item
banks for teachers. We may conclude, therefore, that it is unnecessary for teachers to know how to develop their own assessments. Besides, even if the text-embedded or teacher-developed assessments don’t keep the standards of achievement or test quality as high as we would like, we may find solace in our belief that we can count on those very high-quality standardized tests to bolster our standards of excellence. If we believe these things to be true (whether they are or not—often they are not), we are less likely to value assessment training for teachers.

Without doubt, each of these four factors has contributed in some way to the current state of neglect in the assessment training of our teachers. But I believe the major cause rests not in our process orientation to evaluation, or the fact that testing courses are too tough, or the fact that systematic, public assessment is too risky, or even in our false confidence that we have teacher-proof assessments in place. Rather, I believe the explanation resides in the historical irrelevance of the assessment training we have offered. The concepts covered, the assessment strategies taught, and the assessment quality control procedures advocated in assessment courses traditionally have failed to reflect any whatever sensitivity to the realities of the classroom. I will document the exact nature of this failing in precise detail in the next section. In the meantime, suffice it to say that, in an environment where credit hours for teacher training have always been restricted and currently are declining, what teacher training institution is likely to waste valuable credits on coursework that bears little resemblance to the realities of teaching in the classroom?

Training Versus the Realities of the Classroom

Our research analysis of the task demands of classroom assessment has suggested six specific dimensions of classroom assessment environments that teachers must manage effectively if they are to integrate sound assessment into affective instruction. Each dimension suggests a set of assessment competencies teachers must master if they are to reach this goal. Those dimensions and their associated competencies hold that teachers must understand the:

- full range of possible uses of classroom assessment
- achievement targets they hold as expectations for students and how those targets translate into assessments
- qualities of a sound assessment
- full range of assessment tools at their disposal
- critical interpersonal dimensions of classroom assessment
• keys to formulating and delivering feedback on assessment results

Let's analyze each of these, comparing what teachers need to know about each with what they are taught in the few assessment courses we found in the teacher training curriculum of the Northwest.

Classroom uses of assessment. Our analysis suggests that teachers use assessments in their classrooms to serve at least three different categories of purposes. First, they use assessment results to inform decisions. They diagnose student needs, select students for special services, group students for instruction, assign grades, etc. Second, they use assessments as teaching tools, such as by using them to communicate achievement expectations to students, using assignments both as practice and as assessments of achievement, involving students in self and peer evaluation to help them become better performers, using practice tests, etc. And third, they use assessments as a classroom management or behavior control mechanism to keep students in line. Assessment is the major power tool of the classroom environment and teachers control the switch.

If they are to use assessments in all of these contexts in a fair and effective manner, teachers must understand how each use relates to quality instruction, what role assessment can play in each use, and how the situational variables associated with each use impacts the meaning of a quality assessment.

Our analysis of currently available teacher training courses in assessment reveals treatment of only the first category of purposes, those related to decision making. And even in this case, the coverage is superficial, dealing only with the distinction between criterion-referenced and norm-referenced tests and their relationship to various decisions in the classroom and at higher levels of the education organizational hierarchy. We found no treatment of assessment as a teaching tool and virtually no comment on or guidelines for the use of assessment as a behavior management tool—both obviously critical aspects of effective classroom assessment. And we found no treatment of issues related to changes in the meaning of assessment quality as assessment purpose varies.

Achievement targets in assessment terms. One of the basic tenets of sound assessment in any context is that the assessor possess (a) a clear and highly differentiated vision or understanding of the achievement target to be attained by students, and (b) a thorough understanding of the full range of assessment alternatives available to assess the target of interest. It is impossible, for example, for a teacher to assess a
student’s level of writing proficiency if that teacher does not have in mind a clear vision of what it means to write well—a clear sense of the attributes of good writing. The same is true of the assessment of good reading, thinking, speaking, mathing, sciencing, etc. Certainly it is not the responsibility of the assessment course instructor to teach teachers to have these visions of desired outcomes. That is the responsibility of the content area instructors. However, it is the responsibility of the assessment instructor to provide guidelines for the translation of the various targets into proper assessment methods.

Our analysis of the task demands of the classroom reveals that teachers expect their students to aim for, and must assess, at least five different kinds of achievement targets: First, there is almost always some specific substantive subject matter knowledge to be mastered. In addition, teachers often want students to be able to demonstrate higher order thinking or problem-solving skills using that knowledge. Third, most teachers hold expectations that students will be able to demonstrate certain specific achievement-related behaviors. Fourth, many teachers want their students to be able to create certain achievement-related products that possess certain attributes. And finally, teachers often hope students will attain certain affective goals.

Teachers need to understand how all of the various types of targets translate into assessments. They need to complete assessment training with sufficient practical know-how to be able to align assessments with all of the various types of valued achievement targets.

Our analysis of the achievement targets addressed in the assessment courses we studied reveals the treatment of only two of the four kinds of achievement targets: knowledge and higher order thinking. Strategies are presented for assessing these valued outcomes through the use of paper-and-pencil assessment tools. This is important training that will be of great value in most classrooms. But it is by no means sufficient.

First of all, the definition of higher order thinking advanced in assessment courses almost universally is the definition presented in the Bloom taxonomy of cognitive levels (Bloom, 1956). This represents only one of many such definitions available to teachers. They need to become aware of the full range of alternative conceptualizations at their disposal. Many of the others are far easier than Bloom for teachers and students to deal with. The Quellmalz (1985) taxonomy represents one excellent example. Thinking skills targets need a much broader treatment in assessment training.

Second and most importantly, assessment training needs to address the other three kinds of achievement targets most often com-
pletely ignored in the courses we studied: achievement-related behaviors and products, and affective outcomes. These do translate into systematic classroom assessments and teachers need to know how to do so. We must strive to disimbuie ourselves and teachers of the notion that all (or even most) of the achievement outcomes we value for our students can be translated into objective test item formats. They cannot. Teachers need to know how to translate all their targets into assessment terms. Currently available training does not offer this.

The qualities of sound assessment. We know that the definition of a high-quality assessment varies as the assessment context changes. Therefore, it is not possible to give teachers a specific formula for quality to apply in a rote manner in the classroom. However, we also know that there are a few general quality-control guidelines that teachers must understand, so they can adapt them to the various assessment contexts they face on a day-to-day basis. For example, they must know that quality assessments:

- arise out of a clear and specific target and reflect that target in their assessment methodology
- control for various sources of extraneous interference that can cause us to mismeasure achievement, such as attributes of the student, the assessment process, and/or the assessment environment that are unrelated to student achievement but that influence test results
- sample student performance in a manner that is representative of the performance domain and is sufficiently large to justify our conclusions, yet is economical in that it does not produce more information than we need to the purpose
- provides the users with information in a form they understand and that fits the purpose

Each of these attributes of sound assessment implies a different set of potential sources of mismeasurement. Teachers need to know how to avoid all of these pitfalls. They need to know how to identify a mismatch between a target and an assessment method and how to fix it. They especially need to know all of the various sources of extraneous interference that can pop up both with objective and subjective assessment and how to prevent the problems from occurring. They need to know about potential sampling problems and how to avoid them. And they need to know how purpose and assessment method link up and how to evaluate whether they or other users (e.g., students) truly understand the information resulting from an assess-
There are certain very practical procedural steps teachers need to understand to promote sound classroom assessment.

We did not see these addressed in the courses we studied. Rather, we saw issues of quality control in assessment being addressed from a completely different perspective. That treatment of quality focuses on (a) the definitions of various types of validity and reliability, and (b) the statistical estimation of the validity and reliability of objective tests. Neither of these treatments has practical relevance to teachers in classrooms. They do not help teachers produce and use quality assessments. Far greater attention must be given to eliminating sources of measurement error.

**Assessment tools.** Teachers use at least three forms of assessment in tracking student achievement on a day-to-day basis in the classroom. First, they rely on paper-and-pencil assessment instruments, including teacher-developed and text-embedded tests and quizzes, assignments, standardized tests, and questionnaires. In addition, they rely on observations of and professional judgments about achievement-related behaviors and products. And third, they rely on direct personal communication with students to find out what they are learning, such as through instructional questions, interviews, casual conversations, discussions with others, and intuitions and feelings about students and their needs.

Each of these methods has strengths and weaknesses when used in various contexts. Each matches up well with some achievement targets and not others. Each carries with it a unique set of problems and pitfalls to be avoided in its design and use. Teachers need to understand these things about each set of tools.

The courses we studied covered these topics for only one set of assessment tools: paper-and-pencil instruments. And this coverage was limited to teacher-developed and text-embedded tests and quizzes and standardized tests. Assignments as assessments were ignored, as was the development or use of questionnaires. Further, the vast majority of courses paid little attention to the use of observation and judgment as assessment, and all courses virtually ignored personal communication as a mode of assessment in the classroom.

Each of these kinds of assessment can be done well or poorly. Each carries with it certain unique rules of evidence for sound use. The fact that teachers need to know these things seems to have been completely missed by course designers.

**Interpersonal dimensions of classroom assessment.** Classroom assessment environments are complex interpersonal places. Assessment is
virtually never a detached, scientific, objective laboratory act of dipping the dipstick to test the level of learning. Rather, it is virtually always an interpersonal act with personal antecedents and personal consequences. Experienced teachers know this perhaps better than anyone. But they often are unaware of the implications of this fact for the assessment methods they use. They often overlook the specific impact of assessments on their students as people.

There are a number of interpersonal facets of classroom assessment that need to be covered in depth in training. These include the facts that:

• students are key contributors to the classroom assessment process and environment, because they:
  * come from vastly differing home cultures, some of which directly impact the assessment of their achievement
  * hold expectations of themselves derived from teachers’ classroom assessments of them
  * are consumers of assessment information as self-assessors and crucial decision makers
  * maintain a sense of control over their own academic well-being based on their own assessments of the achievability of achievement targets
  * are peer assessors, judging each other and forming relationships based in part on academic performance in the classroom
  * differ widely in their understanding of the implicit curriculum and what it takes to look like a high achiever
  * differ widely in temperament, assessment anxiety, feedback needs, and motivation to learn and be assessed during the learning process

• teachers are key contributors to the interpersonal assessment environment of the classroom in that they:
  * hold widely differing expectations of students
  * have differing personal reactions to students as people
  * hold all of the power of control over classroom life in their power to assess and evaluate
  * differ widely in temperament, sensitivity, and motivation to teach and assess learning

Out of these important dimensions of classroom assessment environments there arises a set of competencies teachers must master if they are to treat students in a sensitive and equitable manner from an
assessment point of view. And yet, nowhere in the courses we studied were we able to find any evidence of the treatment of these crucial issues.

*Feedback on assessment results.* Teachers continuously formulate and deliver feedback on assessment results. This too is a critical aspect of the academic and interpersonal environment of the classroom. Although all forms of feedback are important, one very prominent form exerts greater influence than the others and therefore deserves special attention. That form is report card grades.

With respect to grades and grading, teachers carry out effective practices when they communicate those practices to students in advance, so students know what is expected; factor various student characteristics into the grade that belong there (e.g., achievement) and leave out all else (e.g., attendance, personality, attitude); use sound achievement data as the basis for grades; keep thorough, appropriate records; and combine data carefully over time and set appropriate cutoff scores to determine report card grades.

With respect to the other forms of feedback teachers use, such as oral communication, nonverbal communication, written comments, performance ratings, and test scores, teachers carry out sound practices when they focus feedback on clear expectations, time feedback to ensure student attention, and check for understanding of feedback. Teachers need to learn these things somewhere in their professional preparation.

Yet again, as with the interpersonal dimensions of classroom assessment environments, we found the arena of feedback on assessment results to be completely neglected in the courses we studied.

*Summary.* As a result of years of study, we know what teachers need to learn about assessment to function effectively in the classroom. Our belief glimpse into the assessment training of teachers in the Northwest reveals that they are not being taught what they need to know. Two of the six key competency arenas (interpersonal aspects and feedback) are being completely ignored, while the others (assessment purposes, achievement targets, qualities of sound assessment, and assessment tools) are being treated so narrowly and with such lack of depth as to render currently available training almost useless to teachers.

**Changing Direction**

Inadequate classroom assessment has direct implications for all. Students who succeed in hitting the target but who fail anyway due
to inept assessment lose their sense of control over their own academic well-being. Teachers face the prospect of less-than-effective or inefficient instruction and, in addition, feel a growing sense of alienation from testing—one of the keys to their success. The public continues to view schools through a filter of assessment illiteracy that allows them to continue to assume naively that all or most of the achievement outcomes we value for our students can be assessed via published norm-referenced standardized tests. School improvement efforts continue to have less impact than they need to have, because all of the effort devoted to attaining better outcomes is expended by those unable to assess whether those outcomes have been attained as a result of program improvements. This list of implications could go on for pages. Sound, relevant assessment training for teachers (and other educators) is an absolute must.

How then shall we reach this goal? I have several suggestions for immediate action.

First, we must deal with each of the five potential reasons for neglect of assessment training cited earlier. And to a very real extent we are beginning to do so. We must reorient from process-based to outcome-based evaluations of students, teachers, and programs. We are starting to do this, although these efforts are just beginning. High school proficiency assessments are becoming more common. Teachers are being held accountable for outcomes. And accrediting agencies also are examining outcome data. As these trends grow, high-quality, relevant, helpful assessment training will become a higher priority for all.

If assessment courses have been more academically demanding and students have had difficulty hitting the achievement targets designated by assessment instructors, we must analyze both the targets and the teaching methods used in these courses. Clearly, as I described in the previous section, the achievement targets for these courses have not been appropriate. Although we cannot judge the quality of instruction based on our study, we do know that if instructors become good teachers, modeling these methods for teachers, and evaluating the performance of their students using the proper methods, the probability will increase that future teachers will meet the demanding standards of assessment training.

If school personnel are uneasy about the dangers of being clear about achievement targets, and systematic and public about the assessment of those targets, then a higher level of assessment literacy on their part can only help. It will help because assessment training will give educators the tools and wisdom they need to be sure (a) the
public understands the full range of achievement outcomes we expect of our students (the public currently does not understand this!), (b) to develop and use the full range of assessment methods needed adequately to represent student attainment of those outcomes (norm-referenced standardized tests do not do this!), and (c) to plan instruction that directly treats valued achievement targets, thus greatly increasing the probability of student success at all levels of the achievement continuum (including advanced, average, and perpetually failing students!). None of these goals can be achieved by an education community that is essentially illiterate with respect to assessment issues. In fact, the risk of unfavorable public review is far greater if we remain uniformed in this critical arena.

If we believe teachers need not understand assessment because someone else already has taken care to assure quality classroom assessment, we need only examine the quality of many text-embedded tests and quizzes. Many of these are developed in the complete absence of quality control standards. If we believe standards of educational excellence are maintained by standardized tests, we need only think about (a) the extent to which these tests cover the full range of valued outcomes and (b) the fact that teachers make decisions about how to interact with their students at the rate of one every few minutes, whereas standardized tests happen only once every year or so. The standards of assessment quality and educational excellence can only be maintained if each teacher in every classroom is the best assessor he or she can possibly be.

Finally, if we currently neglect assessment training because that training historically has been irrelevant, we need to make the training relevant and helpful. The entire premise of this chapter is that *we know how to do this*. We need only make it a priority and allocate resources to make it happen.

Even as we deal with the various causes for neglect, there are other specific actions we can take:

1. Place a priority on in-service training. We are a national faculty that graduated from professional preparation programs that included no such training.
2. Design public relations programs to convince teachers and other educators that systematic classroom assessment can make their assessments (and therefore their teaching) faster, easier, and better, in that order. That is, sell assessment as the time and energy saver that it can be.
3. Separate assessment training audiences. The training needs of teachers are unique. They are not the same as guidance
counselors, psychologists, Ph.D. candidates in testing, or even educational administrators. Teachers should be trained separately.

4. All educational administrators should be required to complete training in classroom assessment and large-scale assessment. Only then can they (a) support the efforts of their teachers and (b) communicate with the public about school attainment of intended outcomes.

5. Assessment course instructors must understand the realities of life in classrooms. All who have not spent time in public school classrooms, or have not been there recently, should go to observe and teach there. This will reveal to them the complexity of the assessment task demands teachers face every day.

6. Through this in-class experience, assessment instructors also can learn from good teachers the basic principles of good teaching. These principles can be applied to the development and presentation of sound assessment instruction also.

In short, assessment training has a terrible reputation to overcome. It is regarded as irrelevant, technically complex, academically demanding, and a waste of valuable credit hours. Many teachers have had bad experiences with this training. Unfortunately, this reputation is deserved.

The time has come to change both the image and the reality of assessment training for teachers and other educators. This is partly a problem in public relations—a problem in salesmanship. But before the new product—relevant, helpful assessment training—can be sold effectively, it must be developed. We have all of the necessary ingredients in hand. We need only assemble them properly and put them in place everywhere students are assessed and evaluated.

REFERENCES


