
Appendix A

Standards for Teacher Competence in Educational Assessment of Students

*Developed by the
American Federation of Teachers
National Council on Measurement in Education
National Education Association*

*This is not copyrighted material. Reproduction and dissemination
are encouraged (1990).*

The professional education associations began working in 1987 to develop standards for teacher competence in student assessment out of concern that the potential educational benefits of student assessments be fully realized. The Committee appointed to this project completed its work in 1990 following reviews of earlier drafts by members of the measurement, teaching, and teacher preparation and certification communities. Parallel committees of affected associations are encouraged to develop similar statements of qualifications for school administrators, counselors, testing directors, supervisors, and other educators in the near future. These statements are intended to guide the preservice and inservice preparation of educators, the accreditation of preparation programs, and the future certification of all educators.

A standard is defined here as a principle generally accepted by the professional associations responsible for this document. Assessment

is defined as the process of obtaining information that is used to make educational decisions about students, to give feedback to the student about his or her progress, strengths, and weaknesses, to judge instructional effectiveness and curricular adequacy, and to inform policy. The various assessment techniques include, but are not limited to, formal and informal observation, qualitative analysis of pupil performance and products, paper-and-pencil tests, oral questioning, and analysis of student records. The assessment competencies included here are the knowledge and skills critical to a teacher's role as educator. It is understood that there are many competencies beyond assessment competencies which teachers must possess.

By establishing standards for teacher competence in student assessment, the associations subscribe to the view that student assessment is an essential part of teaching and that good teaching cannot exist without good student assessment. Training to develop the competencies covered in the standards should be an integral part of preservice preparation. Further, such assessment training should be widely available to practicing teachers through staff development programs at the district and building levels.

The standards are intended for use as:

- a guide for teacher educators as they design and approve programs for teacher preparation
- a self-assessment guide for teachers in identifying their needs for professional development in student assessment
- a guide for workshop instructors as they design professional development experiences for inservice teachers
- an impetus for educational measurement specialists and teacher trainers to conceptualize student assessment and teacher training in student assessment more broadly than has been the case in the past.

The standards should be incorporated into future teacher training and certification programs. Teachers who have not had the preparation these standards imply should have the opportunity and support to develop these competencies before the standards enter into the evaluation of these teachers.

The Approach Used to Develop the Standards

The members of the associations that supported this work are professional educators involved in teaching, teacher education, and student assessment. Members of these associations are concerned

about the inadequacy with which teachers are prepared for assessing the educational progress of their students, and thus sought to address this concern effectively. A committee named by the associations first met in September 1987 and affirmed its commitment to defining standards for teacher preparation in student assessment. The committee then undertook a review of the research literature to identify needs in student assessment, current levels of teacher training in student assessment, areas of teacher activities requiring competence in using assessments, and current levels of teacher competence in student assessment.

The members of the committee used their collective experience and expertise to formulate and then revise statements of important assessment competencies. Drafts of these competencies went through several revisions by the Committee before the standards were released for public review. Comments by reviewers from each of the associations were then used to prepare a final statement.

The Scope of a Teacher's Professional Role and Responsibilities for Student Assessment

There are seven standards in this document. In recognizing the critical need to revitalize classroom assessment, some standards focus on classroom-based competencies. Because of teachers' growing roles in education and policy decisions beyond the classroom, other standards address assessment competencies underlying teacher participation in decisions related to assessment at the school, district, state, and national levels.

The scope of a teacher's professional role and responsibilities for student assessment may be described in terms of the following activities. These activities imply that teachers need competence in student assessment and sufficient time and resources to complete them in a professional manner.

Activities Occurring Prior to Instruction

- (a) Understanding students' cultural backgrounds, interests, skills, and abilities as they apply across a range of learning domains and/or subject areas;
- (b) understanding students' motivations and their interests in specific class content;
- (c) clarifying and articulating the performance outcomes expected of pupils; and
- (d) planning instruction for individuals or groups of students.

Activities Occurring During Instruction

- (a) Monitoring pupil progress toward instructional goals;
- (b) identifying gains and difficulties pupils are experiencing in learning and performing;
- (c) adjusting instruction;
- (d) giving contingent, specific, and credible praise and feedback;
- (e) motivating students to learn; and
- (f) judging the extent of pupil attainment of instructional outcomes.

Activities Occurring After the Appropriate Instructional Segment (e.g. lesson, class, semester, grade)

- (a) Describing the extent to which each pupil has attained both short- and long-term instructional goals;
- (b) communicating strengths and weaknesses based on assessment results to students, and parents or guardians;
- (c) recording and reporting assessment results for school-level analysis, evaluation, and decision making;
- (d) analyzing assessment information gathered before and during instruction to understand each students' progress to date and to inform future instructional planning;
- (e) evaluating the effectiveness of instruction; and
- (f) evaluating the effectiveness of the curriculum and materials in use.

Activities Associated With a Teacher's Involvement in School Building and School District Decision Making

- (a) Serving on a school or district committee examining the school's and district's strengths and weaknesses in the development of its students;
- (b) working on the development or selection of assessment methods for school building or school district use;
- (c) evaluating school district curriculum; and
- (d) other related activities.

Activities Associated With a Teacher's Involvement in a Wider Community of Educators

- (a) Serving on a state committee asked to develop learning goals and associated assessment methods;

- (b) participating in reviews of the appropriateness of district, state, or national student goals and associated assessment methods; and
- (c) interpreting the results of state and national student assessment programs.

Each standard that follows is an expectation for assessment knowledge or skill that a teacher should possess in order to perform well in the five areas just described. As a set, the standards call on teachers to demonstrate skill at selecting, developing, applying, using, communicating, and evaluating student assessment information and student assessment practices. A brief rationale and illustrative behaviors follow each standard.

The standards represent a conceptual framework or scaffolding from which specific skills can be derived. Work to make these standards operational will be needed even after they have been published. It is also expected that experience in the application of these standards should lead to their improvement and further development.

Standards for Teacher Competence in Educational Assessment of Students

1. Teachers should be skilled in choosing assessment methods appropriate for instructional decisions.

Skills in choosing appropriate, useful, administratively convenient, technically adequate, and fair assessment methods are prerequisite to good use of information to support instructional decisions. Teachers need to be well-acquainted with the kinds of information provided by a broad range of assessment alternatives and their strengths and weaknesses. In particular, they should be familiar with criteria for evaluating and selecting assessment methods in light of instructional plans.

Teachers who meet this standard will have the conceptual and application skills that follow. They will be able to use the concepts of assessment error and validity when developing or selecting their approaches to classroom assessment of students. They will understand how valid assessment data can support instructional activities such as providing appropriate feedback to students, diagnosing group and individual learning needs, planning for individualized educational programs, motivating students, and evaluating instructional procedures. They will understand how invalid information can affect instructional decisions about students. They will also be able to

use and evaluate assessment options available to them, considering among other things, the cultural, social, economic, and language backgrounds of students. They will be aware that different assessment approaches can be incompatible with certain instructional goals and may impact quite differently on their teaching.

Teachers will know, for each assessment approach they use, its appropriateness for making decisions about their pupils. Moreover, teachers will know of where to find information about and/or reviews of various assessment methods. Assessment options are diverse and include text- and curriculum-embedded questions and tests, standardized criterion-referenced and norm-referenced tests, oral questioning, spontaneous and structured performance assessments, portfolios, exhibitions, demonstrations, rating scales, writing samples, paper-and-pencil tests, seatwork and homework, peer- and self-assessments, student records, observations, questionnaires, interviews, projects, products, and others' opinions.

2. Teachers should be skilled in developing assessment methods appropriate for instructional decisions.

While teachers often use published or other external assessment tools, the bulk of the assessment information they use for decision making comes from approaches they create and implement. Indeed, the assessment demands of the classroom go well beyond readily available instruments.

Teachers who meet this standard will have the conceptual and application skills that follow. Teachers will be skilled in planning the collection of information that facilitates the decisions they will make. They will know and follow appropriate principles for developing and using assessment methods in their teaching, avoiding common pitfalls in student assessment. Such techniques may include several of the options listed at the end of the first standard. The teacher will select the techniques which are appropriate to the intent of the teacher's instruction.

Teachers meeting this standard will also be skilled in using student data to analyze the quality of each assessment technique they use. Since most teachers do not have access to assessment specialists, they must be prepared to do these analyses themselves.

3. The teacher should be skilled in administering, scoring, and interpreting the results of both externally-produced and teacher-produced assessment methods.

It is not enough that teachers are able to select and develop good assessment methods; they must also be able to apply them properly.

Teachers should be skilled in administering, scoring, and interpreting results from diverse assessment methods.

Teachers who meet this standard will have the conceptual and application skills that follow. They will be skilled in interpreting informal and formal teacher-produced assessment results, including pupils' performances in class and on homework assignments. Teachers will be able to use guides for scoring essay questions and projects, stencils for scoring response-choice questions, and scales for rating performance assessments. They will be able to use these in ways that produce consistent results.

Teachers will be able to administer standardized achievement tests and be able to interpret the commonly reported scores: percentile ranks, percentile band scores, standard scores, and grade equivalents. They will have a conceptual understanding of the summary indexes commonly reported with assessment results: measures of central tendency, dispersion, relationships, reliability, and errors of measurement.

Teachers will be able to apply these concepts of score and summary indices in ways that enhance their use of the assessments that they develop. They will be able to analyze assessment results to identify pupils' strengths and errors. If they get inconsistent results, they will seek other explanations for the discrepancy or other data to attempt to resolve the uncertainty before arriving at a decision. They will be able to use assessment methods in ways that encourage students' educational development and that do not inappropriately increase students' anxiety levels.

4. Teachers should be skilled in using assessment results when making decisions about individual students, planning teaching, developing curriculum, and designing school improvement.

Assessment results are used to make educational decisions at several levels: in the classroom about students, in the community about a school and a school district, and in society, generally, about the purposes and outcomes of the educational enterprise. Teachers play a vital role when participating in decision-making at each of these levels and must be able to use assessment results effectively.

Teachers who meet this standard will have the conceptual and application skills that follow. They will be able to use accumulated assessment information to organize a sound instructional plan for facilitating students' educational development. When using assessment results to plan and/or evaluate instruction and curriculum, teachers will interpret the results correctly and avoid common misinterpretations, such as basing decisions on scores that lack curriculum validity.

They will be informed about the results of local, regional, state, and national assessments and about their appropriate use for pupil, classroom, school, district, state, and national educational improvement.

5. Teachers should be skilled in developing valid pupil grading procedures which use pupil assessments.

Grading students is an important part of professional practice for teachers. Grading is defined as indicating both a student's level of performance and a teacher's valuing of that performance. The principles for using assessments to obtain valid grades are known and teachers should employ them.

Teachers who meet this standard will have the conceptual and application skills that follow. They will be able to devise, implement, and explain a procedure for developing grades composed of marks from various assignments, projects, inclass activities, quizzes, tests, and/or other assessments that they may use. Teachers will understand and be able to articulate why the grades they assign are rational, justified, and fair, acknowledging that such grades reflect their preferences and judgments. Teachers will be able to recognize and to avoid faulty grading procedures such as using grades as punishment. They will be able to evaluate and to modify their grading procedures in order to improve the validity of the interpretations made from them about students' attainments.

6. Teachers should be skilled in communicating assessment results to students, parents, other lay audiences, and other educators.

Teachers must routinely report assessment results to students and to parents or guardians. In addition, they are frequently asked to report or to discuss assessment results with other educators and with diverse lay audiences. If the results are not communicated effectively, they may be misused or not used. To communicate effectively with others on matters of student assessment, teachers must be able to use assessment terminology appropriately and must be able to articulate the meaning, limitations, and implications of assessment results. Furthermore, teachers will sometimes be in a position that will require them to defend their own assessment procedures and their interpretations of them. At other times, teachers may need to help the public to interpret assessment results appropriately.

Teachers who meet this standard will have the conceptual and application skills that follow. Teachers will understand and be able to give appropriate explanations of how the interpretation of student assessments must be moderated by the student's socio-economic, cultural, language, and other background factors. Teachers will be

able to explain that assessment results do not imply that such background factors limit a student's ultimate educational development. They will be able to communicate to students and to their parents or guardians how they may assess the student's educational progress. Teachers will understand and be able to explain the importance of taking measurement errors into account when using assessments to make decisions about individual students. Teachers will be able to explain the limitations of different informal and formal assessment methods. They will be able to explain printed reports of the results of pupil assessments at the classroom, school district, state, and national levels.

7. Teachers should be skilled in recognizing unethical, illegal, and otherwise inappropriate assessment methods and uses of assessment information.

Fairness, the rights of all concerned, and professional ethical behavior must undergird all student assessment activities, from the initial planning for and gathering of information to the interpretation, use, and communication of the results. Teachers must be well-versed in their own ethical and legal responsibilities in assessment. In addition, they should also attempt to have the inappropriate assessment practices of others discontinued whenever they are encountered. Teachers should also participate with the wider educational community in defining the limits of appropriate professional behavior in assessment.

Teachers who meet this standard will have the conceptual and application skills that follow. They will know those laws and case decisions which affect their classroom, school district, and state assessment practices. Teachers will be aware that various assessment procedures can be misused or overused resulting in harmful consequences such as embarrassing students, violating a student's right to confidentiality, and inappropriately using students' standardized achievement test scores to measure teaching effectiveness.

Invitation to Users

The associations invite comments from users that may be used for improvement of this document. Comments may be sent to:

Teacher Standards in Student Assessment
American Federation of Teachers
555 New Jersey Avenue, NW
Washington, DC 20001

Teacher Standards in Student Assessment
National Council on Measurement in Education
1230 Seventeenth Street, NW
Washington, DC 20036

Teacher Standards in Student Assessment
Instruction and Professional Development
National Education Association
1201 Sixteenth Street, NW
Washington, DC 20036

The Committee that developed this statement was appointed by the collaborating professional associations: James R. Sanders (Western Michigan University) chaired the Committee and represented NCME along with John R. Hills (Florida State University) and Anthony J. Nitko (University of Pittsburgh). Jack C. Merwin (University of Minnesota) represented the American Association of Colleges for Teacher Education, Carolyn Trice represented the American Federation of Teachers, and Marcella Dianda and Jeffrey Schneider represented the National Education Association.