

Performance-Based Assessment in the Classroom

Jay McTighe and Steven Ferrara

We take the position that the primary purpose of classroom assessment is to inform teaching and improve learning, not to sort and select students or to justify a grade.

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On-going assessment of student learning is an essential aspect of effective teaching. Teachers can use a variety of assessment methods to diagnose students' strengths and needs, plan and adjust instruction, and provide feedback to students and parents regarding progress and achievement. We take the position that the primary purpose of classroom assessment is to inform teaching and improve learning, not to sort and select students or to justify a grade.

While the choice of particular assessment methods should vary according to the purpose of the assessment, the content of the curriculum, and the age levels of students, we discuss a set of common principles that underlies effective classroom assessment. We also consider the strengths and limitations of a variety of performance-based classroom assessment approaches and methods and present a series of vignettes to illustrate these methods of action. Finally, we offer a set of guiding questions and a framework for planning performance-based classroom assessments to improve teaching and learning.

Principles of Effective Classroom Assessment

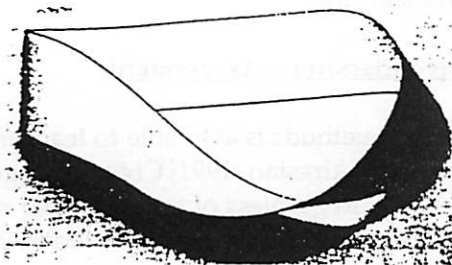
A wide variety of methods is available to teachers for assessing student learning (Airasian, 1991; Cross & Angelo, 1988; Ferrara & McTighe, 1992). Regardless of the particular methods employed, effective classroom assessment is guided by three

fundamental principles. Classroom assessment should (1) promote learning, (2) use multiple sources of information, and (3) provide, fair, valid, and reliable information.

The first principle is based upon the premise that the primary purpose of classroom assessment is to *inform teaching and improve learning* (Mitchell & Neill, 1992). This premise suggests assessment be viewed as an on-going process instead of a single event at the conclusion of instruction. Rather than waiting until the end of a unit of study or course to assess students, effective teachers employ formative assessments at the beginning of instruction to determine students' prior knowledge. They assess regularly throughout the unit or course of study to obtain information to help them adjust their teaching based on the learning needs of students. They recognize that assessment results can inform them about the effectiveness of their teaching as well as the degree of student learning.

When using performance-based assessments, teachers can make their evaluative criteria explicit in advance to serve as a focus for both instruction and evaluation. Effective teachers help their students understand that criteria describe the desired elements of quality. They provide regular feedback to students based on the identified criteria, and allow students to revise their work based upon this feedback. They also involve students in peer- and self-evaluation using the criteria in order to engage students more actively in improving their performance.

Assessment for learning recognizes the mutually-supportive relationship between instruction and assessment. Like a mobius strip where one side appears to seamlessly blend into the other,



classroom assessment should reflect and promote good instruction. For example, teachers following a process approach to teaching writing would allow their students to develop drafts, receive feedback, and make revisions as part of the assessment. Likewise, if we teach science through a hands-on, experimental approach, our assessment should include hands-on investigations.

A second principle of sound classroom assessment calls for a synthesis of information from several sources. The importance of using *multiple sources of information* when assessing learning in the classroom may be illustrated through a photographic analogy. A single assessment, such as a written test, is like a snapshot in that it provides a picture of student learning. While a snapshot is informative, it is generally incomplete since it portrays an individual at a single moment in time within a particular context. It is inappropriate to use a one-time snapshot of student performance as the sole basis for drawing conclusions about how well a student has achieved desired learning outcomes. The classroom context offers a distinct advantage over large-scale assessments in that it allows teachers to take frequent samplings of student learning using an array of methods. To continue the photographic analogy, classroom assessment enables us to construct a "photo album" containing a variety of pictures taken at different times with different lenses, backgrounds, and compositions. The photo album reveals a richer and more complete picture of each student than any single snapshot can provide. Applying the principle of multiple sources is especially important when the assessment information is used as a basis for important summative decisions, such as assigning report card grades or determining promotion.

A third principle of classroom assessment concerns *validity, reliability, and fairness*. *Validity* has to do with whether an assessment measures what it was intended to measure. For example, if a media specialist seeks to assess the capabilities of her students to conduct research using primary and secondary sources, she should observe their use of these sources directly as they work on their research projects. For this learning outcome, a paper-and-pencil test of student knowledge of

library references would be an indirect and less valid assessment since it does not reveal the ability to actually use the references purposefully.

Reliability refers to the dependability and consistency of assessment results. If the same assessment yielded markedly different results with the same students (without intervening variables such as extra instruction or practice time), one would question its reliability. Performance assessments present an additional challenge since they call for judgment-based evaluation of student products and performances. A truly reliable evaluation would result in equivalent ratings by the same rater on different occasions. For instance, an observation checklist can be used reliably as long as teachers are careful to ensure that their ratings would not differ substantially from occasion to occasion (e.g., Monday morning versus Friday afternoon). When teachers are involved in school- or district-level evaluations based on a set of criteria used throughout the school or district, interrater reliability must also be considered. In this case, scores on a writing assessment would be considered reliable if different raters assign similar scores to the same essays.

Fairness in classroom assessment refers to giving all students an equal chance to show what they know and can do. Fairness is compromised when teachers assess something that hasn't been taught or use assessment methods that are incongruent with instruction (e.g., asking for recall of facts when the emphasis has been on reasoning and problem solving). The fairness of teacher judgments is also challenged by the "halo" and "pitchfork" effect, where expectations based on a student's past attitude, behavior, or previous performance influence the evaluation of his or her current performance.

Subtle, unintended racial, ethnic, religious, or gender biases also present roadblocks to the fair assessment of students. Such biases may negatively influence students' attitudes toward, and performances on, classroom assessments. For example, the junior high mathematics teacher who routinely uses sports statistics as a main source for problem-solving tasks could "turn off" those students who are not sports fans. Likewise, insensi-

tivity to diverse religious beliefs (e.g., choosing reading passages involving only Christian holidays), gender/racial images (e.g., depicting all doctors as white males), or socio-economic status (e.g., assuming that all kids have access to a telephone or home computer) may result in unfair evaluation of individuals or groups. Teachers must be on guard so that biases do not influence their evaluations of a student's performance.

Given these three general principles, we now consider a set of fundamental questions related to planning classroom assessments.

Key Questions in Planning Classroom Assessments

Just as teachers have numerous instructional techniques and strategies from which to choose, a variety of methods are available for assessing learning. The selection of particular assessment methods should be determined in response to several key questions. These questions are incorporated in the chart, "Classroom Assessment Planning: Key Questions" (Figure 1).

The first question concerns learning outcomes, or the intended results of our teaching: *What do we want students to understand and be able to do?* Learning outcomes typically fall into three categories: (1) *declarative knowledge* — what we want students to understand (facts, concepts, principles, generalizations); (2) *procedural knowledge* — what we want students to be able to do (skills, processes, strategies); and (3) *attitudes, values, or habits of mind* — how we would like students to be disposed to act (e.g., appreciate the arts, treat people with respect, avoid impulsive behavior). The choice of specific assessment methods should be determined in large part by the nature of the learning outcomes being assessed (Marzano, Pickering, & McTighe, 1993). For example, if we want students to demonstrate the capacity to write an effective persuasive essay, then our assessment should involve gathering samples of persuasive writing and evaluating them against specified criteria. In this case, a multiple-choice test would be ill-suited to measure the intended outcome. Likewise, if we wish to develop students' ability to work cooperatively on a research project, then we

Figure 1

CLASSROOM ASSESSMENT PLANNING: KEY QUESTIONS

Learning Outcomes	Purpose(s) for Assessment	Audience(s) for Assessment
<i>What do we want students to understand and be able to do?</i>	<i>Why are we assessing and how will the assessment information be used?</i>	<i>For whom are the assessment results intended?</i>
<ul style="list-style-type: none"> ■ _____ _____ _____ ■ _____ _____ _____ _____ ■ _____ _____ _____ _____ ■ _____ _____ _____ _____ 	<ul style="list-style-type: none"> <input type="checkbox"/> to diagnose student strengths and needs <input type="checkbox"/> to provide feedback on student learning <input type="checkbox"/> to provide a basis for instructional placement <input type="checkbox"/> to inform and guide instruction <input type="checkbox"/> to communicate learning expectations <input type="checkbox"/> to motivate; to focus student attention and effort <input type="checkbox"/> to provide practice applying knowledge and skills <input type="checkbox"/> to provide a basis for student evaluation (e.g., grading) <input type="checkbox"/> to obtain data for site-based management <input type="checkbox"/> to gauge program effectiveness 	<ul style="list-style-type: none"> <input type="checkbox"/> teacher/instructor <input type="checkbox"/> students <input type="checkbox"/> parents <input type="checkbox"/> grade-level/department team <input type="checkbox"/> other faculty <input type="checkbox"/> school administrators <input type="checkbox"/> curriculum supervisors <input type="checkbox"/> business community <input type="checkbox"/> higher education <input type="checkbox"/> general public <input type="checkbox"/> other: _____

would assess group processes and products as well as individual performance.

In addition to considering outcomes, we need to raise questions related to the purpose(s) and audience(s) for classroom assessments: *Why are we assessing? How will the assessment information be used? For whom are the assessment results intended?* The purpose(s) and audience(s) for assessments influence not only the methods selected, but the ways in which the classroom assessment results are communicated. For example, if we wish to provide parents of a primary-grade student with an interim report of progress in language arts, we might arrange a conference to describe the child's reading skills in terms of a developmental profile and review a work folder containing samples of her writing.

The Framework of Assessment Approaches and Methods

Given identified outcomes, purposes, and audiences, *how might we assess student learning in our classrooms?* The "Framework of Assessment Approaches and Methods" (see Figure 2) offers a systematic guide to the purposeful selection of assessment methods.

Each of the five columns in the Framework identifies an assessment approach and contains examples of specific assessment methods corresponding to that approach. Given the focus of this article on performance-based assessment, we'll skip the first column (selected-response formats) and concentrate on the approaches in the second through fifth columns of the Framework. We'll describe each general approach, examine the strengths and limitations of each, and provide vignettes of teachers using particular assessment methods in their classrooms.

Performance-Based Assessment

By *performance-based assessment*, we are referring to assessment activities that directly assess students' understanding and proficiency. These assessments allow students to construct a response, create a product, or perform a demonstration to show what they understand and can do. Since

they call for students to apply knowledge and skills rather than simply to recall and recognize, performance-based assessments are more likely to reveal student understanding. They are well suited to assessing application of content-specific knowledge, integration of knowledge across subject areas, and lifelong learning competencies such as effective decision making, communication and cooperation (Shepard, 1989).

Constructed-Response Formats

Unlike selected-response items that call for a selection from given alternatives, constructed-response assessment tasks ask students to generate brief responses to open-ended questions, problems, or prompts. Short written answers and visual representations (e.g., concept map, flow chart, graph) are examples of widely-used constructed-response assessment methods. While constructed-response tasks may seek a correct or acceptable response (e.g., fill-in-the-blank), they are more likely to yield a range of responses. Thus, the evaluation of student responses requires judgment, guided by criteria. This approach may be used for assessing declarative knowledge and procedural proficiency. In addition, constructed-responses can provide insight into understanding and reasoning when students are requested to show their work and explain or defend their answers in writing.

Constructed-responses offer several advantages as classroom assessments. They require less time to administer than other types of performance-based assessments. Since they elicit short responses, a variety of constructed-response tasks may be used to assess multiple outcomes. Evaluation of student responses is straightforward, guided by criteria or model responses.

Constructed-responses are limited in their ability to adequately assess attitudes, values, or habits of mind. In addition, as with any open-ended assessment, judgment-based evaluation takes time, and introduces potential problems of scoring reliability and fairness. For summative assessments, constructed-response tasks should not be regularly reused in order to avoid memorized responses to known questions and tasks.

Figure 2

FRAMEWORK OF ASSESSMENT APPROACHES AND METHODS

How might we assess student learning in the classroom?

SELECTED RESPONSE ITEMS	PERFORMANCE-BASED ASSESSMENTS			
	CONSTRUCTED RESPONSES	PRODUCTS	PERFORMANCES	PROCESS- FOCUSED
<input type="checkbox"/> multiple-choice <input type="checkbox"/> true-false <input type="checkbox"/> matching	<input type="checkbox"/> fill in the blank <ul style="list-style-type: none"> • word(s) • phrase(s) <input type="checkbox"/> short answer <ul style="list-style-type: none"> • sentence(s) • paragraphs <input type="checkbox"/> label a diagram <input type="checkbox"/> "show your work" <input type="checkbox"/> visual representation <ul style="list-style-type: none"> • web • concept map • flow chart • graph/table • matrix • illustration 	<input type="checkbox"/> essay <input type="checkbox"/> research paper <input type="checkbox"/> log/journal <input type="checkbox"/> lab report <input type="checkbox"/> story/play <input type="checkbox"/> poem <input type="checkbox"/> portfolio <input type="checkbox"/> art exhibit <input type="checkbox"/> science project <input type="checkbox"/> model <input type="checkbox"/> video/audiotape <input type="checkbox"/> spreadsheet	<input type="checkbox"/> oral presentation <input type="checkbox"/> dance/movement <input type="checkbox"/> science lab demonstration <input type="checkbox"/> athletic competition <input type="checkbox"/> dramatic reading <input type="checkbox"/> enactment <input type="checkbox"/> debate <input type="checkbox"/> musical recital	<input type="checkbox"/> oral questioning <input type="checkbox"/> observation ("kid watching") <input type="checkbox"/> interview <input type="checkbox"/> conference <input type="checkbox"/> process description <input type="checkbox"/> "think aloud" <input type="checkbox"/> learning log

examples

examples

Classroom examples:

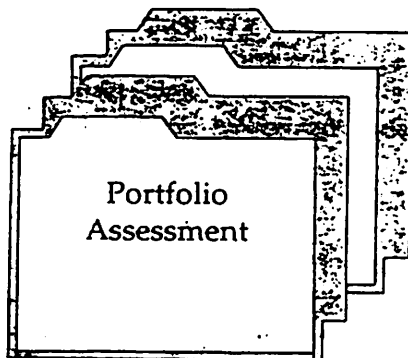
A middle school science teacher involves her students in an investigation of the absorbency rates of different brands of paper towels. Following the investigation, they record results of their data collection on a chart and state their conclusions in writing. Students are evaluated on the effectiveness of their charts in communicating results and of the accuracy of their written conclusions.

A fifth grade mathematics teacher asks her students to show their work as they attempt to solve multi-step word problems. In addition to examining their solutions, she looks at their work for evidence of appropriate use of algorithms and problem-solving strategies. She provides feedback through brief written comments.

Product Assessments

Student products provide tangible indicators of the application of knowledge and skills. Many educators believe that product assessment is especially "authentic" because it closely resembles the real work outside of school. Teachers may evaluate written products (e.g., essays, research papers, laboratory reports), visual products (e.g., 2- and 3-dimensional model, displays, videotapes), aural products (e.g., an audiotape of an oral presentation), and other types of products to determine degrees of proficiency or levels of quality.

One application of product assessment occurs when representative samples of student work are systematically collected over time in portfolios.



Portfolios allow teachers, students, parents, and others to observe development and growth in learning. Portfolio assessment has been widely used over the years in the visual arts, architecture, and certain technical areas. Currently, educators are witnessing a growing use of portfolios to document learning in other subject areas, especially the language arts.

The use of products and portfolios is appealing because of their instructional relevance. When students are given opportunities to produce authentic products, they often become more engaged in, and committed to, their learning. Unlike standardized assessments which strive for uniformity, product assessment often presents students with opportunities to express their individuality. Product assessment highlights what students can do, while revealing what they need to learn or improve. The criteria used to evaluate products, when made public, make the elements of quality known to students, and serve as a guide for student peer- and self-evaluation. Previously-developed products can serve an instructional purpose when they are presented as models of excellence for students (Wiggins, 1992).

Despite their benefits, product assessments have their drawbacks. Criteria for judging the products must be identified, and product evaluation can be a time-consuming process. In addition, teachers must be careful when evaluating student products that their judgments aren't unduly influenced by extraneous variables, such as neatness or spelling. Practicality must also be considered. The time required to develop quality products may compete with other instructional priorities. Product assessments require resources, including funds for materials and space for display and storage.

Classroom examples:

Students develop a computer program for an advanced high school computer class. Their teacher evaluates students' programming knowledge and skills by examining the program's written code for accuracy and efficiency. In addition, students must run the program to

demonstrate that it performs the specified functions. Unsuccessful programs must be "debugged" until they satisfactorily fulfill the requirements.

A second grade teacher collects bi-weekly examples of representative student work in a language arts portfolio. The collected student samples are reviewed with parents during mid-year conferences. The portfolio provides parents with tangible illustrations of their child's literacy development. The teacher uses the actual products, along with a developmental scale of reading and writing for the primary grades, to discuss the student's strengths and point out areas needing special attention.

Fifth grade art students create a landscape using tempera paints. Using a skills checklist, their art teacher assesses their paintings to determine their proficiency in using the medium. He also assesses their understanding of the use of compositional elements for creating an illusion of depth. Individual student conferences are arranged to provide feedback.

A middle school science teacher reviews her students' laboratory reports to determine their effectiveness in applying the experimental procedures and the accuracy of their data collection. Her written comments in the margins point out errors and offer specific suggestions for improvement. The reports are returned, discussed, and filed in the students' science folders for future reference.

Performance Assessments

Using performance assessments, teachers are able to directly observe the application of desired skills and knowledge. Performance assessments can be among the most authentic types of student assessments since they can replicate the kinds of actual performances occurring in the world outside of school. Performances have been widely used to assess learning in certain disciplines, such as vocal and instrumental music, physical education, speech, and theater, where performance is the natural focus of instruction. However, teachers in other subjects can routinely include performances,

such as oral presentations, demonstrations, and debates, as part of a broad array of assessment methods.

The evaluation of performances becomes instructionally valuable when students apply the scoring tools for peer and self-evaluation. Such involvement helps students to internalize the elements of quality embedded in the criteria. Many teachers have observed that students are motivated to put forth greater effort when they perform before "real" audiences of other students, staff, parents, or expert judges. In addition to the influence on students, schools often benefit from positive public relations when students perform for the community.



Despite their positive features, performance assessments can be time- and labor-intensive for students and teachers. Time must be allocated for rehearsal as well as for the actual performances. The evaluation of performances is particularly susceptible to evaluator biases, making fair, valid and reliable assessment a challenge.

Classroom examples:

Students in the school orchestra participate in a "dress rehearsal" two weeks before the public performance. The music teacher works with the students to evaluate their performance during the rehearsal and identify areas of weakness. During the ensuing practices, the orchestra members concentrate on making improvements in these areas prior to the actual performance before a live audience.

A high school social studies teacher sets up an in-class debate as a culminating activity for a contemporary issues unit. Students work as part of a team to debate the issue of gun control. The

teacher will rate students' performances in the debates on several dimensions including their understanding of the Bill of Rights, persuasiveness of their arguments, use of supporting factual information, effectiveness in countering rebuttals, and observance of rules of debating.

An elementary physical education teacher uses a skills checklist during the unit on introductory gymnastics to assess students' proficiency. Each student receives a copy of the checklist and works with a partner to try to successfully perform the identified skills. The completed checklists are used as one component of the culminating grade for the unit.

A high school speech teacher works with a home economics teacher in preparing students to make oral presentations to communicate the results of a nutrition research project. Using a rating scale, the home economics teacher evaluates the students on accuracy and completeness of their knowledge of the "food pyramid." The speech teacher uses a scoring rubric for delivery of an informative speech to evaluate the oral presentations.

Process-focused Assessments

Process-focused assessments provide information on students' learning strategies and thinking processes. Rather than focus on tangible responses, products, and performances, this approach seeks to gain insights into the underlying cognitive processes used by students. A variety of process-focused assessments are routinely used as a natural part of teaching. For example, teachers may elicit students' thinking processes using oral questions such as, "How are these two things alike and different?" or by asking students to "think out loud" as they solve a problem or make a decision. Teachers may ask students to document their thinking over time by keeping a learning log. Finally, teachers can learn about students' thinking processes by observing students as they function in the classroom. This "kid watching" method is especially well suited to assessing the development of attitudes or habits of mind, such as persistence.



Process-focused assessments are formative in that they provide diagnostic information to teachers and feedback to students. They also develop students' metacognition by heightening their awareness of cognitive processes and worthwhile strategies. Process-focused assessment methods are typically used over time, rather than on single occasions. Thus, they are rarely used in standardized, high stakes evaluations of students.

Classroom examples:

A high school literature teacher regularly poses oral questions to assess students' interpretation of a text. Their responses sometimes reveal misunderstandings that need clarification by the teacher.

A kindergarten teacher interviews each of her children in the beginning of the year. This informal assessment provides useful information about cognitive and linguistic development, social skills, and areas of personal interest.

A middle school social studies teacher carefully observes students to assess their cooperative skills as they work on a social studies project in learning groups. He also selects students to serve as process observers, giving them a checklist of observable indicators of cooperative skills. The teacher and student observers periodically provide feedback to the class on the effectiveness of their interactions in cooperative groups.

A high school mathematics teacher asks students to describe their reasoning processes by thinking out loud during the solution of "open-ended" problems. By listening to students as they articulate their thoughts, the teacher can identify fallacious reasoning and the appropriateness of strategy use so as to provide needed assistance.

Evaluation and Communication Methods

In addition to making choices about classroom assessment methods, teachers should consider options for evaluating student work and for communicating assessment results. As before, the selection of evaluation and communication methods is guided by a consideration of the key questions presented in the "Evaluation and Communication Methods" chart (see Figure 3).

Evaluation Methods

How will we evaluate student knowledge and proficiency? The selection of evaluation methods should be determined largely by the assessment approach and the nature of the student responses to the assessment item or task. Performance-based assessments result in a wider range of responses, products, or performances that reflect different strategies, varying degrees of quality, and different levels of proficiency. We rely on judgment-based methods to evaluate responses to these open-ended assessments. Five primary types of evaluation methods are used in conjunction with performance-based assessments: scoring rubrics, task-specific scoring guides, rating scales, checklists, and written and oral comments.

Since performance-based assessments generally do not yield a *single* correct answer or solution method but allow for a wide range of responses, evaluations of student products or performances are based upon judgment. The evaluative judgments are guided by criteria which define the desired elements of quality. One widely-used scoring tool is a rubric, a generic scoring tool used to evaluate the quality of products and performances in a given outcome area. Rubrics consist of a fixed measurement scale (e.g., 4-point) and a list

of criteria that describe the characteristics for each score point. Rubrics are frequently accompanied by examples of student products or performances to illustrate each of the points on the scale. These examples are called *anchors*.

Scoring rubrics can be **holistic** (intended to provide an overall impression of the elements of quality and levels of performance in a student's work), **analytic** (designed to indicate the level of performance of a student's work on two or more separate elements of quality), or **primary trait** (global in nature like holistic rubrics but focused on a specific feature, such as language usage).

In contrast to generic rubrics, **task-specific scoring guides** are designed for use with a specific assessment activity (e.g., an open-ended question about a particular reading assignment or concept from a class discussion). While they also contain a fixed scale and descriptive criteria, task-specific guides cannot be used to evaluate responses to different performance tasks (Goldberg, 1993).

Both rubrics and task-specific guides are most effectively used for evaluation or instruction when they are accompanied by examples of responses for each score point. These examples or anchors provide tangible illustrations of the various points on the scale. Perhaps the greatest advantage of rubrics and task-specific guides lies in their capacity to clearly communicate elements of quality to students and evaluators. The clarity provided by criteria and anchors assists raters in reliably evaluating student responses, products, or performances. The criteria also provide targets toward which teachers can teach and students can aim. When students internalize the criteria contained in rubrics or guides, they are better equipped to engage in self-evaluation and revision of their own work.

These evaluation methods require time to collect or develop rubrics and task-specific guides, to identify representative anchors, to develop proficiency in applying them reliably, and to use them for evaluating student products and performances. Nonetheless, some schools and districts have recognized the significant professional development benefits of providing opportunities for

Figure 3

EVALUATION AND COMMUNICATION METHODS

Evaluation Methods	Evaluation Roles	Communication/ Feedback Methods
<i>How will we evaluate student knowledge and proficiency?</i>	<i>Who will be involved in evaluating student responses, products or performances?</i>	<i>How will we communicate assessment results?</i>
<p><u>Selected-Response Items:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> answer key <input type="checkbox"/> scoring template <input type="checkbox"/> machine scoring <p><u>Performance-Based Assessments:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> generic rubric <input type="checkbox"/> task-specific guide <input type="checkbox"/> rating scale <ul style="list-style-type: none"> • bi-polar • hierarchical <input type="checkbox"/> checklist <input type="checkbox"/> written/oral comments 	<p><u>Judgment-Based Evaluation by:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> teacher(s)/instructor(s) <input type="checkbox"/> peers <input type="checkbox"/> expert judges (external raters) <input type="checkbox"/> student (self-evaluation) <input type="checkbox"/> parents/community members <input type="checkbox"/> other: _____ 	<ul style="list-style-type: none"> <input type="checkbox"/> numerical score <ul style="list-style-type: none"> • percentage scores • point totals <input type="checkbox"/> letter grade <input type="checkbox"/> developmental/proficiency scale <ul style="list-style-type: none"> • generic rubric • task-specific guide • rating scale <input type="checkbox"/> narrative report (written) <input type="checkbox"/> checklist <input type="checkbox"/> written comments <input type="checkbox"/> verbal report/conference

teachers to work together on scoring student products and performances and identifying anchors.



In addition to generic rubrics and task-specific guides, responses to open-ended questions and tasks may be evaluated using rating scales and checklists. While these scoring tools are easy to use, they generally do not provide the detailed, explicit criteria found in rubrics and guides.

Written and oral comments can also be used to evaluate student work because they enable teachers to clearly and directly communicate with their students about elements of quality, expected standards of performance, areas of strengths, and needed improvements. Although they are time-consuming, these methods allow teachers to provide specific evaluative feedback to students. The effectiveness of personal comments may be diminished if teachers provide only negative feedback (identifying errors or problems), make non-specific positive comments that do not acknowledge particular aspects of student effort and work, or make comments that do not address all important elements of quality.

Roles in Classroom Assessment

Who will be involved in evaluating student responses, products, or performances? As always, this guiding question should be answered with assessment outcomes, purposes, audiences, and methods in mind. The question also reminds us of the opportunity to involve others in the evaluation process. When students are engaged in applying criteria for self- and peer-evaluation, they begin to internalize elements of quality and performance standards in ways that can lead to improvements in the quality of their work and learning. Teachers

may also involve other staff members, parents, or community experts in the evaluation of student products (e.g., science fair projects) and performances (e.g., public speaking exhibitions).

Communication Methods

How will we communicate assessment results? A variety of methods can be used to communicate assessment results, including numerical scores, letter grades, developmental/proficiency scales, checklists, verbal and written comments/reports, and conferences. The choice of communication methods should be determined by assessment purposes and methods, evaluation methods, feasibility considerations (e.g., time required), and especially the audience for the assessment.

Conclusion

Assessment is an essential component of the teaching-learning process. Without effective classroom assessment, it is impossible for us to know whether our students are "hitting the target" — that is, learning what is important for them to learn. However, the significance of classroom assessment extends beyond the role of measuring learning. What we assess, how we assess and evaluate, and how we communicate results sends a clear message to students about what is worth learning, how it should be learned, what elements of quality are most important, and how well we expect them to perform. By considering the key questions and principles presented here, teachers will be better equipped to develop and use performance-based classroom assessments that provide fair, valid, and reliable information that will inform teaching and promote learning.

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