Chapter 14
Assessment of Classroom Learning
Overview

• The Role of Assessment in Teaching
• Ways to Measure Student Learning
• Ways to Evaluate Student Learning
• Improving Your Grading Methods: Assessment Practices to Avoid
• Technology for Classroom Assessment
The Role of Assessment in Teaching

• The primary purpose of assessment is . . .  
  • to provide teachers with diagnostic information they can use to increase student achievement and improve their instruction
The Role of Assessment in Teaching

• What Is Assessment?
  • Classroom assessment involves two major types of activities:
    – **Measurement**: Collecting information about how much knowledge and skill students have learned
    – **Evaluation**: Making judgments about the adequacy or acceptability of each student’s level of learning
The Role of Assessment in Teaching

• Why Should We Assess Student Learning?
  • Summative Assessment (Assessment *OF* Learning)
    – To provide a summary judgment of student performance over time and different tasks
  • Formative Assessment (Assessment *FOR* Learning)
    – To monitor student progress for remedial or supplementary instruction
The Role of Assessment in Teaching

• Why Should We Assess Student Learning?
  • Assessment OF Learning Compared to Assessment FOR Learning
    – Assessments of learning are summative judgments that are conducted to measure how much has been learned
    – Assessments for learning are formative judgments that are conducted to provide feedback to teachers and students to improve learning
  • Assessment AS Learning
    – Formative assessment, properly done, helps teachers become more effective and helps students become better learners
Ways to Measure Student Learning

• Written tests
  • Selected-response tests
  • Short-answer tests
  • Essay tests
• Performance tests
  • Direct writing assessments
  • Portfolios
  • Exhibitions
  • Demonstrations
## Written Tests

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Selected-Response Tests</th>
<th>Short-Answer Tests</th>
<th>Essay Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td>Efficiency</td>
<td>Relatively easy to write; Allow for breadth</td>
<td>Assess higher-level abilities</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td>Focus on verbatim memorization</td>
<td>Focus on verbatim memorization</td>
<td>Lack of consistency of grading</td>
</tr>
</tbody>
</table>

### Essay Tests
- Ask to discuss one or more related ideas according to certain criteria.
Ways to Measure Student Learning

- Written Tests
  - Constructing a Useful Test
    - Significance
    - Teachability
    - Describability
    - Reportability
    - Nonintrusiveness
Ways to Measure Student Learning

• Performance Tests
  • What Are Performance Tests?
    – Students required to use a wide range of knowledge and skills over an extended period of time to complete a task or solve a problem under more or less realistic conditions
# Types of Performance Tests

<table>
<thead>
<tr>
<th>Type of Assessment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Writing Assessment</td>
<td>Tests ask students to write about a specific topic under a standard set of conditions.</td>
</tr>
<tr>
<td>Portfolio</td>
<td>A folder that contains pieces of a student’s work, some of which demonstrates different stages of completion.</td>
</tr>
<tr>
<td>Exhibition</td>
<td>A display or showing of some product (painting, drawing, photographs, models).</td>
</tr>
<tr>
<td>Demonstration</td>
<td>Students are required to show how they can apply information or perform a task.</td>
</tr>
</tbody>
</table>
Ways to Measure Student Learning

• Performance Tests
  • Characteristics of Performance Tests
    – Emphasis on active responding
    – Degree of realism
    – Emphasis on complex problems
    – Close relationship between teaching and testing
    – Use of scoring rubrics
    – Use of formative evaluation
    – Responsiveness to cultural diversity
## Scoring Rubric for a Group Oral Presentation

<table>
<thead>
<tr>
<th>Level</th>
<th>Content</th>
<th>Audiovisual Components</th>
<th>Group Members</th>
<th>Audience Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>Accurate, specific, research-based, retold in own words.</td>
<td>Unique, add to presentation quality of materials used, are neat, present clear message.</td>
<td>Each member is equally involved in presentation and is well informed about the topic.</td>
<td>Maintain eye contact with presenters, ask many questions.</td>
</tr>
</tbody>
</table>

(Montgomery, 2000)
### Scoring Rubric for a Group Oral Presentation (Cont’d)

<table>
<thead>
<tr>
<th>Level</th>
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<th>Audiovisual Components</th>
<th>Group Members</th>
<th>Audience Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>Less detailed, lacking depth, limited number of sources used.</td>
<td>Support topic but do not enhance presentation, some attempts at originality, clear message.</td>
<td>Most members are active, most members are informed about the topic.</td>
<td>Some members of the audience not attending, questions are limited or off the topic.</td>
</tr>
</tbody>
</table>

(Montgomery, 2000)
### Scoring Rubric for a Group Oral Presentation (Cont’d)

<table>
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<tr>
<th>Level</th>
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</thead>
<tbody>
<tr>
<td>Minimal</td>
<td>Limited information, general, strays from topic, not presented in own words.</td>
<td>Inappropriate, no originality, detracts from presentation, message is confusing.</td>
<td>One or two members dominate, some members do not seem well prepared or well informed.</td>
<td>Audience is not attending, no questions asked or questions are off the topic.</td>
</tr>
</tbody>
</table>

(Montgomery, 2000)
Ways to Measure Student Learning

• Performance Tests
  • Some Concerns About Performance Tests
    – Teachers may be reluctant to use them because of the emphasis on standardized testing
    – More difficult to establish reliability and validity
Ways to Evaluate Student Learning

• Norm-referenced grading
  • The Nature of Norm-Referenced Grading
    – System assumes that classroom achievement will naturally vary among a group of heterogeneous students because of student differences and so compares the score of each student to the scores of the other students in order to determine grades
    – Also referred to as “grading on the curve” because under ideal circumstances distribution of grades takes the shape of a bell-shaped curve
Ways to Evaluate Student Learning

• Norm-Referenced Grading
  • Strengths and Weaknesses of Norm-Referenced Grading
    – Strengths
      ✓ System is useful for evaluating advanced levels of learning
      ✓ System is useful for selecting students for limited-enrollment programs
    – Weaknesses
      ✓ There are few situations in which the typical public school teacher can appropriately use it
Ways to Evaluate Student Learning

• Criterion-Referenced Grading
  • The Nature of Criterion-Referenced Grading
    – System in which grades are determined on the basis of whether each student has attained a defined standard of achievement or performance
Video: Assessment in the Middle Grades: Measurement of Student Learning
Ways to Evaluate Student Learning

• Criterion-Referenced Grading
  • Strengths and Weaknesses of Criterion-Referenced Grading
    – Strengths
      ✓ Provides more specific and useful information about student strengths and weaknesses
      ✓ Promotes the motivation to learn because it holds out the promise that all students can master most of a teacher’s objectives
    – Weaknesses
      ✓ Performance standards are arbitrary and may be difficult to justify
      ✓ Standards may fluctuate as a result of unnoticed variation
Ways to Evaluate Student Learning

• Criterion-Referenced Grading
  • A Mastery Approach
    – A form of criterion-referenced grading in which students are given multiple opportunities to master a set of objectives
    – Assumes all students can achieve if given good quality instruction, sufficient time to learn, and are motivated to learn
Ways to Evaluate Student Learning

• Criterion-Referenced Grading
  • Elements of a Mastery Approach to Grading
    – Go through a unit and pick out what you consider to be the most important points
    – List these points in some type of outline or structure
    – Distribute the outline at the beginning of a unit and emphasize its importance for testing
    – Consider making up a study guide related to the outline for students to organize notes
    – Use a variety of instructional methods and materials to explain and illustrate outline-related ideas
Ways to Evaluate Student Learning

• Criterion-Referenced Grading

• Elements of a Mastery Approach to Grading
  (cont’d)
  – Make up exam questions based on the outline and study guide questions
  – Arrange these questions into at least two (preferably three) alternate exams for each unit of study
  – Make up tentative criteria for grade levels for each exam and for the entire unit or report period
  – Test students either when they come to you and indicate they are ready or when you feel they have all had ample opportunity to learn the material
Ways to Evaluate Student Learning

• Criterion-Referenced Grading
  • Elements of a Mastery Approach to Grading (cont’d)
    – Grade and return the exams as promptly as possible, go over questions briefly in class, and offer to go over exams individually with student
    – Schedule alternate exams and make yourself available for consultation and tutoring the day before
    – If students improve their score on the second exam but still fall below the desired criterion, consider a safety valve option
    – To supplement exams, assign book reports, oral reports, papers, or some other kind of individual work
Improving Your Grading Methods: Assessment Practices to Avoid

- Worshiping averages
- Using zeros indiscriminately
- Providing insufficient instruction before testing
- Teaching for one thing but testing for another
- Using pop quizzes to motivate students
- Keeping the nature and content of the test a secret
- Keeping the criteria for assignments a secret
- Shifting criteria
- Combining apples and oranges
Technology for Classroom Assessment

• Electronic Gradebooks and Grading Programs
• Technology-Based Performance Assessment
• Digital Portfolios