Outline

- Definition of Assessment
- Types of Assessment
- Rubrics
- Classroom Assessment Techniques (CAT)
What is assessment?

(1) How well are students learning?
(2) How effectively are teachers teaching?
What is assessment?

(1) How well are students learning?
(2) How effectively are teachers teaching?

- Educational assessment is the process of documenting, usually in measurable terms, knowledge, skills, attitudes and beliefs.

- Assessment can focus on the individual learner, the learning community (class, workshop, or other organized group of learners), the institution, or the educational system as a whole.
Brainstorming

- Types of Assessment
<table>
<thead>
<tr>
<th>Curricular Priority</th>
<th>Type of Assessment</th>
<th>Type of Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worth being familiar with</td>
<td>Traditional Quizzes and Tests</td>
<td>Lecture, Recitation, Discussion</td>
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<tr>
<td>Important to know and do</td>
<td>Traditional Quizzes and Tests or Performance Tasks and Projects</td>
<td>Writing and Speaking Exercises, Un-graded in-class activities, Cooperative Learning, Peer to Peer Feedback, Case Method, Problem-Based Learning</td>
</tr>
<tr>
<td>Enduring understandings</td>
<td>Performance Tasks and Projects</td>
<td>Dialogue, Inquiry-Based Learning, Role Plays, Simulations and Games, Service Learning with Reflection</td>
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</tbody>
</table>

The category *Worth being familiar with* are those things we want our students to hear, read, view and encounter. The *Important to know and do* group describes the knowledge and skills that we believe are essential to the course. *Enduring understandings* are big ideas that transcend beyond the classroom, lie at the heart of the course, and are deemed important and interesting by the student.
Summative vs. Formative

- **Summative assessment** - generally carried out at the end of a course or project. In an educational setting, summative assessments are typically used to assign students a course grade. Summative assessments are evaluative.

- **Formative assessment** – generally carried out throughout a course or project. Formative evaluations provide information that can be used to improve course content, methods of teaching, and, ultimately, student learning. Formative evaluations are most effective when they are done frequently and the information is used to effect immediate adjustments in the day-to-day operations of the course. Some faculty incorporate a CAT into every class session. Formative assessments are diagnostic.
Objective vs. Subjective

- Assessment (either summative or formative) is often categorized as either objective or subjective.

- **Objective assessment** is a form of questioning which has a single correct answer.
  - Objective question types include true/false answers, multiple choice, multiple-response and matching questions.

- **Subjective assessment** is a form of questioning which may have more than one correct answer (or more than one way of expressing the correct answer).
  - Subjective questions include extended-response questions and essays.
Rubrics

- A rubric is a set of **criteria** and **standards** typically linked to learning objectives that is used to assess or communicate about performance.
  - Can communicate expectations of quality around a task
  - In many cases, rubrics are used to delineate consistent criteria for grading.
    - If the criteria are public, a rubric allows teachers and students alike to evaluate criteria, which can be complex and subjective.
  - A rubric can also provide a basis for self-evaluation, reflection, and peer review.
Rubrics usually in the form of a matrix with a mutually agreed upon negotiated “contract” or criteria for success.

The rubric focuses on stated objectives, which should be tied to the educational standards as established by the community, and should use a range or scale to rate the performance.
Rubrics can be many formats - a table, a % of total grade, numerical scale, or words.

Rubrics can be used for a large project, paper, presentation, group work, essay, or even an individual short answer questions.
Steps to create a rubric

1. Have students look at models of good versus “not-so-good” work.

2. List the criteria to be used in the rubric and allow for discussion of what counts as quality work.

3. Articulate gradations of quality. These hierarchical categories should concisely describe the levels of quality (ranging from bad to good). They can be based on the discussion of the good versus not-so-good work samples. Using a conservative number of gradations keeps the rubric user friendly while allowing for fluctuations that exist within the average range.

4. Practice on models. Students can test the rubrics on sample assignments provided by the instructor. This practice can build a student’s confidence by teaching them how the instructor would use the rubric on their work.

5. The final step is to use teacher assessment, which means using the same rubric the students used to assess their work.
Rubrics: for Accurate and Fair Assessment

- During the **pre-assessment phase**, rubrics are used to clarify expectations and grading methods with learners. As a result, learners can perform a self-assessment prior to submission of their work.

- During the **assessment phase**, rubrics help evaluators to remain focused on the preset standards of excellence and objectively assess the learner.

- During the **post-assessment phase**, learners are given a scored rubric with clear explanation of their grade. They are made aware of their weaknesses and strengths.
Classroom Assessment Techniques (CAT’s)

- **Formative** evaluation methods
  - can help you to assess the degree to which your students understand the course content
  - can provide you with information about the effectiveness of your teaching methods.

*Most are designed to be quick and easy to use.*

- CATs are intended more as basic feedback tools for monitoring how well students are learning the course content so as to make timely instructional adjustments, than as basis for grades (summative evaluation).
How do CATs improve teaching and learning?

- For faculty, CATs can:
  - provide day-to-day feedback that can be applied immediately
  - provide useful information about what students have learned without the amount of time required for preparing tests, reading papers, etc.
  - allow you to address student misconceptions or lack of understanding in a timely way *(building from A to Z)*
  - help to foster good working relationships with students and encourage them to understand that teaching and learning are on-going processes that require full participation

- For students, CATs can:
  - help develop self-assessment and learning management skills
  - reduce feelings of isolation, especially in large classes
  - increase understanding and ability to think critically about the course content
  - foster an attitude that values understanding and long-term retention
  - show your interest and caring about their success in your classroom
What kinds of evaluations are CATs designed to perform?

- Course-related knowledge and skills
  - including prior knowledge, recall and understanding; analysis and critical thinking skills; synthesis and creative thinking skills; problem solving skills; and application and performance skills

- Student attitudes, values, and self-awareness
  - including students' awareness of their own values and attitudes; students' awareness of their own learning processes; and course-related learning and study skills awareness

- Reactions to instruction methods
  - including student and peer reactions to teachers and teaching, class activities, assignments, and materials

Handout of table from http://www.celt.iastate.edu/teaching/cat.html
CAT’s: “Feedback Loop”

- Classroom Assessment is an ongoing process.
- By using a number of simple CAT’S that are quick and easy to use, teachers get feedback on student learning.
- Faculty then complete the loop by providing students with feedback on the results of the assessment and suggestions for improving learning.
- To check on the usefulness of their suggestions, faculty use Classroom Assessment again, continuing the “feedback loop.”
- As the approach becomes integrated into everyday classroom activities, the communications loop connecting faculty and students -- and teaching and learning -- becomes more efficient and more effective.
Handout with CAT Examples for...

- Assessing Prior Knowledge, Recall, and Understanding
- Assessing Skill in Analysis and Critical Thinking
- Assessing Skill in Synthesis and Creative Thinking
- Assessing Skill in Problem Solving
- Assessing Skill in Application and Performance
Final Question

- How would I go about assessing what you learned from this section?
Sources Used

- http://www.celt.iastate.edu/teaching/cat.html
- http://www.gettysburg.edu/about/offices/ees/institutional_analysis/assessment/faculty-resources/cats.dot
- http://www2.honolulu.hawaii.edu/facdev/guidebk/teachtip/assess-1.htm
- http://home.lagrange.edu/dlivingston/differentiated.htm
- http://www2.gsu.edu/~mstnrhx/457/rubric.htm
- http://www.schools.lth5.k12.il.us/aviston/KBLesson8.html
- http://jfmueller.faculty.noctrl.edu/toolbox/rubrics.htm