Assessing Learning

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## Types of (Approaches) to Assessment

There are many educational activities related to assessing learning: exercises, assignments, “grading” those incremental elements, tests & exams, course grades, and more. This document addresses three dimensions that help describe the scope of approaches to assessing learning.

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| Formative |  | Summative |
| Informal |  | Formal |
| Feedback |  | Evaluation |

## Formative vs. Summative Assessment

Formative assessment is designed to enhance learning by providing feedback to learners before instructors issue evaluations of performance. Formative assessments identify strengths and weaknesses of learners throughout a learning cycle and, therefore, aim to improve future performance. Formative assessments communicate learners' mastery of material and skills to internal stakeholders; i.e. learners and instructors.

Summative assessment is designed to assess readiness for progression by providing evaluations of performance. As the term suggests, summative assessment occurs at the end of an educational activity or learning cycle and is designed to evaluate the learner's overall performance (knowledge, skills sets, etc.). Summative evaluations serve as the basis for course grade assignments. They communicate learners' mastery of material and skills to external stakeholders; e.g., administrators and prospective employers.

## Informal vs. Formal Assessment

Informal assessment is performance driven rather than data driven. It is integrated with other learning activities; it is immediately actionable; and it is self-designed. Examples include polls, quick writes, such as one-minute papers, pre-tests. Informal assessment is most often used to provide formative feedback. As such, it tends to be less threatening and thus less stressful to learners. However, informal feedback is prone to high subjectivity or bias.

Formal assessment is data driven. It occurs after a learning cycle has ended; it is not immediately actionable; and it may be designed by others. Examples include exams, written assignments, such as essays, and other high­stakes activities. Most formal assessment is summative in nature and thus tends to be highly motivating to learners. It is, however, also associated with increased stress. Given the role of formal assessment in decision making, formal assessment should be held to higher standards of reliability and validity than informal assessments.

## Feedback vs. Evaluation (Course Grade)

Course grading is most closely related to assessment as a formal, summative, final, and product-oriented evaluation (judgment) of a learner's performance or achievement in a particular educational context. In some settings, this grading employs comparative measurement and sets up a competitive relationship among those receiving grades. Most proponents of assessment, however, would argue that grading and assessment – even the most formal and summative type of assessment – are two different things.

Simply put, feedback measures student growth and progress on an individual basis, emphasizing informal, formative, process-oriented, reflective feedback and communication between learners and teachers while grading evaluates student achievement on an individual basis, emphasizing summative and formal judgments of learners by teachers.

The following material is a partial chart of formative (and mostly informal) classroom assessment techniques: the kind of assessment for which each technique is intended, what each is called, how it is conducted, what to do with the information you collect, and an approximation of the relative amount of time each requires.

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| **Kind of Assessment** | **Name** | **How It’s Done** | **How to Use It** | **Time Needs** |
| Course Knowledge and Skills | One-Minute Paper | During the last few minutes of a class period, ask students to use a half-sheet of paper and write “Most important thing I learned today and what I understood least.” | Review before next class meeting and use to clarify, correct, or elaborate. | Low |
| Muddiest Point | Similar to One-Minute Paper but only ask students to describe what they didn’t understand and what they thing might help. | Same as One-Minute Paper. If many had the same problem, try another approach. | Low |
| Chain Notes | Pass around a large envelope with a question about the class content. Each student writes a short answer, puts it in the envelope, and passes it on. | Sort answers by type of answer. At next class meeting, use to discuss ways of understanding. | Low |
| Application Article | During the last 15 minutes of class, ask students to write a short news article about how a major point applies to a real-world situation. An alternative is to have students write a short article about how the point applies to their major. | Sort articles and pick several to read at next class, illustrating range of applications, depth of understanding, and creativity. | Medium |
| Dual Journal Entry | Ask students to draw a line down the center of a piece of paper. Left side is used to record info (take notes, summarize text, etc.) and right side is used to record personal reflections about or reaction to material on left. Each side is completed simultaneously. | Read entries and address interesting points that students raise, particularly the values and concerns they express so that students see more clearly how and why they respond as they do. | Medium |
| Attitudes, Values, and Self-Awareness | Journals | Ask students to keep journals that detail their thoughts about the class. May ask them to be specific, recording only attitudes, values, or self-awareness. | Have students turn in the journals several times during the semester so you can chart changes and development. | Medium |

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| **Kind of Assessment** | **Name** | **How It’s Done** | **How to Use It** | **Time Needs** |
| Reactions to Instruction Methods | Exam Evaluations | Select a test that you use regularly and add a few questions at the end which ask students to evaluate how well the test measures their knowledge or skills. | Make changes to the test that are reasonable. Track student responses over time. | Medium |
| Student Rep Group | Ask students to volunteer to meet as a small group with you on a regular basis to discuss how the course is progressing, what they are learning, and suggestions for improving the course. | Some issues will be for your information, some to be addressed in class. | High |
| Suggestion Box | Put a box near the classroom door and ask students to leave notes about any class issue. | Review and respond at the next class session. | Low to Medium |
| Peer Review | Work with a willing colleague, pick a representative class session to be observed, and ask the colleague to take notes about his/her impression of the class, your interactions with students, and your teaching methods. | Decide method with the colleague. Discussion is best, but a written report may be more useful in the long term. | High |

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