

Formative Assessment, Diagnostic Assessment and Summative Assessment

FORMATIVE ASSESSMENT

The goal of Formative Assessment is to monitor student learning so as to provide continuous feedback that instructors and students can use to improve their teaching and learning respectively. Formative assessment is, thus a two-way ongoing assessment process where faculty gather information on student performance while learning is in progress, and provide feedback to students based on faculty observations on how students can meet or exceed established program learning outcomes. Feedback provided to students include areas they are doing well in as well as those other areas they need to improve upon. Students incorporate provided feedback to improve performance in a course/program before a formal assessment (graded summative assessment) is done at the end of the term. Thus, feedback provided to students using formative assessment are generally not graded or carry little weight towards the final course grade.

For formative assessment to be effective, faculty need to clearly stipulate the expected learning goals and outcomes and communicate these to students. Based on the expected outcomes, regular feedback is provided to students during the course of the program to help them meet or exceed established learning outcomes.

Formative assessment does not involve the grading of student work. Rather, it is the provision of feedback on how students can improve upon competencies, skills, and knowledge, before they are formally graded at the end of the course or program on the particular student learning outcomes being assessed that term. At the end of the term, student work is assessed using summative assessment measured against expected outcomes to determine whether or not they were able to improve their performance based on feedback provided.

More specifically, formative assessment:

- Helps students identify their strengths and weaknesses and target areas that need work
- Helps faculty identify areas where students are struggling and address those problems immediately

Formative assessments are generally *low stakes*, which means that they have low or no point value.

Examples of Formative Assessment

- Examples of formative assessment include reviewing students' projects, papers, assignments, reports and providing constructive feedback. The feedback could come in the form of comments.

Asking students to:

- Draw a concept map in class to represent their understanding of a topic
- Submit one or two sentences identifying the main point of a lecture or presentation
- Turn in a research proposal for early feedback

DIAGNOSTIC ASSESSMENT

A diagnostic assessment is a form of pre-assessment where faculty can evaluate students' strengths, weaknesses, knowledge and skills before their instruction formally begins. Thus, faculty are assessing students' level of understanding of the subject matter to make a determination on where to start course/program content delivery. Diagnostic assessment helps both faculty and students. Faculty are able to determine what students already know and develop lessons accordingly. Results of the assessment may also help direct remediation support for students that need it to get them caught up with the rest of students in the course/program. With this form of assessment, faculty can plan meaningful and efficient instruction and can provide students with an individualized learning experience.

Diagnostic assessments include sets of written questions (multiple choices or short answers) that assess a learner's current knowledge base or current views on a topic/issue to be studied in the course. It can, however, refer to an assignment written both at the beginning (pre-test) and end (post-test) of a course. In other words, diagnostic assessment focuses on the student's understanding of the subject matter prior to it being introduced/taught to the student and after the subject matter has been introduced/taught.

The post-course assessments then can be compared with pre-course assessments to show students' potential improvement in certain areas. These assessments allow the instructor to adjust the curriculum to meet the needs of current—and future—students.

Examples of diagnostic assessment include:

- Pretests done by faculty prior to program content delivery
- Use of pre-tests conducted by commercial entities like ETS, SAT etc.
- Diagnostic questionnaires administered to students
- Instructor designed assessment tools
- Error analysis of progress on literacy monitoring data
- Phonics inventory
- Running records
- Analysis of student work (e.g. classroom assignments, work samples, & tests, etc.)
- Observations and anecdotal notes

SUMMATIVE ASSESSMENT

The goal of summative assessment is to evaluate student learning at the end of an instructional unit by comparing student performance against some standard benchmark (a set target). Summative assessments are often high stakes, which means that they have a high point value. They serve as the ultimate assessment of student performance on a particular student learning outcome (SLO) in a given subject area.

For summative assessment to work, faculty need to clearly identify program goals and learning outcomes coupled with the development of rubrics on how assessments are to be done. The expected outcomes and criteria for assessment need to be clearly communicated to students at the

beginning of the course or program. Summative assessment activities should focus on particular course or program SLOs and not be a simple passing grade on a course final exam.

Examples of summative assessments include learning outcome measures embedded in:

- A midterm exam
- A final project
- A final paper, and or
- A senior recital

Information from summative assessments can function formatively as well when faculty or students use it to guide their efforts and activities in subsequent courses to improve teaching and learning.