

ASSESSMENT: FORMATIVE AND SUMMATIVE

Assessment is any mechanism used in a course to provide feedback and measure student learning, divided into two sub-categories: formative and summative.

Formative assessment is *assessment for learning* that is primarily used to inform a student (through feedback, by verbal, written or other means) about their learning and progression towards the requirements to successfully complete the course. Typically, formative assessment is not assigned a grade or if it is, it has a low value.

Forms of formative assessment:

- a. *Classroom or embedded assessment* – incorporated into instructional activities, such as using personal response systems (iClickers), or classroom assessment techniques. Within a lesson plan for a class, *pre-assessment* and *post-assessment* are used. Pre-assessment is a diagnostic used at the beginning of class to determine what students know about concepts for that lesson. Post-assessment determines if students reached the intended learning outcomes set for that lesson.
- b. *Peer-assessment* – students assess other students work with no value. There is much research about peer-assessment and most agree on two things: do not assign grades to peer-assessment, and when used as formative assessment, peer-assessment is very effective and contributes to students' ability to self-assess.
- c. *Self-assessment* – students are required to assess their work against certain standards, such as a rubric, provided by the instructor. This provides an opportunity for students to reflect on their work to see how they can improve.

Summative assessment is *assessment of learning* that is graded. Many forms of summative assessment exist but increasingly *authentic assessment* methods are being used because they more accurately represent how student learning will be used in practice (Wiggins, 1998). For example, according to Wiggins (1998), authentic assessment has the student 'do' the subject by simulating real-world contexts so that students can actually apply the subject matter.

How they work together

Each summative assessment is supported by formative assessment(s). The following provides an example of how formative assessments support the final summative assessment:

Summative assessment

- 5-page double-spaced paper (15% of total grade)

Formative assessment in support of the summative assessment

- Choose topic, using one sentence, and hand in to instructor (third week of course) (no grade assigned)
- Annotated bibliography with at least three disciplinary resources (one month before due date) (no grade assigned)
- Peer feedback, rough draft brought to class, guided questions provided, and peers provide feedback based on guided questions (two weeks before due date) (3% assigned)

- Paper due, but before students hand it in, they are asked to write a letter on the back that begins with Dear Dr. (Name Here), and then describes the main point in their paper and how they think they did on it (Svinicki & McKeachie, 2011). When this method is used, most students self-declare if they did well or not and why. This provides an opportunity for students to enter into a conversation with the instructor about their work and to share responsibility in assigning the grade. (12% assigned)

As the above example illustrates, some formative assessment can have low value grades assigned.

In the table below, a list of possible formative and summative assessments is provided. Despite being separated, some types of assessment can be both formative and summative, depending on the learning outcomes for the course.

Examples of types of formative and summative assessment

Formative	Summative
Classroom assessment techniques	Completing structured summaries of readings
Bullet point summaries	Concept maps
Small writing pieces	Exams
Journals	Posters
Games	Essays
Summaries	Multiple-choice
Quiz	Projects

Adapted from Knight (2001)

References

Knight, P. (2001). *A briefing on key concepts: Formative and summative, criterion and norm-referenced assessment*. York: Learning and Teaching Support Network Generic Centre.

Svinicki, M. & McKeachie, W. J. (2011). *McKeachie's teaching tips: Strategies, research, and theory for college and university teachers*, (13th ed.). Belmont, CA: Wadsworth.