

Assessment METHODS

What are assessment methods?

Assessment methods are the strategies, techniques, tools and instruments for collecting information to determine the extent to which students demonstrate desired learning outcomes. Several methods should be used to assess student learning outcomes. See the Assessment Methods Table for an overview of some commonly used direct and indirect methods of assessment.

Why is it important to use multiple methods?

Relying on only one method to provide information about the program will only reflect a part of students' achievement. Additionally, SLO may be difficult to assess using only one method. For each SLO, a combination of direct and indirect assessment methods should be used. For example, responses from student surveys may be informative, however, when combined with students' test results they will be more meaningful, valid, and reliable.

What are direct and indirect methods of assessment?

Direct methods of assessment ask students to demonstrate their learning while indirect methods ask students to reflect on their learning. Tests, essays, presentations, etc. are generally direct methods of assessment, and indirect methods include surveys and interviews.

Can grades be used for assessment?

Even though course grades are a source of information about student achievement, they are generally insufficient in measuring the student learning outcomes of the program. Grades may not identify whether the SLO have been achieved, may include factors not related to SLO such as class participation, and faculty members may differ in their grading policies and practices. Considering these limitations, however, grades MAY be able to be used for program assessment IF they relate to the program's SLO and if grading methods are consistent across program faculty and courses. There is a book dedicated to the use of grades as an assessment measure. (Walvoord, Barbara, & Anderson, Virginia Johnson. (1998). *Effective grading: A tool for learning and assessment*. San Francisco: Jossey-Bass.)

What are embedded assessment methods?

Embedded assessments utilize existing student course work as both a grading instrument as well as data for assessing SLO. Embedded assessments are also referred to as "classroom-based" or "continuous" assessments. Embedded assessments can assess individual student performance, the course, or the program if the information is aggregated; they can be formative or summative, quantitative or qualitative. If embedded assessments are properly designed, students should not be able to tell whether they are being taught or assessed. For example, as part of a course, each student completes a research paper that is graded for content and style, but is also assessed for advanced ability to locate and evaluate Web-based information (as part of a college-wide outcome to demonstrate information literacy).

What existing information can be used for program assessment?

There may be numerous types of course work that can be utilized for the assessment of SLO. Some modifications may be made to the existing assignments in order to more directly assess the SLO of the program. Additionally, a rubric may be developed for instructors to use for grading and scoring the assessment.

Below are some examples of information that may already be collected by programs:

- Course exams
- Course assignments/projects
- Essays, written exams, research papers, etc.
- Second year assignments or projects, capstone

When reviewing existing course material to determine whether it can be utilized for the assessment of student learning outcomes, consider asking:

- Does assessment method/instrument answer (assessment) questions?
- Does it yield the information/data needed to understand how students learn and what can be improved?
- What revisions might be necessary?
- Are there other or additional assessment tools that are needed?
- Are there other departments that might benefit from knowing about the tools being used?

Which assessment method should be used for assessment?

Each program will select the assessment methods that will provide the most useful and relevant information for the purposes that the program and its faculty have identified. When selecting which assessment methods to use, consider what questions need to be answered, the availability of resources, and the usefulness of the results. Programs may find it valuable to identify what information currently exists in the program that can be utilized as well as what assessment methods have been used for past assessments.

Below are several guidelines to follow when selecting assessment methods:

- Collect information that will answer the program's questions
- Use multiple methods to assess each student learning outcome
- Include both indirect and direct assessment methods
- Include both qualitative and quantitative methods
- Choose methods that allow the assessment of both strengths and weaknesses
- Utilize capstone courses or "second-year" projects/assignments to directly assess student learning outcomes
- Use established accreditation criteria/standards when developing the assessment plan

The above guidelines are adapted from University System of Georgia: Task Force on Assessing Major Area Outcomes, Assessing Degree Program Effectiveness (1992); and Western Carolina University, Assessment Resources Guide (1999).

What is an assessment (methods) "map"/matrix?

An assessment "map"/matrix is a tool to match the student learning outcomes to assessment methods. This process ensures that all SLO will be assessed using a variety of methods. Completing such a "map"/matrix may assist programs in the developing comprehensive and effective assessment plans. (A template of an Assessment Methods "Map"/Matrix is included.)

Assessment Methods

Method	Description	Direct or Indirect Data
Alumni Survey	Surveying program alumni can provide information about program satisfaction, preparation (transfer or workforce), employment status, skills for success. Surveys can ask alumni to identify what should be changed, altered, maintained, improved, or expanded.	Indirect
Capstone Project or Course	A capstone project or course integrates knowledge, concepts, and skills that students are to have acquired during the course of their study. Capstones provide a means to assess student achievement across a discipline.	Direct
Certification or Licensure Exam	These standardized tests are developed by outside, professional organization to assess general knowledge in a discipline.	Direct
Competitions (Juried)	External reviewers score, judge the performance, work, etc. of students	Direct
Course Evaluation Survey	Course evaluations assess student experience and satisfaction with an individual course and are generally administered at or near the end of the semester. They provide the faculty, department, and institution with student perceptions of the classroom aspect of their educational experience.	Indirect
Embedded Techniques	Embedded assessment techniques utilize existing student course work as both a grading instrument as well as data in the assessment of SLO.	Direct
Employer Survey	Programs can survey employers to determine if their graduates are satisfactorily skilled. Additional information to collect can include on the job skills, field specific information, etc.	Indirect
Entrance/Exit Interviews	Interviews are conducted with students when they enter college and when they leave – either through graduation or early departure. These interviews can be designed to measure SLO, but can also be used to learn about students’ perceptions, gather feedback, on various college services, activities, etc.	Direct
Exit Exam/ Comprehensive Test	A comprehensive exam given near the end of the student's academic career (usually during the final semester prior to graduation). The exam is generally given to determine a student’s acquisition and application of a particular type or form of knowledge or skill, as well as the ability to integrate knowledge from various disciplines. The exam can be written, oral, or a combination.	Direct
Focus Groups	A series of structured discussions with students who are asked a series of open-ended questions designed to collect data about beliefs, attitudes, and experiences.	Indirect
Graduate Survey	An assessment of a student’s overall satisfaction with his or her collegiate experience and learning	Indirect
Institutional Data	Review both program and student data that is collected at the institutional level. Data can include program enrollment, retention, student GPA, etc.	Indirect
Locally Developed	A test that is developed within the institution to be used	Direct

Tests	internally. The test is typically administered to a representative sample in order to develop local norms and standards	
"Maps" and/or Matrices	A map/ matrix is a grid of rows and columns that organizes information that can be used for assessment purposes by summarizing relationships between goals, SLO, courses, syllabus outcomes, course work, assessment methods, etc. Maps/matrices can be used to review curriculum, select assessment methods, make comparisons, etc.	Indirect
Observations	Information can be collected while observing "events" such as classes, social gatherings, activities, group work, study sessions, etc. Observation can provide information on student behaviors and attitudes	Indirect
Performance	Students can be evaluated on participation in campus and/or community events, volunteer work, presentations, clinical, internships, musical or art performances, etc. The performance of students is rated/scored using a rubric/scoring guide.	Direct
Portfolio	Students' work is collected throughout a program which is assessed by faculty using a common scoring guide/rubric. Portfolios may contain research papers, reports, tests, exams, case studies, video, personal essays, journals, self-evaluations, exercises, etc.	Direct
Pre & Post Tests	Typically an exam is administered at the beginning and at the end of a course or program in order to determine the progress of student learning	Direct
Reflective Student Essays	Reflective essays can be used as an assessment method to determine student understanding of course content and/or issues as well as students' opinions and perceptions	Direct/ Indirect
Rubrics/ Scoring Guides	Rubrics/scoring guides outline identified criteria for successfully completing an assignment and establish levels for meeting the criteria. They can be used to score everything from essays to performances.	Direct
Standardized Tests	A test that is developed outside the institution for use by a wide group of students using national or regional norms	Direct
SWOT Analysis	A facilitated analysis of the internal strengths & weaknesses of the course, program, department as well as the external threats & opportunities	Indirect
Syllabus Review	Reviewing a syllabus involves determining if the course is meeting the goals and outcomes that have been established	Indirect

Assessment Methods "Map"/Matrix

Assessment Method	SLO	SLO	SLO	SLO
National exam				
Locally developed exam				
Capstone course				
Embedded assessment				
Portfolio				
Performance				
Pre & post tests				
Course evaluation survey				
Graduate survey				
Alumni survey				
Employer survey				
External review				
Other...				

C indicates "current use"

F indicates "future use"

P indicates "past use"