

Quick Guides

Academic Units: Assessment Measures

Assessment measures are the instruments or tools by which student learning will be evaluated to determine if the desired outcome has been achieved. Generally, all measures fall into one of two categories: either direct assessment or indirect assessment. Direct assessment measures specifically evaluate the observable skills, knowledge, values or beliefs of students completing a program or processes of a department. Indirect measures differ in that they are concerned with students' or clients' experiences, opinions, or perceptions, rather than their observable knowledge and skills.

Selecting appropriate measures for assessment is an essential step in ensuring the success of the assessment process. The selection of assessment measures should

- reflect the culture of the program and provide decision makers with useful information.
- be simple to use, require little extra time or effort, and still provide data that are easily interpreted and are not ambiguous.

Using multiple assessment measures is recommended for each learning outcome. By using more than one measure, different components of one outcome can be assessed with a high level of accuracy and authority. Ideally, a variety of direct and indirect measures should be used.

An inventory of existing sources of data is useful before adding any measures to the assessment plan. It is also valuable to determine beforehand if there are available resources to assist in data collection. When possible, avoid selecting assessment measures that require complex data collection techniques.

Some examples of assessment tools or instruments for direct and indirect measures are listed below.

Direct measures

The following is a list of examples of measures for evaluating by direct observation, student behavior, skills, knowledge, or values:

Rating of student-generated artifacts using a standard rubric

- Capstone course assignments
- Capstone projects
- Case studies, hypothetical situation responses
- Course-embedded assignments (standard across sections)
- Portfolio assignments (standard across sections)
- **Research papers**
- Published manuscript or conference presentation content
- Juried performance or exhibit

Other

- Observations in class by an evaluator who is not the teacher
- Peer evaluation of practical skills (such as teamwork) using a standard rubric
- Clinical practice or internship skill assessment

Examinations and Tests (aligned to specific SLOs)

National exams or standardized tests

- Locally developed exams such as comprehensive exams
- Classroom examinations and tests (standard across sections)
- Pre-post tests
- Test-embedded questions (standard across sections)
- Licensure or certification exams

Indirect measures

The following is a list of examples of measures for gauging students' perceptions of their educational experience and what they have learned; or of students' and/or other stakeholders' opinions of programs and services.

Types of surveys used as indirect measures:

- National surveys such as Student Engagement at Research Universities (SERU)
- Student satisfaction surveys
- Alumni surveys
- Employer surveys
- UA's Graduating Senior Survey (results available OIRA Senior Survey Results at http://oira.ua.edu/d/content/reports/assessment-reports)
- Other student surveys, e.g. Advising Survey (results available OIRA Advising Survey Results at http://oira.ua.edu/d/content/reports/2016-advising-report
- Program or department level surveys
- Student self-rating surveys on specific SLOs (S⁵)

Other types of indirect measures

- Focus groups
- Advisory committees
- Structured interviews
- Student activity and study logs
- Reflections

After outcomes are written and performance criteria are established, identify the courses or learning experiences from which artifacts for assessment can be collected (e.g., papers, exams, reflections, presentations, etc.). Try to make artifacts used for assessment a part of the regular course work and learning activities in the curriculum rather than an additional task for students and faculty.

For example, capstone course experiences or senior projects are both excellent for directly assessing student learning outcomes. These projects may already be a part of the curriculum and provide students a place to demonstrate the ability of absorbing, applying and integrating experiences and knowledge that they have acquired throughout the program.

Click the following link to access additional information on some of the advantages and disadvantages of using different types of measures for assessment: <u>http://manoa.hawaii.edu/assessment/howto/methods.htm</u>

In combination with curriculum mapping, an assessment matrix is a useful tool for linking current assessment efforts to student learning outcomes. Assessment matrices can be used to identify various configurations of how outcomes are being measured. A simple example of an assessment matrix is shown below. *For more information on curriculum mapping, see Quick Guides: Curriculum Mapping [link].*

Outcomes Students will demonstrate	Graduating Senior Survey	Capstone Course Project	Portfolio	Focus Group
the ability to collect and interpret data, think critically, and conduct theoretically based inquiry	Indirect	Direct	Direct	
knowledge of human cultures based on an understanding of history, social situations, and social institutions;	Indirect	Direct	Direct	Indirect
proficiency in written communication skills		Direct	Direct	Indirect

Worksheet:

- 1. Using one of your program's SLOs, change it into a question. How well can students...
- 2. Using the verb as your guide, what are the ways that students can demonstrate that action?
- 3. Where in your program curriculum is significant, explicit attention given to the program's SLOs? Do the learning experiences Introduce (I) or Reinforce (R) concepts necessary to attain the SLOs? Or do they provide opportunities for mastery and assessment?

Course	SLO 1	SLO 2	SLO 3

- 4. In courses where mastery is expected, what assessment tools are used, (i.e. course exams, student presentations, portfolios, standardized tests, projects, etc.)?
- 5. How many of your program graduates do you expect to successfully demonstrate attainment of your SLO?
- 6. How do you define successful attainment?
- 7. Describe how often you plan to collect the artifacts (population or sample), how it will be evaluated, who will evaluate the artifacts, and when program faculty will analyze the results.