

Glossary of Terms Associated with SLO Assessment

Broad Terminology

Student Learning Outcome (SLO)	<p>What students are expected to produce by the end of a course, program, college experience, degree or certificate program, or set of interactions with student services. SLOs involve higher order thinking skills and are measurable. A robust SLO includes the following three elements:</p> <ul style="list-style-type: none">• Context or conditions under which performance will be assessed (e.g. test, essay, demonstration, class discussion, etc.)• Behavioral objective• Criteria, performance standards or primary traits for assessing performance <p>Thus, an SLO suggests an appropriate assessment and rubric for measuring the outcome.</p>
Core Competency	<p>A broadly-defined knowledge base and/or set of skills. Core competencies can be expressed as institution-level outcome (ILO) statements which describes what students are able to do at the end of their experience at the college. They serve as “folders” or “categories” under which course- and program-level learning outcomes are organized and aligned. They may be assessed indirectly via measures of course- and program-level student learning accordingly.</p>
Course-Level SLO	<p>What the student will be able to produce at the end of a course. This is the lowest level at which SLOs are usually assessed. Writing a course-level SLO involves considering the overarching goals of the respective course, matching these goals with a particular assessment method, and articulating these overarching goals in an SLO statement. Courses may have multiple SLOs.</p>
Course Objective	<p>A statement of what the students are expected to know or learn by the end of a course.</p> <p>These differ from SLOs in many ways:</p> <ul style="list-style-type: none">• they often focus on what the instructor does rather than what the student will be able to do (i.e. input rather than output);• they are often content-based and not necessarily competency-based• they are often not measurable or assessable
Institution Learning Outcome (ILO)	<p>What students are able to do at the end of their experience at the college.</p>

ILOs serve as “folders” or “categories” under which course- and program-level learning outcomes are organized and aligned. They may be assessed indirectly via measures of course- and program-level student learning accordingly.

Program

A set of courses which culminates in a degree, certificate, or preparation for degree or certificate

Program Learning Outcome (PLO)

What the student will be able to produce at the end of a program. This is the middle level at which SLOs are usually assessed. Writing a Program Learning Outcome involves considering the overarching missions of the respective program, matching these missions to courses in the program, and coming up with a cumulative assessment which may or may not be the same as a course-level assessment. Program Learning Outcomes, like core competencies, may also serve as “folders” or “categories” under which course-level SLOs are assessed; thus, Program Learning Outcomes may or may not be directly assessed. For student services, which has many modes of learning which cannot necessarily be readily divided into discreet units like courses can, this is the most common level at which SLOs are written and assessed.

Student Learning Outcomes Assessment Cycle

The process by which SLOs are identified, measured and analyzed, and the results used to improve student learning.

The three steps in the cycle are:

- *Identify*: Faculty meet and work together in identifying what the students should produce at the end of a set of learning experiences (be it at the course or program level). An SLO is then drafted, and an assessment plan written, which states what the assessment will be (i.e. how the SLO will be measured), and what the rubric will be (i.e. which standards will be used to determine attainment of the outcome.)
- *Assess*: The semester following the identification of the SLO(s) and drafting of the assessment plan, the proposed assessment is then run and the data collected.
- *Reflect*: In the third semester of the cycle, the data is compiled and the faculty come together again to discuss the results. This dialogue should include a discussion about the meaning of the results and how they can be used to improve student learning.

Processes Involved in SLO Development and

Assessment:

Assessment	<p>In simplest terms, assessment is the systematic collection and analysis of information to improve student learning. However, “assessment is not an end in itself but a vehicle for educational improvement” (AAHE, 1992). The purpose of assessment is not merely to gather information; the purpose of assessment is to foster improvement.</p> <p>Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance. When it is embedded effectively within larger institutional systems, assessment can help us focus our collective attention, examine our assumptions, and create a shared academic culture dedicated to assuring and improving the quality of higher education (Angelo, AAHE Bulletin, November 1995, p. 7).</p>
Assessment Instrument	The evidence of learning that the student will produce (e.g. test, essay, portfolio, demonstration) and which will be evaluated by faculty associated with a particular program with respect to a rubric.
Assessment Plan	A plan written in the first step of the cycle (<i>identify</i>) in which faculty draft an SLO for a course or program, outline how it will be assessed, and state how the resulting data will be used to improve student learning.
Dialogue	A group discussion among colleagues, often facilitated, which is designed to explore complex issues, greater group intelligence and facilitate group learning (ACCJC Standards Glossary). Dialogue is an essential process in SLO development.
Norming	A process in which faculty come to an agreement about how the rubric will be used and standards applied to evaluate assessments. The purpose is to avoid inter-rater error (i.e. large differences from evaluator to evaluator in how assessments are scored).
Pilot	A small-scale trial of an assessment instrument to test its validity and usability before the full-scale assessment is run.
Program Review	An analysis of a program’s performance with respect to particular indicators, including student learning outcomes.

SLOs are a natural fit in program reviews because for both, the goal is improvement (of student learning).

Rubric

A set of primary traits and guidelines for scoring and evaluating each assessment as agreed upon by a particular faculty group. A rubric makes explicit and specific statements about the expected qualities of performance at each point in the scale and for each primary trait or standard being evaluated. Rubrics help ensure consistency among raters (Oxnard College SLO Handbook, 2006).

Types of Assessment

Classroom Assessment

Simple, non-graded, anonymous, in-class activities that help instructors gather feedback from students on the teaching-learning process and determine how well their students are learning what they are being taught.

The purpose of classroom assessment is to provide faculty and students with information and insights needed to improve teaching effectiveness and learning quality. College instructors use feedback gleaned through Classroom Assessment to inform adjustments in their teaching. Faculty also share feedback with students, using it to help them improve their learning strategies and study habits in order to become more independent, successful learners (Angelo, T.A., 1991; see also Classroom Assessment Techniques (2nd ed.) by Angelo and Cross, 1993). Classroom assessment is a type of formative evaluation (see below).

Embedded Assessment

Collecting assessment data information within the classroom because of the opportunity it provides to use already in-place assignments and coursework for assessment purposes.

This involves taking a second look at materials generated in the classroom so that, in addition to providing a basis for grading students, these materials allow faculty to evaluate their approaches to instruction and course design. These assessments can be a part of the student's grade, but do not have to be (Oxnard College SLO Handbook, 2006).

Pre-Test/Post-Test

An assessment technique in which students are given an assessment at the beginning of the semester on material to be covered in the course to provide a baseline (pre-test). Then, students are given the same or a similar assessment at the end of the semester (post-test). This is a particularly valid way to show learning in a course because

prior knowledge is established through the pre-test; then it's possible to show learning that took place in the course itself (rather than some other course or prior knowledge) through comparing the pre- and post-test results.

Portfolio A collection of student work to show not only learning outcomes but also the progress or process of learning. Portfolios may be used not only as a course-level assessment but also at the program-level to show learning progress throughout a whole program.

Types of Evidence:

Direct Evidence Evidence that shows directly that a student has learned. Examples of direct evidence include essays, tests, portfolios, or demonstrations. Simply stated, direct evidence is produced by students.

Indirect Evidence Evidence that shows student learning indirectly, through which student learning can be inferred rather than directly demonstrated. Examples of indirect evidence are course grades, transfer and retention data, surveys, exit interviews, etc.

Formative Evaluation Evaluation for the purpose of *improvement*. Formative evaluation usually takes place *continually* throughout a lesson module, course, or program.

Summative Evaluation Evaluation that is used to show *learner achievement*. Summative evaluation usually takes place at the *end* of a lesson module, course, or program. Formative and summative evaluation should be used to complement each other.

Qualitative Evidence/Data Data/evidence that is narrative or descriptive in form. Qualitative evidence usually involves fewer cases than quantitative data, but shows much more specific information and tends to be very subjective.

Quantitative Evidence/Data Data/evidence that is numerical in form. Quantitative evidence usually involves a great number of cases and is used to show general patterns and trends rather than specifics. It tends to be much more objective.