An Introduction to Student Learning Outcomes

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Presentation Overview

- What is an SLO?
- What is the "SLO Process" at Rio Hondo College?
- Frequently Asked Questions
- Future Directions for SLOs at the College
- Closing Q & A
Some context first:

- **Goal** is a statement of intent or vision that is not necessarily measurable. A course description is an example of a goal.
- **Objectives** are small steps that lead toward the goal.
- **SLOs** are overarching, specific, observable characteristics, developed by local faculty, to determine that learning has occurred as a result of a specific course, program, activity, or process.
What is an SLO?

- The course objectives are a list of essential topics which are to be presented in the class
  - The emphasis of objectives is placed on the instructor and the course framework
- SLOs indicate skills and/or knowledge students are supposed to have gained through participation in the course
  - The emphasis here is clearly on the student
  - It’s not “What did I teach?” but rather “What have students taken out of the class?”
- This difference of perspective is the key to understanding SLOs and their role
What is an SLO?

- Consider the difference between objectives and SLOs for a Student Services program:
- The program’s objectives state the purpose of the program and how it functions relative to students and the College
- SLOs, by contrast, are used to evaluate the degree to which students have benefited from their involvement in the program
Examples

Consider the three items below. Identify each as a goal, objective, or SLO.

1. This course introduces senior engineering students to design of concrete components of structure and foundation and integrating them into overall design structures.
2. Given a scenario concerning a specific population, the student will define and assess the health status of that population and identify factors influencing the use of health services.
3. The student will understand the use of commas.
Students will be able to analyze a documented nutritional problem, determine a strategy to correct the problem, and take action on the devised strategy.

Given a two- to three-component mixture of chemical compounds, students will devise and execute an efficient procedure which isolates each compound in a pure form.

Given data, students will analyze information and create a graph that is correctly titled and labeled, appropriately designed, and accurately emphasizes the most important data content.
A good starting point for writing SLOs for a course is the “Exiting Skills” section of the course outline. These skills have already been written and agreed to by faculty and received the approval of the Curriculum Committee. The skills statements should be altered as necessary to produce a measurable outcome. In some cases, the exiting skill statement itself may be sufficiently descriptive (and measurable!) to serve as an SLO with little or no modification.
Writing SLOs: An Example

- I start with an exiting skill for Chemistry 131:
  “...Predict whether a specified reaction will occur spontaneously given appropriate thermodynamic data.”
- The statement is easily expanded upon and made into an SLO:
  “Given adequate quantitative and/or qualitative data describing a simple chemical system, students will determine whether or not a reaction will occur spontaneously and effectively explain how they came to this conclusion using appropriate terms and physical laws.”
  - Note that SLOs do not necessarily need to begin with the “Given such-and-such a problem/situation” construct
For programs—and Student Services programs in particular—the starting point for developing SLOs should be the program’s mission statement. The Mission Statement itself describes the values and functions of a particular program. The program SLO assesses the extent to which students have benefited from participation in the program. In other words, have students been able to use the knowledge and abilities gained in the program and put them to use to advance their education?
The Language of SLOs

- SLOs measure more complex skills than simply “knowing facts”
- SLOs generally contain “action verbs” which call upon higher-level thinking
- Bloom’s Taxonomy is an excellent resource for the construction of SLOs, as are many of the publications which are based on its ideas
- Bloom recognizes three domains of learning
  - Cognitive
  - Psychomotor
  - Affective
The Language of SLOs

- The Cognitive Domain
- Action verb handouts
Multiple SLOs are defined for each course. These SLOs are written by faculty and agreed to within each area. In writing the SLO, acceptable assessment methods and a descriptive standard for proficiency are developed. For each course, a subset of these SLOs are designated as “active”; the remainder are “not active.”
Assessment data is collected for each of the “active” SLOs each semester
After collecting 1-2 semesters’ worth of data, the assessment results are analyzed by faculty
The faculty develop an action plan to improve student learning based on the results collected
If assessment results are deemed satisfactory, the SLO may be deactivated and replaced by one of the “not active” SLOs
A similar set of procedures is followed for programs
For the purposes of SLOs, the following are designated as programs:

- General Education
- Basic Skills
- Student Services programs

Course data is the primary source of assessment data for General Education and Basic Skills SLOs

Student Services assess data which is most appropriate to their particular program
The SLO Process at Rio Hondo

- SLOs must also be defined for each degree and certificate
- Assessment may be based on course data, results of licensing exams, final projects and/or portfolios, and other relevant sources of information
SLOs in Context

Program Review & Institutional Planning: Targeted Needs Assessment

- General Education & Basic Skills
- Degree & Certificate
- Community/Non-Credit
- Student Services
- Non-Instructional Programs
- Course-Level
Frequently Asked Questions

- Why do we have to do this?
- Aren’t SLOs just a passing trend like all the other education fads we’ve seen come and go?
- How many SLOs must a course have?
- Do all faculty teaching a course assess the same SLOs?
- Do all faculty have to use the same assessment tool for an SLO?
- How often do we need to assess an SLO?
- Will assessment data be used to evaluate my teaching?
- Do SLOs interfere with Academic Freedom?
Future Directions

- General Education & Basic Skills SLOs
- Degree & Certificate SLOs
- Student Services SLOs
- Additional SLO training
- Links with Institutional Planning
- Quality Control for SLOs
- SLOlutions software
Many of the definitions and examples cited in this presentation can be attributed to Janet Fulks at Bakersfield City College and her extensive handouts on assessment. The document “SLOs and Assessment: Mapping the Route to the Lost Ark,” presented at the 2008 Curriculum Institute by Marcy Alancraig, Janet Fulks, and Michael Heumann was another major source of information and examples.
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Thank you for participating!