Developing and Assessing Student Learning Outcomes

Presented by:
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Agenda

• Introduction
• Ice Breaker
• Why should we care about SLOs?
• What are SLOs?
• Writing Good SLOs
• SLO Relationship
• Assessment of SLOs
• SLO Assessment Cycle
• Activity
Why should we care about Student Learning Outcomes

• We assess student learning because students are our priority

• Improve the quality of education

• Provide accountability
HCC at risk populations

• First-generation students

• Returning adult students

• Distance education students
Faculty Concerns

• We already have grades.
• Just tell me what we need for SACS
• This is additional work
• I don’t know how
• When will this go away?
• BLECK
Student Learning Outcomes (SLOs) Defined

The knowledge, skills and abilities a student has attained at the end (or as a result) of his or her engagement in a particular set of higher education experiences.

— CHEA, 2003
Question

• What major college activities are going on right now that focus on SLOs?

- Quality Enhancement Plan (QEP)
- Achieving the Dream (ATD)
- Mathematic Assessment Performance Scholarship (MAPS)
- Learning outcomes for student services
Good Student Learning Outcomes

• Learning over time

• Learning within a context
Good Student Learning Outcomes

• It must be a measurable behavior

• What do you want students to do or produce as a result of your program? (i.e. Because of my program, students will ...)

• Evaluate to make sure that the learning outcomes are appropriate for the course level
Good Student Learning Outcomes

• Learner-centered
• Key to course/program
• Relies on active verbs
• Meaningful
• Measurable- can be assessed qualitatively and quantitatively
• Can be written for a course, program, or institution
Bloom’s Taxonomy

<table>
<thead>
<tr>
<th>KNOWLEDGE</th>
<th>COMPREHENSION</th>
<th>APPLICATION</th>
<th>SYNTHESIS</th>
<th>ANALYSIS</th>
<th>EVALUATION</th>
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<td>Describe</td>
<td>Complete</td>
<td>Appraise</td>
<td>Argue</td>
<td>Arrange</td>
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<td>Discuss</td>
<td>Compare</td>
<td>Categorize</td>
<td>Assess</td>
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<td>Name</td>
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<td>Comply</td>
<td>Choose</td>
<td>Analyze</td>
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<td>Explain</td>
<td>Construct</td>
<td>Compose</td>
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<td>Formulate</td>
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<td>Repeat</td>
<td>Distinguish</td>
<td>Evaluate</td>
<td>Complete</td>
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<td>State</td>
<td>Formulate</td>
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<td>Tell</td>
<td>Practice</td>
<td>Inspect</td>
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<td>Prepare</td>
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<td>Tell</td>
<td>Sketch</td>
<td>Plan</td>
<td>Support</td>
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<td>Translate</td>
<td>Question</td>
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<td>Underline</td>
<td>Use</td>
<td>Test</td>
<td>Setup</td>
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Writing Good Student Learning Outcomes

• (Knowledge) By the end of the course, students will be able to recall . . .

• (Skills) By the end of the course, students will be able to do . . .

• (Abilities) By the end of the course, students will be able to demonstrate their ability to. . .
Writing Good Student Learning Outcomes

• Format
  – Action verb
  – Object
  – Target
  – Modifiers
Improving SLOs

- The student should know the historically important systems of psychology.
- Students will know the psychoanalytic, Gestalt, behaviorist, humanistic, and cognitive approaches to psychology.
Improving SLOs

• Students will know the psychoanalytic, Gestalt, behaviorist, humanistic, and cognitive approaches to psychology.

• The student will be able to recognize and articulate the foundational assumptions, central ideas, and dominant criticisms of the psychoanalytic, Gestalt, behaviorist, humanistic, and cognitive approaches to psychology.
Improving SLOs

• The student will appreciate the benefits of eating healthy foods.

• Students will be able to analyze a nutrition food label and explain various components of that food label and their relation to healthy food choices.
Improving SLOs

• The student will strengthen his/her writing skills

• Students will be able to apply principals of logical argument in their writing.
# Ten Question Checklist

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>1. Is it measurable?</td>
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<td>2. Is it important?</td>
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<td>3. Do we have a means of assessment (or is it creatable)?</td>
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<td>4. Is it discipline-specific?</td>
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<td>5. Is it student focused?</td>
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<td>6. Is it clear to both the instructor and the student?</td>
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<td>7. Does it support the unit plan?</td>
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<td>8. Is it a result of the program work?</td>
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<td>9. Can we use the results to improve upon the program?</td>
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<tr>
<td>10. Does it include an action verb?</td>
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Course Student Learning Outcomes

• Outcomes that describe what a student is to learn for that particular course

• Course SLOs should be included in the course syllabus
Program Student Learning Outcomes

• Overarching concepts that span SLOs in several courses

• Individual course learning outcomes are not designed as program level but can be a program level if it has an overarching reach
Program Level

• Holistic Picture
• Not just the courses taken, but the total learning experiences in the program
• Small number (4-8 outcomes)
• Product of input and discussion by all faculty
Overlapping Course SLOs become Cluster/Program SLOs

Program’s vision, mission, and goals

Student’s needs and goals

Institution mission, vision, and goals

Community expectations

Related professional expectations

Information taken from http://online.bakersfieldcollege.edu/COURSEASSESSMENT/Section_6_Program%20Assessment/Section6_4ProgramSLOs.htm on March 3, 2011
Layers of Outcomes

- Institutional Learning Outcomes
- Cluster/Program Learning Outcomes
- Course Learning Outcomes
Objectives vs. Outcomes

• Objectives are what the instructor aims to teach (intended outcomes)
  – Instructor-centered

• Outcomes are what we expect the student to learn (achieved outcomes)
  – Student-centered
Biology Example

• Objective
  – To understand and apply the scientific method

• Outcome
  – All students will be able to design experiments and interpret data according to the scientific method in order to evaluate a given hypothesis.
So close, why care?

• Focus on what students will be learning instead of what you are teaching

• Clear to the student what they are learning

• Encourages reflection of what you want the student to know
Types of Assessment

- Capstone projects
- Localized exams
- Observation rubrics
- State and national exams
- Portfolios
- Internships
- Projects
- Clinic Observation Rubrics
- Case studies
Direct and Indirect

• Outcomes can be assessed directly or indirectly

• Direct assessments are better for identifying measurable change in a student learning
Direct and Indirect

**Direct**
- Capstone assignments
- Licensing examinations
- Portfolios
- Standardized tests
- Case studies
- Rubrics
- Simulations

**Indirect**
- Student satisfaction
- Employer satisfaction
- Grades
- Retention rates
- Placement rates
- Exit interviews
- Reflective essays
Assessing Outcomes

- If it isn’t written down, it does not exist
- Faculty-driven
- Sustainable
- Set realistic goals
- Multiple measures
An Analogy: GPS

This is a student’s ability.
GPS: One Measure

Measurement 1

A student’s predicted ability could be anywhere on the circle.
GPS: Two Measures

A student’s predicted ability could be either of two points on the circle.
GPS: Three Measures

We know that this is the student’s ability.

Measurement 1

Measurement 2

Measurement 3

We know that this is the student’s ability.
Types of Assessment:
Formative vs. Summative

• Along the way?

• At the end?
Formative Assessment

• Can be thought of as “practice” assessments
• On-going throughout the term
• Instantaneous modifications to teaching to enhance learning
Summative Assessments

- Most common
- Evaluate effectiveness of the program
- Used at the end of a section, term, year
- Make judgments about the individual’s competency or mastery level
Formative and Summative Examples

Formative Examples
• Quizzes
• Portfolios
• Work Samples

Summative Examples
• Final Exams
• Standardized Exams
• National Credentialing Exams
Closing the Loop

4 Step Assessment Process

1. Identify outcomes
2. Assess learning
3. Analyze results
4. Provide evidence of improvement
NOTE

• It is equally important to know what does NOT work as much as what DOES work
Academic Student Learning Outcomes Assessment

Why assess? Assessments are tools by which to collect the data needed to explore results and ultimately improve upon the program by improving student learning. They analyze strengths and weaknesses of the program and how the organization within the program operates by comparing it to a larger framework. First, the learning outcomes and second, the context of the unit plan and mission of the college. It is the intent of the assessment to shed light on the data needed to assist the faculty in furthering their program.

Unit Functions: To organize findings and provide faculty support for a continuous systematic program to assess student learning outcomes, including the incorporation of outcomes and findings into the planning process.

The links in the left navigational panel direct you to the appropriate student learning outcomes assessment area.

Faculty Resources on Student Learning Outcomes:

- Program SLOs Relationship to course SLOs
- Student SLOs Relationship to course SLOs
- Best Practice Outcome Characteristic/HelpfulHints
- Example Outcomes
- Student Learning Outcome Checklist
Questions?