Learning outcomes or learning goals are goals that describe how students will be different because of a learning experience. More specifically, learning outcomes are the knowledge, skills, attitudes, and habits of mind that students take with them from a learning experience. (Suskie, 2018, p. 41)
Broad, Nebulous Terms to Avoid in SLOs

• Acknowledge
• Appreciate
• Aware of
• Believe
• Capable of
• Comprehend
• Conscious of
• Enjoy
• Experience

• Experience
• Familiar with
• Know/have knowledge of
• Learn
• Memorize
• Understand
# STEPS of SLO ASSESSMENT

<table>
<thead>
<tr>
<th>Identify goals and objectives/outcomes for learning.</th>
<th>Identify where in the “curriculum” the goals are addressed.</th>
<th>Gather information about how well students are achieving those goals.</th>
<th>Discuss, and use the information to improve learning.</th>
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<tbody>
<tr>
<td>(PLAN)</td>
<td>(TEACH)</td>
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<td>(ACT)</td>
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- **Identify where in the “curriculum” the goals are addressed.**
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- **Discuss, and use the information to improve learning.**
Cycle of Ongoing SLO Assessment

- Plan
  - Write Outcomes
- Do
  - Teach & Learn
- Check
  - Evaluate Student Work
- Act
  - Revise & Reinforce
Measuring Student Learning

Direct Measures
- Artifacts produced by students to demonstrate their learning or skills
- Expert assesses to determine if student is demonstrating SLO

Indirect Measures
- Signs that students are probably learning, often based on reports of perceived student learning
Examples of Direct Measures

Student Work

- Written work, performances, or presentations, scored using a rubric
- Research projects, case studies, presentations, theses, dissertations, oral defenses, exhibitions, and performances, scored using a rubric
- Portfolios
- Tests such as final exams in key courses, qualifying examinations, comprehensive exams
- Pre-post tests

Ratings of Student Skills

- Field experience supervisors or employers rate students on student skills using a rubric

Standardized Tests

- Achievement Tests in a Particular Field of Study (e.g. ETS Major Field Tests, ACAT Area Concentration Achievement Tests, GMAT, GRE Subject Tests)
- Licensure or Certification Exams
- Instruments to Measure Specific Skills (e.g. California Critical Thinking Skills Test)
Examples of Indirect Measures

### Student Response
- **Student Survey**: Students’ perceptions of their educational experiences and the institution’s impact on their learning.
  - List SLOs and ask, how well did you achieve each goal? What aspects of your education in the department helped you with your learning? What might the department do differently to help you learn more effectively?
- **Student Focus Groups**: held with representative students to probe a specific issue that might have been identified
- **For Freshmen and Seniors**: National Survey of Student Engagement (NSSE)

### Alumni, Employer, or Faculty-Staff Surveys
- Perceptions of student learning and the institutions’ impact on their learning
- **Alumni**: ACT Alumni Outcomes Survey

### Admission Rates into Graduate Programs
- What are our students’ acceptance rates?

### Placement Rates of Graduates into Appropriate Career Positions and Starting Salaries
- How do students fare after graduation?
Goals vs. Objectives/Outcomes

Goal:
Students will be critical thinkers

SLOs:
Students will be able to:
• Interpret an essay in the discipline
• Compare and contrast two theories
• Argue a thesis about...
Goals vs. Objectives/Outcomes

**Goal:**
Students will be interculturally competent

**SLOs:**
Students will be able to:
Basic Formula for Program/Unit-Level Student Learning Outcomes

As a result of participating in_____, students

By the time students graduate, they will be able to_______

Will be able to ________ (action verb)

Product/process/outcome
Characteristics of Program/Unit-Level Student Learning Outcomes

- Describes what students should be able to demonstrate, represent, or produce as a result of what and how they have learned in a program.

- Focuses on what you expect to see at the end (outcome) rather than what you plan to do or how it will be done.

- Focuses on the most important goals for students in your unit.

- Relies on an action verb that identify what students should be able to demonstrate, represent, or produce.