

## STUDENT LEARNING OUTCOMES 101

### **What do we mean by “student learning outcomes” (SLOs)?**

Student learning outcomes specify what students will know, be able to do or be able to demonstrate when they have completed or participated in a program/activity/course/project. Outcomes are usually expressed as knowledge, skills, attitudes or values that can, in some way, be measured or assessed.

### **What is the difference between learning “goals” and learning “outcomes?”**

Generally speaking, learning goals are broad aspirational statements about what we intend for our students to achieve, gain, accomplish, or understand as a result of successfully participating in a program of study, activity, course, or project. Because of the generality of these goal statements (e.g., develop strong critical thinking skills, become an effective problem-solver, etc.), learning goals are not always easily observed or measured and often may not be fully realized until well after the program, activity, course or project has ended. Well-written, mission-driven learning goals, however, provide a useful framework for identifying and articulating a set of more specific, observable and measurable learning objectives that support the broader learning goals of the program and/or the mission of the institution.

### **What are the characteristics of good SLOs?**

Good SLOs are those that specify an action demonstrated by the student that must be *observable and measurable*.

### **How can SLOs help students and organizations?**

Assessing SLOs...

1. Will help programs understand why, how, and where improvements to student learning should be made;
2. Will provide programs with feedback (e.g., Is your curriculum providing what it is supposed to? Are your students graduating with the skills and knowledge you think they are? What skills are students learning? Are these the skills we are actually teaching them?);
3. Will enable students to articulate what they are learning and have learned from attending Berea College, both inside and outside of their classrooms;
4. Will help students be able to explain what they can do and what they know, in turn, allowing them to better integrate their skills and knowledge with other courses and aspects of their education; and
5. Will enable students to better understand where they are learning particular knowledge, skills, attitudes or values throughout the College.

## How to Get Started:

1. Ask yourself: what are the most important things a student should know, be able to do or demonstrate after completing my program/course?
2. Make a list of these and try to write them as SLO statements using the examples and hints provided below. As much as possible, try to relate them to the broader College-wide Aims of General Education (e.g., <http://www.berea.edu/cataloghandbook/academics/academicprogram/gep/aims.asp>) and the paired learning goals stated in Berea's strategic plan (<http://www.berea.edu/president/documents/BBRevision--June%202011.pdf>).
3. Edit and review – refer to “How Do You Fix a Student Learning Outcome?” on this handout, paying careful attention to the verbs used in your SLOs.
4. Always ensure that the most recent version of your SLOs are on file with the Director of Academic Assessment.

### **HELPFUL HINTS:**

- Work with one or two people to draft SLOs--incorporating different perspectives helps.
- Review/edit statements with others in your department.
- Consult resources outside the department (e.g., the Director of Academic Assessment, Office of Institutional Research, etc.).
- Again, focus on a small number of learning outcomes that are most relevant to your services. Three to five may be plenty! (However, individual program requirements may vary.)
- Don't try to cover every domain. Focus on domains that are most applicable to your program.
- Be sure to specify any particular populations you may be assessing. For instance, programs may have some programs in which only certain students participate.
- Clearly differentiate SLOs (which are measures of what students have learned) from assessment of student satisfaction, program evaluation, and purely process measures such as attendance.

## WHEN WRITING STUDENT LEARNING OUTCOMES

1. Focus on a smaller number of high priority outcomes – this will lower the burden of assessment and record-keeping.
2. Put learning outcomes in broad categories.
3. Make outcomes as specific, focused, and clear as possible – general outcomes will be difficult, if not impossible, to measure!

## THE IMPORTANCE OF ACTION VERBS

1. **Action verbs result in overt behavior that can be observed and measured. Sample action verbs are:**

Analyze	Create	Examine	Operate	Review
Apply	Criticize	Explain	Organize	Revise
Argue	Critique	Formulate	Plan	Schedule
Arrange	Defend	Identify	Practice	Select
Assemble	Define	Illustrate	Predict	Solve
Assess	Demonstrate	Indicate	Prepare	State
Calculate	Describe	Interpret	Propose	Translate
Categorize	Design	Label	Question	Use
Choose	Develop	List	Rate	Utilize
Classify	Differentiate	Locate	Recognize	Write
Compare	Discuss	Manage	Repeat	
Compile	Distinguish	Memorize	Report	
Compute	Estimate	Order	Reproduce	

2. **Certain verbs are unclear and call for covert, internal behavior which cannot be observed or measured. These types of verbs should be avoided:**

Appreciate	Become familiar with	Learn
Know	Become aware of	Understand

3. **Examples – TOO general and VERY HARD to measure...**

- ...will appreciate the benefits of exercise.
- ...will be able to access resources at the University of Rhode Island.
- ...will develop problem-solving skills and conflict resolution.
- ...will be able to have more confidence in their abilities.

4. **Examples – Still general and HARD to measure...**

- ...will value exercise as a stress reduction tool.
- ...will be able to develop and apply effective problem solving skills that would enable one to adequately navigate through the
- proper resources within the university.
- ...will demonstrate ability to resolve personal conflicts and assist others in resolving conflicts.
- ...will demonstrate critical thinking skills, such as problem solving as it relates to social issues.

## 5. Examples – Specific and relatively EASY to measure...

- ...will be able to explain how exercise affects stress.
- ...will be able to identify the most appropriate resource that is pertinent to their university concern.
- ...will be able to assist roommates in resolving conflicts by helping them negotiate agreements.
- ...will demonstrate the ability to analyze and respond to arguments about racial discrimination.

## HOW DO I FIX A STUDENT LEARNING OUTCOME?

Shortcomings can typically be seen by asking two simple questions:

“CAN IT BE MEASURED?” and “IS LEARNING BEING DEMONSTRATED?”

Take a look at the following examples:

- *“Participants will understand the nine reasons for conducting a needs assessment.”*
- *“Student will arrive on time daily.”*

In the first example, learning is demonstrated, but this SLO will be difficult to measure. In the second example, the SLO can be easily measured but learning is not necessarily demonstrated.

We can rewrite these, however, to make the learning outcomes both measurable and demonstrative of learning:

- *“Participants will be able to list nine reasons for conducting a needs assessment.”*
- *“Student will be able to articulate the necessity of maintaining office hours as publicized.”*

Both of these SLOs answer the two questions. They are measurable and demonstrate that the student has learned!

## Template for Writing Learning Outcomes

### When writing student learning outcomes...

- Try using this template for writing learning outcomes:

As a result of completing \_\_\_\_\_,  
students will be able to \_\_\_\_\_.

*Ex: As a result of completing the Psychology Major, students will be able to design and conduct basic studies to address psychological questions using appropriate research methods and statistical analyses.*

### After creating learning outcomes, reference this checklist:

1. Does the outcome support the program objectives?	Y	N
2. Does the outcome describe what the program intends for students to know (cognitive), think (affective, attitudinal), and/or do (behavioral, performance)?	Y	N
3. Is the outcome important/worthwhile?	Y	N
4. Is the outcome:		
a. Detailed and specific?	Y	N
b. Measurable/identifiable?	Y	N
c. A result of learning?	Y	N
5. Does your curriculum provide opportunities that enable students to learn the desired outcome?	Y	N
6. Can the outcome be used to make decisions on how to improve the program?	Y	N

Adapted, in part, from:

Keeling & Associates, Inc. (2003, January). Developing Learning Outcomes That Work. Atlanta, GA.

Fowler, B. (1996). Bloom's Taxonomy and Critical Thinking. Retrieved February 23, 2005 from <http://www.kcmetro.cc.mo.us/longview/ctac/blooms.htm>. Template adapted from: Gail Short Hanson, American University, as originally published in Learning Reconsidered 2, p. 39.