



Department of Institutional Effectiveness and Research

Helpful Tips When Developing Student Learning Outcomes

The examples and tools included in this resource are intended to serve only as a reference and guide and not as an exclusive representation of all possible examples, tools, or best practices.

Introduction to Student Learning Outcomes

What is a student learning outcome? The Texas Higher Education Coordinating Board (2015) defines the term student learning outcomes as “what students are able to demonstrate in terms of the knowledge, skills, and attitude upon complete of a program” (para.15). With this definition in mind that student learning outcomes are developed, assessed, and improved upon.

How to begin developing student learning outcomes? As a start, brainstorming amongst departmental faculty members, with like minded colleagues and with knowledgeable professionals in the field can generate answers to the below questions:

How do we know if our student learning outcomes are comprehensive? Because student learning outcomes should be appropriate to and comprehensive of the program’s academic discipline, consult resources such as the following to gauge the relevance of the program’s learning outcomes:

Strong Student Learning Outcomes

A strong student learning outcome is a S.M.A.R.T. student learning outcome

Weaker Outcomes	Strong Outcomes
Outcome verbs are vague (e.g., understand, comprehend, demonstrate an understanding of) and do not really get at the intended outcome	Outcome verbs are sharp, clear, and specific (write, calculate, describe, analyze) and make it clear what students should know and be able to do at the end of the program
Multiple verbs per learning outcome	One verb per learning outcome
Wordy, packing in multiple ideas	Brief and to the point
Focus only on lower levels of thought	Demonstrate varying levels of thought (Bloom's Taxonomy)

Not easy to observe/demonstrate/measure

How are student learning outcomes structured?

There are a variety of formats and guides to structuring a student learning outcome. The below formula and the ABCDs of SLOs are two practical examples of what to include when writing a student learning outcome

Using a formula to assist in structuring the writing of a student learning outcome:

Graduating students will be able to [

How can Bloom's Revised Taxonomy help in creating the student learning outcome? "The taxonomy is useful in two important ways. First, use of the taxonomy encourages instructors to think of learning objectives in behavioral terms to consider what the learner can do as a result of the instruction. A learning objective written using active verbs will indicate the best method of assessing the skills and knowledge taught. Second, considering learning goals in light of Bloom's taxonomy highlights the need for including learning objectives that require higher levels of cognitive skills that lead to deeper learning and transfer of knowledge and skills to a greater variety of tasks and contexts (Adams, 2015, p.153)

What type of language should be used to create student learning outcomes?

BLOOM'S TAXONOMY OF ACTION VERBS

LEVEL	DEFINITION	SAMPLE VERBS					SAMPLE BEHAVIORS
KNOWLEDGE	Student recalls or recognizes information, ideas, and principles in the approximate form in which they were learned.	Arrange	Identify	Memorize	Recognize	Reproduce	The student will define the 6 levels of Bloom's taxonomy of the cognitive domain.
COMPREHENSION		Define	Label	Name	Relate	Select	
		Describe	List	Order	Recall	State	
		Duplicate	Match	Outline	Repeat		

Examples of language used to develop student learning outcomes

The below demonstrates weak language that is too general and difficult to measure:

The below language is neither weak nor strong:
will apply the scientific method in problem solving

The below highlights language used to develop strong, specific and measurable student learning outcomes:

will design a grounded research study using the scientific method

Helpful Tips for Student Learning Outcomes

Do a program's student learning outcomes always remain the same? A program's student learning outcomes are not set in stone – they can evolve and change over time.

When might an SLO change?

After continuously meeting the outcome over multiple assessment cycles	When changing the direction of the program mission or curriculum	When introducing or incorporating a new element within the discipline or type of outcome	In response to an update or revision to disciplinary or professional
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To whom should a program's student learning outcomes be communicated? A variety of audiences should be aware of or would benefit from being familiar with a program's student learning outcomes.

References

Huitt, W. (2004). *Bloom et al.'s taxonomy of the cognitive domain*. Educational Psychology Interactive. Valdosta, GA: Valdosta State University. Retrieved from <http://www.edpsycinteractive.org/topics/cognition/bloom.html>

Colorado College. (n.d.) *Writing and Evaluating Outcomes*. Retrieved April 3, 2017, from <https://www.coloradocollege.edu/other/assessment/learning/learning-outcomes/writingevaluatingoutcomes.html>

Texas Higher Education Coordinating Board. (2015). *Writing end of course learning outcomes*. Retrieved from http://cbgm41.thecb.state.tx.us/search?site=WWW&client=wwwnew_frontend&proxystylesheet=wwwnew_frontend&proxyreload=1&output=xml_no_dtd&q=student+learning+outcomes&btnG.x=17&btnG.y=7