Guidelines for Well-Written Student Learning Outcomes (SLOs)

Updated May 17, 2018

What to Do When the Generic Guidelines Below Don't Fit What You Need to Do

The guidelines below will help you create student learning outcome statements that meet *usual* assessment expectations.

However, sometimes the formula below may not do what you need it to do. In such cases, you may break from the formula, but when you propose a course, you should explain why the outcomes are suitable for the contexts of your course. **How to do this for course proposals**: At the bottom of the online New Course Proposal interface, where you propose a new course, you'll find a text box labeled "Additional Information" and an attachment function labeled "Supporting Documents." You may use either of those options to include brief explanations for SLOs that need to deviate from the generic guidance provided below. **How to do this for program assessment SLOs:** The assessment plan document can be edited. Under Section II, you may include footnotes addressing justifications for any outcomes that need to deviate from the generic guidance below.

Common situations in which you might need to deviate from the generic guidance from this document:

1. You might need to use a lower-level verb for an upper-level course if students will be introduced to new material or a new subtopic that isn't covered in lower-level courses or prerequisites. For example, students in a 5000-level graduate seminar might have to *summarize* or *explain* major theories or methodologies that would be far beyond the ability of undergraduates to understand. Example: *Students will be able to … Explain the methods involved in meta-analysis research.*

2. You might have a lower-level verb but a high-level *predicate*. For example, *identifying* the cause of a symptom is more difficult than *creating* a mud pie.

3. A sequence of courses might use the same **verb** at each level, but set different benchmarks for success in the predicate, based on external standards. For example, our Spanish I and Spanish II courses both use *communicate* as a verb in SLOs, but Spanish I expects students to reach the low-to-mid level of performance on ACTFL standards, while Spanish II expects them to reach the mid-to-high level.

Guidance for Developing Typical SLOs

1. Student Learning Outcomes Defined*

Outcomes…

- Express what the student will be able to do with the *essential* knowledge, skills, and dispositions gained by the end of a course (or lesson or academic program)
- Focus on the *product (performance)* rather than the *process*
- Are *measurable* (i.e., identifiable or observable)
- Are *detailed* and *specific* – explicitly stated
- Include appropriate *action verbs* such as define, compare, create, design, etc. (Bloom's Taxonomy) FYI: If a student learning outcome is *essential*, it should be assessed.

*Modified from: University of South Carolina. (2010). *A faculty and staff guide to creating learning outcomes.* Columbia, SC: National Resource Center for The First-Year Experience & Students in Transition.

2. Components of Student Learning Outcomes

Well-written SLOs tend to include (or sometimes imply) 4 components (ABCCs):

- *A = Actor* (implies students –"The student will be able to…") This component of the SLO is often referred to as the "stem."
- *B = Behavior* (the performance/what the student will be able *to do*) Use an action verb from Bloom's Taxonomy.
- *C = Conditions* (context, setting and/or conditions under which the behavior will occur) Provides specific details.
- *C = Criterion/criteria* (defines the *minimum acceptable level* of performance) The focus is on the expected "quality of performance." The criterion/criteria can be specific or qualitative (using generic quality indicators of performance such as, critically, accurately, appropriately, concisely, etc.).

3. Bloom's Taxonomy of Educational Objectives

Action verbs from Bloom's Taxonomy can help ensure that a student learning outcome is measurable. Bloom's Taxonomy is a hierarchical design of ways of thinking (action or performance verbs) that classifies learning or cognition into six levels, from less to more complex.

- Level 1 – Know
- Level 2 – Understand
- Level 3 – Apply
- Level 4 – Analyze
- Level 5 – Evaluate
- Level 6 – Create

Note that action verbs found at lower levels of the taxonomy are often implied at the higher levels. Consider the following SLO:

Clearly comprehend and apply early childhood theories. (Redundant due to implication)

The action verb "comprehend" is equivalent to *understand* (Bloom's Level 2), while "apply" is a Level 3 action verb. But if one can accurately apply the theories, then one likely comprehends them. In this example, the SLO could be restated as follows:

Clearly apply early childhood theories. (Improved version)

In general, one would expect 3000 and 4000-level courses to include action verbs derived from the more complex levels of Bloom's Taxonomy (Levels 4-6). Graduate level courses would typically include action verbs from the highest levels of Bloom's Taxonomy.

Exceptions do exist, however: If a high-level course is primarily introducing new background material, lower-level verbs may be suitable. And when it comes to skills like writing and public speaking, the verbs (*write*, *compose*, *deliver*, etc.) may remain the same at every course level, while the **object being composed** increases in difficulty, sophistication, or complexity. In such instances, the object's description should make it clear what the new, higher-level expectations are. Examples:

- 1000-level: *Write a summary.* ← Though the word *write* appears at this level, a **summary** is much easier than a **literature review**.
- 2000-level: *Compare the positions of two authors.*

- 3000-level: *Evaluate multiple arguments on a subject.*
- 4000-level: *Write a literature review covering scholarly research in the area of study.* ← Though the word *write* appears at this level, a **literature review** is much more difficult than a **summary**. The term *literature review*, moreover, implies a range of expectations and standards, so that verbs like *analyze* and *evaluate* aren't necessary here.

4. Rules of Thumb – Action Verb Selection

- Avoid use of verbs such as, “know," “recognize," “value," “demonstrate," “appreciate," etc. unless you describe student performance actions that will indicate their knowledge, recognition, value, and ability to demonstrate or appreciate.
- It’s best to keep SLOs simple by only using a single action verb per SLO.

5. Well-written Student Learning Outcomes Examples

- *Select* the most appropriate investigative methods or information retrieval systems for accessing needed information. (Level 1-Know)
- *Accurately compare* the positions of two authors on a controversial subject. (Level 2-Understand)
- *Choose* appropriate interventions to manage patient fear, anxiety, and/or pain in a clinical setting. (Level 3-Apply)
- *Insightfully analyze* a speech from a Renaissance play to illuminate the effects of word-choice and rhetorical or poetic devices. (Level 4-Analyze)
- Accurately *assess* the quantity, quality, and relevance of the search results to determine whether alternative information retrieval systems or investigative methods should be utilized. (Level 5-Evaluate)
- *Structure* a 3 to 5-page essay around a thesis, maintaining unity and coherence. (Level 6-Create)

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Selected Action Verbs from Bloom's Taxonomy					
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
Know	**Understand**	**Apply**	**Analyze**	**Evaluate**	**Create**
define describe enumerate examine identify label list locate match omit quote recall record reproduce select tabulate	associate cite compare contrast convert differentiate discuss distinguish estimate explain express extend generalize give examples group illustrate indicate infer interpret order paraphrase predict relate report represent research rewrite summarize trace translate	administer apply articulate calculate change chart choose collect compute construct determine develop dramatize employ establish experiment interpret manipulate modify operate paint prepare produce simulate sketch solve transfer	advertise analyze break down categorize classify conclude connect correlate criticize deduce devise diagram discriminate dissect divide focus organize outline plan point out prioritize question separate subdivide survey test	appraise argue assess convince critique debate decide defend editorialize evaluate judge find errors justify persuade rank rate recommend reframe score support weigh	adapt assemble collaborate combine compile compose create design facilitate formulate hypothesize imagine integrate intervene invent manage negotiate originate propose rearrange reorganize revise schematize solve speculate structure substitute validate

Center for University Teaching, Learning, and Assessment http://uwf.edu/cutla/SLO/ActionWords.PDF
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