

Dos, Don'ts, and Cautions in SLO Writing

- I. Limit each SLO to *one measurable* learning outcome (i.e., one action verb).

For example:

POOR: “Students will be able to *name, explain, and apply* ...”

The problem here is that there are three potentially independent behaviors. Which is the one that will be assessed? If more than one at the same time, will they be weighted differently in determining whether a student has attained the outcome? Multiple verbs in a learning outcome create multiple problems.

WEAK: “Students will *understand* ...”

This outcome includes a single verb, “understand,” but how will a student be expected to demonstrate that understanding? Will qualitatively different demonstrations of understanding, determined according to the preferences of individual instructors, be accepted as equally convincing evidence of outcome attainment? Vague outcome verbs yield unreliable assessments.

BETTER: “Students will *list* ...” or “... *summarize* ...” or “... *solve* ...” or “... *contrast* ...”

One measurable student behavior per learning outcome is more likely to produce reliable, potentially valid assessment of student learning.

- II. Think carefully about the conditions (givens) under which the learning outcome reasonably could be expected to be demonstrated. In this context, conditions may be considered to be learning opportunities – occasions structured intentionally to promote a particular learning outcome.

For example:

“After attending X session(s) of ...”

“After completing [a workshop on] ...”

“After participating in [an activity] ...”

The condition may or may not be made explicit in the text of an outcome, but thinking about it in advance can provide a context for selection of an appropriate verb that captures that outcome.

- III. As you are developing a learning outcome, think about the ways in which a student could be asked to demonstrate it. Ideally, the words you select should permit several things a student could do, depending on context, which would provide compelling evidence of outcome attainment.

The learning outcome, “Students will be able to apply the steps of scientific inquiry to real-world problems,” for example, might be demonstrated in an essay, a capstone project, an oral presentation, a group activity – and so on.

Wherever possible, the wordings of learning outcomes, although sufficiently explicit to be measurable, should not unduly restrict the venues in which they can be assessed.

- IV. Think about reasonable criteria or target levels of student success that would demonstrate that your curriculum has been successful in preparing students to be able to demonstrate each of its learning outcomes. The criterion or target for an outcome should take into account the nature of the learning involved, the number and types of learning opportunities the curriculum provides to its students, and the number of students who will be involved in an assessment.

For example,

A criterion set too high: “All students will be able to ... without errors.”

A criterion set too low: “50% of students will be able to ... with 50% accuracy ...”

A more reasonable criterion (?): “At least 70% of students will be able to ... with at least 70% accuracy”

- V. Finally, each academic program should try to limit itself to a total of *no more than six*, high-level, essential, student learning outcomes.

All programs should have as their goals to conduct assessments of student learning outcomes that provide meaningful information that will be useful to identify program strengths, diagnose program difficulties, and prescribe program changes in an efficient and sustainable fashion. One key word in that last sentence is “**sustainable**.” The Middle States Commission on Higher Education expects its member institutions to conduct *continuously recurring* assessments of its academic program effectiveness.

In order for academic programs to obtain timely information that can inform meaningful programmatic changes, Middle States recommends that every one of a program’s student learning outcomes should be assessed at least once every 3 years. Too many learning outcomes means too much time and energy will be spent on continuous assessment, which means the assessment process will not be sustainable. Six program-level learning outcomes assessed at least once every 3 years means that no more than one learning need be assessed each semester. That almost certainly should be a sustainable process.