WRITING STUDENT LEARNING OUTCOMES

How to write a Course Level SLO:

In one sentence, describe one major piece of knowledge, skills or abilities that a student will have gained by the end of your course. Make sure that the SLO represents a fundamental result of the course and aligns with other courses in a sequence, if applicable.

There is no need to reinvent the wheel. **It may actually help to work backwards.** What are you already doing in the course that you feel is central to the course? Take a look at your course assignments or syllabus. If there were just a couple of topics that you could teach the students from the entire course, what would they be? Another approach would be to make a list of all of your major assignments and try to extract the central piece of knowledge, skills or abilities that you are intending for the students to capture.

A set of guidelines has been developed to help you evaluate your SLO progress. The checklist is provided on page 26 of this toolkit. It includes the following questions:

- 1. Have you indicated whether your outcome is course-level or program-level?
- 2. Does it align with department goals?
- 3. Is it central to the course/program?
- 4. Is it reasonable given the ability of the students?

5. Does it explicitly state what the students will think, know, or be able to do as a result of the course/program?

6. Is it measurable or observable? (Hint: Use action verbs.—See Blooms Taxonomy next page.)

How to Write a Program Level SLO All courses will belong to a program (program descriptions can be found on the SLO website.)

Program faculty will meet, discuss, and develop their program level student learning outcomes using the same process as noted for the development of their course level SLOs. In one sentence the faculty will describe what knowledge, skills or abilities that a student will have gained as a result of completing the program. The *PROGRAM LEVEL SUMMARY* form has been developed to document this process. Once this process is completed these forms will be stored into the *SharePoint* depository for future use by the Department Chair.

Once the program level and course level SLOs have been created, faculty will also meet to discuss and decide how their courses are "mapped" to the program level SLOs. The purpose of mapping is to illustrate where program-level outcomes are being address across the program's courses. It can also help to identify curricular needs and resource priorities. The map indicates where knowledge and skills are introduced, reinforced, and mastered. The point where the program-level is mastered is where the SLO should be assessed.

In programs where there are clear prerequisites and/or sequencing, program level SLOs will be measured in the course with the highest level of knowledge or skill (capstone). In programs with courses that do not build in this manner, programs may introduce and master knowledge or a particular skill in one course.

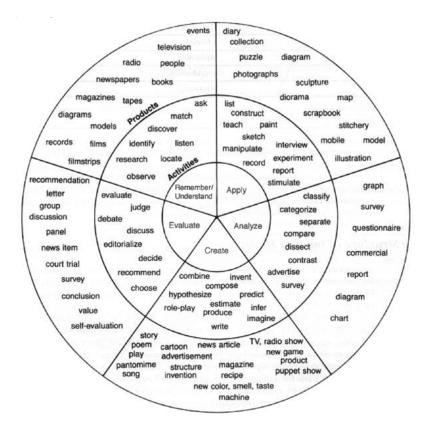
Bloom's taxonomy is a very useful framework for describing SLOs. It identifies a hierarchy of cognitive learning outcomes from lower-level to higher-level thinking abilities. It starts at the basic knowledge level and works through the evaluation level. A variety of action verbs are provided to assist with measuring specific student abilities and skills.

The great benefit of these verbs is that they are action verbs and thus, observable and measurable! Since SLOs can address a variety of learning from simple memorization and recall of basic facts to complex analysis and evaluation skills, Bloom's taxonomy is especially effective when developing SLOs/SUOs.

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Cite	Associate	Apply	Analyze	Arrange	Appraise
Count	Classify	Calculate	Appraise	Assemble	Assess
Define	Compare	Classify	Categorize	Collect	Choose
Draw	Compute	Demonstrate	Classify	Compose	Compare
Identify	Contrast	Determine	Compare	Construct	Criticize
List	Differentiate	Dramatize	Debate	Create	Determine
Name	Discuss	Employ	Diagram	Design	Estimate
Point	Distinguish	Examine	Differentiate	Formulate	Evaluate
Quote	Estimate	Illustrate	Distinguish	Integrate	Grade
Read	Explain	Interpret	Examine	Manage	Judge
Recite	Express	Locate	Experiment	Organize	Measure
Record	Extrapolate	Operate	Identify	Plan	Rank
Repreat	Interpolate	Order	Inspect	Prepare	Rate
Select	Locate	Practice	Inventory	Prescribe	Recommend
State	Predict	Report	Question	Produce	Revise
Tabulate	Report	Restructure	Separate	Propose	Score
Tell	Restate	Schedule	Summarize	Specify	Select
Trace	Review	Sketch	Test	Synthesize	Standardize
Underline	Tell	Solve		Write	Test
	Translate	Translate			Validate
		Use			
		Write			

Source: Bronx Community College Institutional Research (http://www.bcc.cuny.edu/InstitutionalResearch/Assessment.htm)

The next diagram is another representation of Bloom's taxonomy. It identifies the transition from lower-level to higher-lever thinking by moving clockwise in the innermost circle from Remember/Analyze to Evaluate.



Hints for writing SLOs:

• Make sure the outcome can be tested or assessed or observed.

• Have a manageable number of outcomes. Maybe a course/program/department could develop 2-4 outcomes. Try to pare down the outcomes to those that truly reflect the major skills or knowledge that students will take away from the course/program/department.

• When developing your outcomes, keep in mind what kind of student product (i.e. assignment, test, or project) will help you decide if the expectations have been met.

• Define any terms that individuals outside of the course or program would not be able to readily understand.

• When starting out, try not to get in over your head with the number or difficulty of the statements. Keep your statements simple and assess one main skill at a time. A rule of thumb is to have two SLOs per course, two SLOs per program, etc.

• If multiple skills can be synthesized to build a major skill, feel free to create one SLO. Don't bundle unrelated items – break them down into separate SLOs. Sample SLO statements could begin with the following:

- Nursing V 10 students will be able to evaluate...
- ESL V02 students will be able to categorize...
- Chemistry V20 students will be able to hypothesize...
- Political Science V03 students will be able to discuss...
- Health Education V93 students will be able to construct...
- Students meeting with Academic Counselors will be able to prepare...

Faculty members attending a Professional Development Flex Day activity on Desire2Learn basics will be able to create...