Professional Development Workshops for Program Assessment Leaders

Marquette University
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Writing Program Learning Outcomes that Work for Assessment
What are student learning outcomes (SLOs)?

SLOs identify what students should be able to demonstrate, represent or produce because of what and how they have learned in the program.

They should focus on the expected knowledge, abilities, values and attitudes that are appropriate to the discipline and level.
What is the difference between program goals/objectives and SLOs?

**Program goals** are broad statements of what the program or curriculum hopes to achieve. They are less specific and may be long-range.

**SLOs** are precise, specific, clear and measurable statements about the intended outcomes of a program.
SLOs transform program goals into sets of particular actions that can be observed and assessed to provide evidence of specific student learning.

There can be more than one SLO related to a program goal, and a particular SLO can support more than one goal.
Sample program goal from communications:

Graduates will demonstrate an understanding of the diversity of groups in a global society and their relationship to the field of communications.

SLO 1: Students will be able to analyze a film for its inclusion or exclusion of certain diverse groups.

SLO 2: Students will be able to write an unbiased news article about a two-sided issue.
Sample program goal from physics:

Graduates will acquire the theoretical and experimental background for work in areas such as acoustics, astrophysics, biophysics, chemical physics, computer science, mathematical physics, and engineering.

SLO 1: Students will be able to evaluate an article from a discipline-specific text and write a critique using theoretical principles.

SLO 2: Students will be able to employ the correct procedure for a given experiment.

[Source: Penn State University]
Benefits of SLOs for faculty:

- Fosters communication and collaboration among faculty on what is important for students to learn in their program.
- Leads to identification of areas in the curriculum where SLOs should be introduced, reinforced and assessed.
- Helps faculty identify opportunities for students to acquire the intended SLOs.
- Provides feedback for how the program can be improved.
- Helps faculty evaluate their teaching.
- Communicates expectations to students.
- Can be helpful to advertise the program to prospective students.
- Is a requirement for accreditation.
In preparation for writing an SLO, ask yourself:

1. What are the important knowledge, skills, abilities, dispositions that a student graduating from our program should have? What would our ideal graduate “look” like?

2. How will students be able to demonstrate these capabilities? Which experiences would provide evidence of their achievements?

3. What assessments can we use to find out whether they’ve achieved?
Strategies for developing SLOs

Examine existing institutional, college or program-level mission statements.

Adapt statements developed by disciplinary and professional organizations.

Review samples of student work.

Examine curriculum and syllabi for content coverage.

Have frank discussions with program faculty.
A Method for Writing a Learning Outcome

Program + SWiBAT + Verb + What

At the completion of (your program) +

the student will be able to +

Descriptive and measurable (Blooms) verb +

What the student will know,

What skills,

What affective change
Measurable Descriptive Verbs (see handout)

Create
Evaluate
Synthesize
Analyze
Apply
Comprehend
Identify
Why might these verbs be a problem?

Know
Comprehend
Understand
Appreciate
Familiarize
Study

Realize
Become acquainted with
Cover
Gain appreciation of
Learn
Be aware of
“Demonstrate points of agreement and distinction in philosophical positions.”

“Identify the critical elements of an accounting problems/issue.”

“Conceptualize and create effective ads for a targeted audience.”

“Communicate technical ideas clearly to colleagues and clients.”

“Identify matters of personal and professional ethics within typical computing scenarios.”
Describe what students should be able to demonstrate, represent or produce.

*Poor*- Students will know how to conduct research in the discipline.

☑️ **Better**- Students will be able to independently design and carry out experimental and correlational research that yields valid results.
Are stated in clear and specific terms.

**Poor**- Students will think critically about literary works.

☑️ **Better**- Students will present original interpretations of literary works in the context of existing research on these works.
Poor- Students will demonstrate the effective use of technology.

Better - Students will prepare final research reports that demonstrate the effective use of word processing, spreadsheets, databases and presentation graphics.
Are neither too broad nor too specific:

*Too broad* - Students will demonstrate information literacy skills

*Too specific* - Students will be able to use the MARQCAT library catalog.

☑️ *Just right* - Students will be able to locate information and critically evaluate it for validity and appropriateness.
Represent the level and type of competence expected at that point in the program.

*Poor* - Manage a health-care organization

✔️ **Better** - Apply basic problem-solving skills and knowledge of health care financial management to develop recommendations related to the financial issues faced by a health care organization.
Focus on the learning result and not the learning process.

**Poor** - Write a five-page essay reflecting on the work of an author of their choice.

**Better** - Write a five-page essay reflecting on the work of an author of their choice that presents a clear and well-organized argument and uses examples from the author’s work to support the argument.
Can be reasonably observed and measured, preferably by more than one assessment method.

*Poor* - Students will demonstrate ethical awareness.

✅ *Better* - Students are able to identify and analyze real-world ethical problems or dilemmas and identify those affected by the dilemma.
Do not bundle outcomes requiring different types of assessment into a single statement.

*Bundled* - Graduates will demonstrate knowledge of math, science and engineering fundamentals, and gain competency in writing reports, communicating research ideas and oral presentations.

*Simple* -
1. Graduates will demonstrate knowledge of engineering fundamentals.
2. Graduates will demonstrate oral competency in communicating knowledge in the discipline.
3. Graduates will demonstrate written competency in communicating knowledge in the discipline.
4. Etc.
Other good practice characteristics for SLOs:

Are collaboratively authored and collectively accepted among the program faculty.

Map to program curriculum that offers multiple opportunities for students to learn, practice, and master.

Are aligned with discipline accreditation standards, where applicable.

Are framed in terms of the program rather than individual courses.

Are aggressive but attainable.

Can identify areas for improvement.

Taken together, produce an accurate picture of the knowledge, abilities, values and dispositions that are essential for a successful graduate of the program.
Practical concerns:

- How many SLOs should I have for my program?
- Do I have to assess all of them every year? If not, how many?