

## Guide to Writing Program Student Learning Outcomes

**Program student learning outcomes (PSLOs)** are specific, measurable statements about what students should be able to know, do, and/or value by the time they complete a program. When a degree, certificate, or minor program is created, program faculty design the curriculum to provide students with the learning opportunities needed to achieve each PSLO.<sup>1</sup> To make sure the curriculum and instructional approaches produce the expected learning outcomes, programs develop and implement assessment plans. Therefore, it is important to make sure PSLOs are written so the outcomes are observable and measurable. Also, if PSLOs, curriculum, and/or assessment plans are modified over time, it is important to make sure there is still alignment between PSLOs, curriculum, and assessments. We include information below that will help you to write and/or revise your PSLOs.

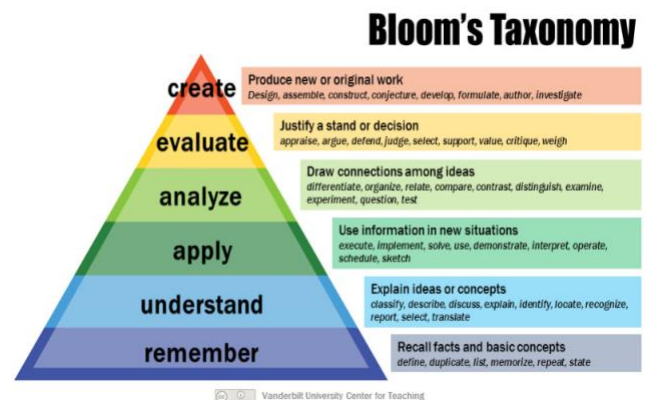
### Key Elements in Program Student Learning Outcome Statements

Program student learning outcome statements should specify the **who**, **what**, **when**, and **how** for the learning:

1. **Who** is doing the learning: “students”
2. **What** will be learned: “core concepts and theories in the discipline”
3. **When** the learning will be achieved: “after completing the program”
4. **How** the learner will demonstrate the learning has been achieved: “identify” “explain” “examine” “apply”

What students are expected to learn should be based on disciplinary expectations about the essential knowledge and skills in the field as well as current industry needs. PSLOs usually include expectations about discipline-specific knowledge, critical thinking skills, interpersonal and/or communication skills, etc. How students will demonstrate their learning should be based on the level of cognitive learning expected by the degree program. That is, PSLOs should be specific to the discipline and appropriate for the level of the degree program.

PSLO statements include learning verbs, such as those in [Fink’s and Bloom’s Taxonomies](#), that specify *how* students will be able to demonstrate they have achieved the expected knowledge, skills, and/or values. The learning verb used specifies the level of cognitive learning expected. PSLOs for undergraduate programs may include learning verbs from all levels of cognitive skills on Bloom’s Taxonomy, but PSLOs for graduate programs should reflect advanced learning and should include learning verbs from higher levels of cognitive skills (apply, analyze, evaluate, create).<sup>2</sup> Also, the learning verb used determines the types of assessments that will be used to determine achievement of the outcome (see [Use Bloom’s Taxonomy to Align Assessments](#)).



Example: **After completing the B.S. in health science program, students** will be able to:

- **Identify** the **factors that contribute to major chronic illnesses and disabilities.**
- **Explain** **contemporary public health concepts and theories that address major public health challenges.**
- **Critically examine** the **current literature on contemporary health issues.**
- **Design** a research project that **evaluates the effectiveness of a public health intervention.**
- **Apply** **ethical principles and values in a healthcare setting.**
- **Write** effectively **using AMA style to communicate health information.**

<sup>1</sup> While there is not a specific number of student learning outcomes programs should have, it is important that they reflect the knowledge, skills, and abilities that are essential to your program (the number may vary based upon the number of credit hours in a program). Also, keep in mind that for a meaningful and manageable assessment plan, you should be able to assess all PSLOs over a 6-year period. Therefore, we recommend between 3-8 PSLOs for degree programs and 2-4 for certificate programs and minors.

<sup>2</sup> See examples from [Georgia Southern University](#), [Washington State University](#), and the University of Florida (see academic compacts for each UF [undergraduate](#) major and PSLO lists for each [graduate](#) major). Also, see guidance on writing graduate program student learning outcomes from the [University of Cincinnati](#).

## Writing Program Student Learning Outcomes that are Observable and Measurable

PSLOs should be stated using **precise learning verbs** that are **observable and measurable**, such as those included in Bloom's Taxonomy. The PSLOs state something students *must do* to show they have achieved the knowledge, skill, or ability. To help determine if a PSLO is observable and measurable, see the table below.

Not Measurable:	Measurable:
Students will be familiar with...	Students will identify (or list) the...
Students will know the difference between...	Students will summarize the difference between...
Students will think critically about...	Students will evaluate the evidence... Students will compare and contrast... Students will construct an argument for...
Students will understand the principles of...	Students will apply the principles of...
Students will appreciate...	Students will articulate the importance of...

The **SMART mnemonic** is often referenced when crafting student learning outcomes that are meaningful and measurable. The typical criteria have been expanded to include others that may be helpful to consider:

- Specific, Strategic
- Measurable, Motivating, Meaningful
- Attainable, Action-Oriented, Aligned
- Relevant, Result-Oriented, Rigorous, Realistic
- Time-bound, Trackable



### Guiding Questions (Suskie, 2018):

- What do we want students to get out of this learning experience? What do we want them to be able to do long after the program is completed? Why are those things important?
- What do we value most about our discipline? According to the major authorities in our discipline, what are the most important things students should learn?
- What do our students do after they graduate? What are the most important things they need for success in those pursuits?
- What action words (i.e., Bloom's Taxonomy) describe what students will know or do for this outcome?
- Are the learning outcomes observable and measurable?
- Do the learning outcomes align with the expected level of mastery for the degree program?
- What specific learning activities will help students achieve the learning outcomes?
- How will we know if students have achieved the learning outcomes?
- What assessments will best provide evidence of outcome achievement (i.e., exam items, assignments assessed with a rubric, clinical experience or internship supervisor ratings, etc.)?

### Additional Resources

- Massa, L. J. & Kasimatis, M. 2017. *Meaningful and manageable program assessment: A how-to guide for higher education faculty*. Stylus Publishing.
- Suskie, L. (2018). *Assessing student learning: A common sense guide*. Jossey-Bass.

For assistance with developing appropriate program student learning outcomes, please contact the Office of Academic Assessment [assessment@kennesaw.edu](mailto:assessment@kennesaw.edu).