

Goals and Objectives – Writing Meaningful and Measurable Objectives

While goals reflect more general desires of the department or program for student learning, objectives¹ drill down to specific details about how those goals are expressed. Each goal may have several objectives, which should be stated in terms of action verbs reflecting what the student will know or be able to do. Below is an example from a psychology department.

Goal: *Students will understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.*²

Objectives:

1. *Students will identify and describe different research methods used by psychologists—including quantitative and qualitative approaches.*
2. *Students will design and conduct basic studies to address psychological questions using appropriate research methods.*
3. *Students will critique research conclusions appropriately based on the parameters of particular research methods.*

Notice how the goal is rather broad, while each of the objectives reflects a different facet of the goal's intention. Each objective is specific and presents an **observable behavior**. Like goals, objectives can reflect knowledge, skills, competencies, values, or attitudes.

Consider the goal below from a theatre department.³

Goal: *Students will demonstrate knowledge of the history, literature, and function of the theatre, including works from different periods and cultures.*

The goal cannot be assessed until it is expressed in more detailed pieces. Each piece is an objective. Here is one objective that might derive from the goal.

Objective: *Students will be able to explain the theoretical bases of various dramatic genres and illustrate them with examples from plays of different eras.*

The objective describes specific behaviors – explain, illustrate - that can be accomplished if the student has the knowledge identified by the goal. Because the objective identifies specific behaviors, it can be assessed. If an objective is written well, it is much easier to identify ways to assess it than would be the case with the broader goal.

¹ Terminology is inconsistent across the assessment literature. The term “outcomes” is often used in a very similar way as we are using “objectives” here. Swarthmore is not requiring particular terminology, as different disciplines may have different practices. It's the logic of going from the broad to the specific that is most important.

² Adapted from the American Psychological Association task force report titled, Undergraduate Psychology: Major Learning Goals And Outcomes, available at: <http://www.apa.org/ed/pcue/taskforcereport2.pdf>

³ Adapted from an example in “How to Write Program Objectives/Outcomes,” University of Connecticut Assessment website.

How do you go from goal to objective? Start by asking questions about the goal such as:

- What do we mean by this?
- What are some ways that we would know if a student achieved this goal?
- What behaviors or products could result from the achievement of the goal?
- Can I break this idea down into finer details, until I reach the behaviors that exemplify it?

One more example is presented below.⁴

A “top level **goal**” for the Swarthmore major in Physics and Astronomy - *Students will develop and exhibit learning, problem-solving, communication, and laboratory skills.*

An **objective** under the general heading of “problem-solving skills” – *A student should be able to translate a physical description into a mathematical equation, and conversely, explain the physical meaning of the mathematics.*

Here, the goal is quite general, and is clarified by the set of objectives under each of the “skill” headings. The objective is very specific, and one can imagine any number of situations in which the behavior could be observed and evaluated. Having multiple ways of assessing an objective is important in providing confidence that students are indeed learning what we want them to learn and, importantly, helping to identify shortcomings in the curriculum that could be bolstered.

How do you evaluate whether you have a good objective? Ask these questions:

- Does it describe what a student will be able to do (rather than what was taught)?
- Does it include an action verb that reflects an important behavior?
- Is the behavior observable?
- Does it suggest evidence that would reflect achievement (assessments)?
- Is it meaningful and measurable?

How many objectives should there be for each goal? It is helpful to keep the number manageable, and to strive for a balance between capturing the range of activities suggested by the goal and identifying those that are the most important. Three to seven objectives for each goal are common, but it is ultimately up to the department to determine what captures their intentions, and what structure will allow them to get meaningful feedback (through assessment) about their curriculum.

⁴ This goal and objective come from “Learning Goals for Physics and Astronomy majors at Swarthmore College.”