Make Course Outcomes and Learning Objectives Learner-Centered, Meaningful, and Measurable

Developing course outcomes and learning objectives that are learner-centered, meaningful, and measurable ensures that you are better able to design assignments, assessments, and learning experiences that truly help and offer proof that students attain mastery of those objectives and outcomes. Writing outcomes that meet these criteria also helps students better understand and act on what they are to learn.

Use Learner-Centered Language

Course outcomes and learning objectives become **learner-centered** when they are written from the students' point of view. To ensure that course outcomes and learning objectives are learner-centered, ask yourself if the outcome or objective describes what you as the instructor will do or if they describe what students will be expected to learn or be able to do.

For example, "Students will apply the scientific method to lab investigations" is focused on the student's action, giving them a better understanding of what they are expected to know and do by the end of the course. An outcome that reads, "This course will introduce students to the scientific method" describes what the course or instructor will do.

When sharing outcomes and objectives with students, it is helpful to word them so that they are focused on the learning and skill development of the students. Some leaders in the field, such as Catherine Haras and Beverly Bondad-Brown, also believe that it can be powerful to speak directly to students rather than referring to them in the third person. For instance, rather than "Students will apply the scientific method," you can write "You will apply the scientific method."

Make Course Outcomes Meaningful

Meaningful course outcomes support student learning and success in subsequent courses and in their lives or future careers. They also represent the significant learning you expect students to master by the end of the course. To ensure that course outcomes are meaningful, review each one from the lens of "Is this skill or concept relevant to their lives now and in the future?" and "Is this skill or concept transferable to subsequent courses or jobs and careers?" Another useful question from Dee Fink (2013) is, "What would distinguish students who have taken this course from students who have not?"

Learning objectives are meaningful when they bring students closer to mastering the course outcomes. For example, the learning objective, "You will solve for equations with a single variable" is meaningful because it is a stepping-stone for students working toward the course outcome of solving for equations with multiple variables.

Make Course Outcomes Measurable

Measurable course outcomes and learning objectives make it clear what students need to do to demonstrate mastery of the objective. For example, the learning objective, "Students will draw a basic model of DNA" would allow you to analyze student work to determine if they have met this objective, making this objective measurable.

Let's compare these two course outcomes:

- "You will solve equations with multiple variables"
- "You will understand how to solve equations with multiple variables"

In the first example, the verb "solve" is an action that can be measured through assessments and assignments by asking students to solve equations with multiple variables. The term "understand" in the second example reflects an internal state that is difficult to measure. The use of verbs that reflect internal states such as "understand" or "appreciate" are difficult to measure and should typically be avoided.

Coming up with the right verb can be challenging, and sometimes an existing outcome or objective can be revised in a much more effective way simply by using the right verb. Download the table "Action Verbs by Cognitive Level" on the Implementation Resources page to help you select a measurable verb.

Sources

Fink, L. D. (2013). *Creating significant learning experiences, revised and updated: An integrated approach to designing college courses.* Jossey-Bass.