Constructing Useful Learning Outcomes

One of the “best practices” of effective teaching is to state learning outcomes directly and clearly for your students. Our regional accreditors now require faculty to include course learning outcomes on their syllabi. Some departments or programs have constructed sets of outcomes for specific courses (often multiple sections at the introductory level); you should check to see whether your course has any required learning outcomes. In addition to your course learning outcomes, it’s also a good idea to check with your chair or director to determine whether your syllabus should include program-level outcomes (usually broader and more encompassing than course-level outcomes). The suggestions below are meant to help you construct useful course outcomes that will enable you to reflect on your expectations for student learning and can provide a coherent structure for your course.

I. Stating learning outcomes on your course syllabus means articulating what you want students to learn.

   In the past, faculty have tended to focus on what an instructor wants to accomplish with a class or what the class covers. Typically, this perspective reads as declarations of content important to the instructor. For example, “This class provides an overview...,” or “We will explore...” or “You will become familiarized with the concepts of...” are all statements using the class coverage approach. Learning outcomes are faculty expectations for the kind of learning desired once students have completed the course. By focusing on your expectations from the outset, it’s easier to check whether your instructional activities and assignment evaluations are aligned with your expectations. In the sections below, we’ll discuss characteristics of effective course outcomes, types of outcomes, developmental levels of outcomes, and outcome alignment through course design.

II. Adopting six guidelines will help you understand the characteristics of useful outcomes.

   Writing effective, useful outcomes takes time and practice. As you gain in experience, you will have a better sense of how to challenge students without losing them. You can begin by ensuring your outcomes have the following characteristics:

1. Keep the outcomes student-focused, not course-coverage focused.
2. Limit outcomes to a manageable number; 4-6 are accomplished more realistically in the course of a semester.
3. Construct outcomes that are measurable; consider how you will communicate the criteria students will need to meet in order to demonstrate their outcome achievement.
4. Focus on learning that endures; studies typically show that students recall less than half of factual information they’ve been required to memorize, but remember and are able to apply skills such as problem-solving or critical thinking more effectively.
5. Align course outcomes with program-level outcomes. Even if your department or program does not require you to align your outcomes with the program’s, the exercise will make for a more cohesive curriculum. Undergraduate and graduate programs on this campus all have affiliated outcomes published on the website. Ask your department chair or program director to identify where these are located.
6. **Connect your outcomes to your discipline.** Consider how the knowledge, skills, and attitudes your students acquire in your course will help them to understand and prepare for what is important to your discipline.

III. Selecting from any of the three different **types** of outcomes (knowledge, skills and/or attitudes) will facilitate understanding your expectations for student learning.

1. **Knowledge outcomes:** usually focus on remembering facts, concepts, principles, theories, and/or models previously learned or comprehending the meaning of information. Examples would include:
   i. You will be able to identify and explain major social identity theories.
   ii. You will be able to summarize the key points of rationalism, empiricism, skepticism, realism, idealism, phenomenology, and existentialism.

2. **Skill outcomes:** usually focus on developing cognitive, interactive, and creative skills across a variety of disciplines. Whereas knowledge outcomes may focus on comprehending the methodologies of a discipline, for example, skills outcomes would emphasize applying the methodologies. Examples would include:
   i. **(Cognitive):** You will be able critically analyze the major theoretical debates in the field of genetics.
   ii. **(Interactive/Communication):** You will be able to construct and orally present a persuasive and well-organized thesis addressing a major issue in the field.
   iii. **(Creativity):** You will be able to contrast and evaluate alternate, divergent, or contradictory perspectives or ideas fully.

3. **Attitudes outcomes:** usually emphasize a shift in “habits of mind” reflective of general attitude change. Examples would include:
   i. **(Civic Engagement):** You will be able to articulate the ways in which your individual perspective has changed based on your working with and learning from a diverse community and culture.
   ii. **(Ethical Reasoning):** You will be able to evaluate and reasonably defend your position relative to assumptions and implications of different ethical concepts and perspectives.

IV. Outcomes should be rich in action verbs that express **developmental levels** of learning. Students at beginning levels are able to learn more basic cognitive tasks. As they mature, they should be able to handle increasingly more difficult learning tasks. More basic levels are identified in 1-3 whereas more complex tasks are listed in 4-6. Bloom’s developmental taxonomy includes:

1. **Remembering** includes the following cognitive tasks: define, duplicate, list, memorize, recall, repeat, reproduce state
2. **Understanding** includes the following: classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase
3. **Applying** includes the following: choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write
4. **Analyzing** includes the following: appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test
5. **Evaluating** includes the following: appraise, argue, defend, judge, select, support, value, evaluate
6. **Creating** includes the following: assemble, construct, create, design, develop, formulate, invent

V. Your outcomes play crucial roles in the design of your course. Alignment of your outcomes with the rest of your course can be accomplished by answering three simple questions:
1. What do you want student to learn by taking your course?
2. What activities and assignments do you have them do so that they can achieve the course outcomes?
3. How will you evaluate whether they’ve achieved your outcomes?

The purpose of curricular alignment is to ensure that there is a clear connection between your outcomes, activities/assignments, and assessments. When you consider how you expect students to achieve the learning outcomes you have articulated, it often will lead to assignment/activity revision and refinement. Your outcomes and course design will also impact the ways in which you evaluate your students. And when you assess your students’ work, you may find that your outcomes need further revision. This process of curricular alignment is reflexive and cyclical.

For example, suppose you want students to be able to develop effective arguments to support their positions and write clear, organized term papers with appropriate referencing as two distinct outcomes. You discover that your writing assignments ask them to identify and explain key concepts and apply them to particular contexts, but don’t provide opportunities for them to learn how to develop defensible claims warranted with appropriate forms of evidence. Nor do you address how to write effective term papers directly.

Frequently, you will see this “disconnect” when you begin to evaluate student papers. In the example above, the discontinuity becomes evident when evaluation criteria include elements of argument and writing proficiency that are not met by the majority of students. It makes sense to revise our assignments to better fit our outcomes and assessments. And the revisions of the assignments will often lead to adding, deleting, or revising our existing set of outcomes. Through this revision process, you can see why it is never sufficient just to develop a set of outcomes for your course. Outcomes which are fully reinforced by course design allow students multiple opportunities for achieving them.

--College of Arts and Sciences A-Team

(Adapted from “Developing Effective Learning Outcomes” at http://www.neiu.edu/~neassess/pdf/DevEff.pdf )
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