

Chapter 4. Establishing Learning Outcomes

A) The Relationship Between Goals and Learning Outcomes

After a program's mission statement has been established, the next step for faculty is to design goals and the attendant outcomes for those goals. Faculty should strive after goals that can easily be converted into learning outcomes. It might be helpful to note that while goals tend to focus on delivery of information (*Students will become familiar with the cultures of ancient Greece and Rome*), the converted outcomes focus on effect (*Students will compare and contrast the political, economic, and religious systems of Greece with that Rome*). In order to arrive at outcomes, faculty might consider the following questions as a guide for the learning outcomes discussion:

- 1) What do we want students in our major to know?
- 2) What do we want our students to be able to do?
- 3) What values or attitudes (dispositions) do we want to instill in our students?

The statement of learning outcomes at the program level clarifies for all stakeholders the knowledge, skills, and abilities a student must possess to successfully complete a course or program and thus earn a degree from the college. Learning outcomes have three distinguishing characteristics: the learners' specified action must be observable, measurable, and performed by the learners. Here are examples of goals followed by their respective outcomes:

- *Students will be familiar with the syllogism.*
- *Students will have an appreciation of cultural diversity in the classroom.*
- *Students will be familiar with the different kinds of writing genres.*

These goals can easily be converted into outcomes by inserting action verbs and in some instances making clear the predicate.

- *Students will conduct logical arguments through the use of a syllogism.*
- *Students will summarize in writing their attitudes about cultural diversity in reflective essays.*
- *Students will submit by graduation the following kinds of writing: essay, creative non-fiction, summaries, paraphrase, and reports.*

Since the learner's performance ought to be observable and measurable, the verb chosen for each outcome statement should result in overt behavior that can then be observed and measured. Sample action verbs are: compile, create, plan, revise, analyze, design, select, utilize, apply, demonstrate, prepare, use, compute, discuss, explain, predict, assess, compare, rate, critique. Conversely, some verbs that are unclear subject the learning statement to different interpretations in terms of what action is being specified; such verbs, which obscure the intended behavior, cannot be observed or measured. These types of verbs should be avoided when constructing learning outcomes: know, become aware of, appreciate, learn, understand, become familiar with.

B) How to Establish Goals and Learning Outcomes

The most practical way to start the conversation about goals and learning outcomes is to

weigh the needs of the program mission statement against examples of outcomes published through the respective professional organizations or by departments with similar programs at other schools. This process should help generate a comprehensive list of ideas and suggestions for learning outcomes that can then be refined and narrowed. Once the department has generated such a list, the most challenging task is then deciding which goals and outcomes are essential at the program level. Practitioners point out that if the final list of learning outcomes initially reaches beyond five or six, the assessment effort will be onerous, even unmanageable. During discussions, it might be helpful to keep in mind that all outcomes should be measurable. Program goals articulate both measurable and non-measurable expectations for students; outcomes must be expressed in terms of demonstrable characteristics. Outcomes focus on what students in the major can demonstrate rather than on what faculty members teach. The list of learning outcomes can always be reviewed and revised as the need arises or as new developments occur in the discipline. In any event, it is important to make sure that students know the program's learning outcomes. Research has shown that students who are aware of the direction of their education are much more likely to be engaged in the learning process.

Here is a model of learning outcomes for a History department:

1. History majors will demonstrate skill in chronological thinking.
2. History majors will demonstrate historical comprehension.
3. History majors will demonstrate the skills of historical analysis and interpretation.
4. History majors will demonstrate historical research capabilities.
5. As a consequence of these skills, History majors will demonstrate a) a working knowledge of the natural and cultural environment in which humans have developed and live; and b) a sense of the diversity of the human experience influenced by geography, culture, race, ethnicity, gender, and class.
6. History majors will demonstrate an understanding of the career search in appropriate educational and professional markets

C) Use Curriculum Mapping to Confirm Outcomes

Once the preliminary list of outcomes is established, faculty should engage curriculum mapping to see where those outcomes are embedded in current courses. A curriculum map consists of a table with two axes, one listing program outcomes, the other listing courses in the major. The coverage of a learning outcome in each course is shown in the cells of the table (see Table 4.1)

Table 4.1. Curriculum Map Template

Program Learning Outcomes	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7
Outcome 1	X	X	X	X	X	X	X
Outcome 2		X		X	X		
Outcome 3	X		X	X			X
Outcome 4							
Outcome 5	X	X	X				

Course mapping can provide a view of how individual courses are related to the program learning outcomes and can show the curricular emphasis given to each outcome. For example, Outcome 1 in the above table appears in seven courses and is therefore given greater emphasis than Outcomes 2 and 3. A map can also identify program redundancies or gaps, such as the fact that no course currently takes ownership of Outcome 4.

Curriculum mapping can help facilitate faculty discussion about the extent to which the program currently addresses the list of learning outcomes. A different kind of map, one that indicates levels of intensity, can go even further by displaying the degree to which a course emphasizes a specific outcome. In some cases, it may even be useful to show the number of hours devoted to each outcome in each course; the level of achievement that is expected in each course can be indicated as low, medium, or high or other such descriptors. This would reveal how student achievement is expected to develop during their progress through the curriculum.

*For those who are need further convincing about the importance of outcome-based pedagogy, read the following noteworthy articles.

Articles:

[From Teaching to Learning - A New Paradigm for Undergraduate Education](#) By Robert B. Barr and John Tagg. November/December 1995. *Change* magazine.

[So, What's a Learning Outcome Anyway? Learning Outcomes and the Learning Paradigm](#) By Mark Battersby, Department of Philosophy, Capilano College.