Student Learning Outcomes

Learning Outcomes are statements that specify what students will be able to know, do, or be upon completion of a course or program. They should answer the following questions:

- What knowledge should students possess? What should they be able to do with it?
- What skills should they demonstrate?
- What attitudes, values, or behaviors should they have?

When developing outcomes, consider the following:

- Do they emphasize the participant, use an action verb, and incorporate a learning statement?
- Are they specific and clear?
- Are they observable?
- Are they measurable? How will they be assessed?
- Are they able to be demonstrated?
- Do they align with the outcomes of the program, unit, or college?

General format of a learning outcome:
As a result of completing (course name), students will be able to (action verb) (learning statement).

Examples of learning outcomes: Upon completion of (course), students will be able to:
- Describe and analyze the key characteristics of an historical event or period.
- Develop intercultural competence
- Identify and describe cultural concepts, ideas and achievements
- Demonstrate a critical understanding of how culture affects individuals and society.
- Conduct research using primary sources
- Deliver a verbal/oral/visual/audio presentation of research on a specific cultural topic
- Construct and substantiate an argument in written form.

Getting started with learning outcomes:

- What are the most important things a student should know (cognitive), be able to do (skills), or value (affective) after completing the course?
- Make a list and try to write them as learning outcomes using the general format above. Consult a list of action verbs, which are verbs that result in overt behavior that can be observed and measured. Avoid verbs that are unclear and which cannot be observed and measured easily, for example appreciate, become aware of, become familiar with, know, learn, and understand.
- Edit and review the outcomes. Consulting and discussing with others can be very helpful.
Learning Opportunities

Once learning outcomes are established, adequate learning opportunities must be given so that students can practice and then achieve the desired outcomes. When planning topics, sessions, projects, experiences, field trips, etc, keep in mind that they should support the achievement of the articulated learning outcomes. It might be helpful to list the components (activities, texts, etc) of a course and ask:

- What learning outcome do they help students achieve? In other words, what knowledge, skills, attitudes or behaviors will they be practicing or be exposed to?
- If the activities do not align with the outcomes, are they necessary or is there an important outcome that is missing?

Assessment Methods

After the outcomes have been identified and adequate learning opportunities have been developed, methods to assess the achievement of the outcomes must be identified. Assessment asks the following questions:

- How will you know that the learning outcomes for the course have been achieved?
- What are the measures will be used? How will the outcomes be assessed?
- How will the information obtained be used to inform changes?

In order to do assessment, information is gathered in the form of direct and indirect measures of student learning. Direct measures, such as tests, papers, portfolios, projects, and presentations, provide direct, observable evidence of student learning. Indirect measures, such as surveys, evaluations, participant self-reports, and focus groups, evaluate student perceptions of their learning and the quality of the learning experience. The information gathered from these measures is used to evaluate the degree to which the outcomes of the course are met, and to inform changes to the course.

Constructing a matrix, where the learning outcomes are listed in the first column, and the assessment measures (such as assignments, prelims, surveys or projects) are listed across the top row, can be helpful. This method can be very useful when determining if there are any gaps in the course (where a stated learning outcome is not being evaluated). An example matrix is given below:

<table>
<thead>
<tr>
<th></th>
<th>Assessment 1</th>
<th>Assessment 2</th>
<th>Assessment 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 1</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Outcome 2</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Outcome 3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the matrix above, outcomes 1 and 2 are met by the activities in the course, but outcome 3 is not. If outcome 3 is important for the course, then an assessment or activity would need to be added.

For more information, please contact the Center for Teaching Excellence at cornellicte@cornell.edu, or visit our webpage at www.cte.cornell.edu.