How to Assess My Academic Department or Program

Identify Program Learning Outcomes

What are student learning outcomes?

Student learning outcomes are goals that describe how a student will be different because of a learning experience. More specifically, learning outcomes are the knowledge, skills, attitudes, and habits of mind that students take with them from a learning experience (Suskie, 2009).

Why create program-level student learning outcomes?

They help instructors by:

- Enabling cohesion and compatibility between courses.
- Facilitating curriculum revision and development.

They help students by:

- Clarifying what students can expect from a department or program.
- Delineate student knowledge and skills to prospective employers.

What makes for good program-level student learning outcomes?

In order to have any of the benefits described above, program-level student outcomes must:

- Describe what students should know and be able to do upon completion of the departmental requirements.
- Specify an action that faculty can both observe and measure.
- Be limited to about five per department or program.
- Be aligned with both course-level and institution-level learning outcomes.
How do I write good program-level student learning outcomes?

Unlike the process for creating course-level student learning outcomes, the process for creating program-level student learning outcomes is by necessity collaborative. Ideally, all teaching faculty and support staff should be involved in the creative process, with optional facilitation by an assessment professional. This encourages ownership by all those involved in helping students achieve department/program-level outcomes.

Ideas for program-level student learning outcomes can come from a review of one or many sources:

- Course-level student learning outcomes.
- Suggested outcomes provided by professional organizations.
- Complimentary departments/programs within the same institution or departments/programs in the same discipline at other institutions.

Example program-level student learning outcomes from University of Connecticut's Assessment Office:

- **Anthropology**: Students will be able to explain and appropriately apply evolutionary theory to human and nonhuman primate biological phenomena; this should include ability to summarize the basic time-line and processes of general primate and specific hominid biological evolution.
- **Bioengineering**: Students will be able to apply advanced mathematics (including differential equations and statistics), science, and engineering to solve the problems at the interface of engineering and biology.
- **English**: Students will be able to evaluate how a text supports or defies the literary conventions of its genre.
- **Natural Resources**: Students will broaden their social perspectives through exposure to diverse culture and thinking in course works, service projects, and departmental or college seminars.

Want more examples of good program-level student learning outcomes? Visit the Sample Tools page.
Map Courses to Outcomes: Curriculum Maps

What is a curriculum map?
A curriculum map is a grid that aligns courses with program-level outcomes so you can see what is taught when, and how.

Why create a curriculum map?
Curriculum maps showcase where there may be gaps or overconcentration in the curriculum, encouraging reflection about course offerings and cohesion. It also provides a roadmap for program-level assessment by documenting in which course program-level outcomes are assessed.

How do I create a curriculum map?
(Excerpted from George Mason University's Office of Institutional Assessment)

1: Compile a list of the program’s student learning outcomes. Make a table with one program learning outcome per row.

2: List all the courses in the program, one per column. It is best to list all the courses in a degree program, not just core or required courses. Make sure to also include required experiences, such as field placement or an internship.

3: Use Xs to mark the learning outcomes that each course or experience covers.

4. Analyze the curriculum map, looking for any courses that don't address any learning outcomes, or any learning outcomes that aren't covered in any courses. Also question whether the department is doing too much overall and needs to eliminate outcomes that are not highly-valued and focus on those that are by including them in multiple courses.
### Program Learning Outcomes (PLOs)

<table>
<thead>
<tr>
<th>PLO 1: Identify theoretical foundations</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
<th>Experience 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

| PLO 2: Apply research methods             |          | X        | X        | X            |

| PLO 3: Communicate through writing        | X        |          |          |              |

| PLO 4: Discuss ethics                     |          |          | X        |              |

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### Go the next level!

Instead of X's, note where each learning outcome is Introduced ("I"), Reinforced ("R") and Mastered ("M"). That way you can track the sequential mastery of student knowledge in each of the learning outcomes required for completion of the program.

Want examples of good curriculum maps? Visit the [Sample Tools](#) page.
Assess Student Learning: Key Assessments, Portfolios, Capstones Analysis

Student learning at the program level can be assessed in many ways. Below are a few of the most popular types of direct assessment: Key Assessments, Portfolios, and Capstones. Programs can also be assessed indirectly through a review of program data and alumni surveys.

**What are key assessments?**

Key assessments are course assignments or exams that are directly aligned to program-level learning outcomes and used to represent student learning on those outcomes.

**Why use key assessments?**

If a department is using a curriculum map to conduct program-level assessment, key assessments can be chosen within aligned courses to assess program-level learning. This can be an efficient method of program-level assessment as a direct outgrowth of course-level assessment.

**What are portfolios?**

Portfolios, or more often online "e-portfolios", are archives of an individual student's work. In addition to providing a record of accomplishments throughout an academic career, they often reflect a student's voice or perspective as it develops during their academic experience.

**Why use portfolios?**

They help instructors and potential employers by providing a way to richly assess a student's learning and experiences, both throughout their development and upon completion of a program. Often this involves the creation of a rubric that ties program-level outcomes to evidence in the portfolio. Portfolios also help students by encouraging the process of reflection and self-evaluation and by providing a way to easily share evidence of their learning with others for feedback and application purposes.
What are capstones?

Capstones are courses taken at the culmination of a program that broaden, deepen and integrate multiple aspects of that program. They often include a final project that provides evidence for learning in multiple program-level outcomes.

Why use capstones?

Capstones help instructors by providing a way to assess the learning of graduating students across multiple learning outcomes. Similar to a portfolio assessment, this often involves the creation of a rubric tied to program-level outcomes. Capstones help students by providing an opportunity to bring potentially disparate course concepts and skills together into one synthesized project, requiring a higher level of learning that can be showcased to multiple audiences.
Close the Loop: Adjust Curriculum & Resources

What Does it Mean to “Close the Loop?”

The purpose of program-level student learning assessment is to find where students are struggling and succeeding and make adjustments on the basis of those findings. The "loop" indicates that this is a continuous process of identifying outcomes, assessing learning, using this learning to improve curriculum or resources, and then once again identify outcomes.

Why “Close the Loop?”

Closing the loop is the part of assessment where the department gets to take action, where it gets to innovate and advocate for resources. Based on the department’s findings of where students are struggling or succeeding, the department can decide how to adjust your curriculum or resources. For example:

- Maybe the department finds that students in the capstone course are having trouble writing at a level of mastery expected of them, as evidenced by their final capstone paper. Perhaps they need more practice writing earlier in the program, so the department decides to make all earlier courses writing-intensive.
- Maybe the department analyzes key assessments and finds that students' quantitative reasoning in the advanced courses is not at the level of mastery expected. Perhaps they need additional tutoring throughout the major, so the department advocates for resources to build in tutoring workshops throughout the curriculum.
- Maybe the department finds through an analysis of e-portfolios that students are not able to reflect on and learn from their own creative work at the level expected of them. Perhaps they need more guidance in the reflective process, so the department encourages faculty to introduce reflective exercises throughout the introductory courses.

Did you know?

Departmental Curriculum Committees can be excellent homes for program-level assessment activities, as they are able to directly link assessment findings to curricular changes.