Guidelines for Reviewing Assessment Plans

Departments with undergraduate majors are expected to develop and implement plans for assessment of student learning outcomes. Although assessment is required for institutional accreditation, it can be a powerful tool for improving academic programs and curricula. UCI's operating principle is that assessment should be locally defined, discipline-specific, and faculty-driven. By assessment, we mean a systematic and ongoing process of identifying student learning outcomes, assessing student performance in relation to these outcomes, and using the results to improve student learning and academic programs. Assessment includes four basic steps:

1. Articulate outcomes for student learning.
2. Gather evidence about how well students are achieving the outcomes.
3. Evaluate the evidence and interpret the findings.
4. Use the findings for programmatic and curricular improvements.

These four steps are typically thought of as a cycle with one step leading to the next, creating a process for continuously improving student learning:

An assessment plan describes how the assessment process will be conducted by the department. Assessment plans need not be large and elaborate, nor as rigorous as a research study. Rather, assessment plans should be meaningful, manageable, and sustainable (Allen, 2004). That is, assessment plans should address issues that are meaningful to faculty, they should build on assessment methods already in place, and they should be integrated into regular faculty work, such as discussing assessment findings as part of regularly held faculty meetings. We encourage departments to think small and whenever possible, to sample students and to sample existing student work.

Although formats used for assessment plans may vary, all assessment plans should address the following areas:

1. Student learning outcomes - what do faculty expect all majors to know, understand and be able to do by the time they graduate?

2. Curricular alignment - where does student learning in the major take place? Do students have adequate opportunities to achieve the learning outcomes?

3. Learning evidence - what types of evidence of student learning will be collected and analyzed?

4. Evidence review process – how are faculty reviewing and using findings from their assessment efforts to enhance student learning?

The following sections describe our expectations around these four areas.

1. Student Learning Outcomes

Student learning outcomes at the program level describe the knowledge, skills and values that students will acquire by the end of the program. They answer the questions "What should students know, what should they be able to do, and what should they value?" They focus attention on the learner, not what topics will be covered. They also describe the behavior students will use to demonstrate achievement of the outcomes (e.g., describe, analyze, explain). Learning outcomes generally fall into three categories:

- Knowledge – what do you want students to know and understand by the time they graduate? For example, what are the most important facts, concepts and theories students should know and understand?
- Skills – what thinking skills should students develop? What should students be able to do with what they know and understand? Examples might include application, analysis, evaluation, problem-solving, decision-making skills, creativity, critical thinking skills and information literacy skills.
- Attitudes, behaviors, and values – what do you want students to care about? What values and life-long learning habits should they develop? Also included in this category are personal and social responsibil
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- Do students have multiple opportunities (that is, more than one course) to learn and demonstrate achievement of learning outcomes?
- Are learning outcomes addressed at several points in the curriculum, and not just clustered in introductory courses or senior-level courses?
- Does the curriculum map indicate increasing levels of proficiency?
- Are there any overlaps, gaps or misalignments between the curriculum and the expected student learning outcomes?
- Is there a senior capstone course in which several outcomes might be assessed?

3. Evidence of Student Learning

Departments are expected to identify what evidence they will use to demonstrate that students have achieved the stated learning outcomes. Since assessment is an ongoing process, we recommend that departments start out small and assess only one learning outcome per year. We also recommend starting out small, using sampling of students and sampling of student work, and whenever possible, embedding assessment activities into required courses. The primary advantage of course-embedded assessment is that it relies on work produced by students are a normal part of their course work, thereby solving to potential problem of quality of student effort, is efficient and low cost, has face validity, and has the potential to provide maximally useful assessment results.

Evidence of student learning is generally divided into two types—direct and indirect. "Direct evidence" captures a direct observation or tangible demonstration of student performance including examples of student work such as exams, essays, portfolios, oral reports and presentations. "Indirect evidence" captures someone's opinions or perceptions of student learning, from the student or from others. All departmental assessment plans must include at least one direct measure of student learning, which may or may not be supplemented by indirect measures.

We also encourage the use of multiple methods of assessment to provide a more complete picture of student learning. Multiple methods can provide converging evidence that student learning is taking place (Rogers, 2006).

Examples of Direct and Indirect Measures of Student Learning

Direct	Indirect
• Course-embedded assessment • Student work samples from tests and exams developed within the program • Research papers and/or reports • Homework assignments • Laboratory experiments • Capstone projects or other culminating assignments • Collections of student work or portfolios • Performances in the fine arts or languages • Oral presentations • Performance on standardized exams	• Student course evaluations • Students' written self-reflections, journal entries • Students' self-assessment of their learning • Alumni or employer surveys • Student satisfaction surveys • Focus groups • Exit surveys or interviews with graduating seniors • Curriculum, syllabi, and transcript analyses • Job placement • Retention and graduation rates • Graduate school acceptance statistics • National rankings

Some assessment measures yield data that can be objectively scored; that is, responses are either correct or incorrect. In other cases, assessment measures can yield data that is qualitative and not amenable to correct/incorrect scoring. In these cases (for example, written essays, portfolios, performances), faculty need to develop rubrics or other types of scoring guides that operationally define the relevant learning outcome(s) and create a common frame of reference for evaluating student achievement. These rubrics and scoring guides should be described in the assessment plan. In addition, such rubrics should include specific levels of achievement, such as “below expectations”, “meets expectations”, and “exceeds expectations”.

Example of a Scoring Rubric

Criteria	Below Expectations	Meets Expectations	Exceeds Expectations	Outstanding
	Experimental design demonstrates a misunderstanding of the methodology.			
Experimental methodology				

to established standards or expectations, and used to improve the program. Faculty will review student work and the methods used to assess student achievement. One technique is to provide samples of student work at various levels, from "excellent" to "needs improvement." Recommendations for action may include further review of learning outcomes or the methods of assessment or modifications to the curriculum, pedagogy, or policies. The review process should be a collaborative process involving all faculty who teach in the undergraduate program.

Assessment plans should address the following three questions:

- Who will be involved in the evidence review process? To what extent will the teaching faculty be involved in the process? Who in the department will lead the discussion of the assessment results?
- When will the review process take place? Are there plans for the review process to take place at a certain time during the year or as part of regular faculty activities? Is the department planning a faculty retreat or some other time set aside for the review process?
- How will the review take place? What activities will be carried out during the review process? Will the process include review of student work, analysis of assessment results, and making recommendations for changes? Is a follow-up meeting planned to study the impact of the changes made?

An Additional Consideration

At the beginning of this document, we stated that assessment plans should be meaningful, manageable, and sustainable, and that departments should start small, sample students and student work, and use course-embedded assessment. These characteristics can also be used for a holistic review of assessment plans. That is, overall, to what extent did the plan meet these expectations? An overly elaborate or complex assessment plan is not needed, nor is it recommended. Assessment experts tend to agree that starting small is the best approach for successful assessment programs (Allen, 2004; Suskie, 2009).

References

Allen, M.A. (2004).

Questions for Reviewing Assessment Plans

Student Learning Outcomes

- Are they focused on the program as a whole and what students should be able to know and do have they have successfully completed the program?
- Are student learning outcomes student-centered? That is, do they describe what students will do rather than what the curriculum covers or topics that will be taught?
- Are they measurable? Do they describe how students will demonstrate their achievement of the outcome?
- Are they clear and understandable, and not open to interpretation? Do they avoid vague terms such as understand or appreciate?
- Do they include higher-level learning outcomes beyond knowledge and understanding, such as critical thinking, synthesis and evaluation?
- Are they discipline-specific; that is, do they reflect the distinctive aspects of the major rather than the general aims of liberal education?
- Are they reasonable in terms of number and scope? Student learning outcomes are only useful to the degree that they can be implemented. We suggest that programs craft a list of 3 to 5 of the most important outcomes.

Curricular Alignment

- Does the curriculum map indicate that students have adequate opportunities to learn and demonstrate achievement of each learning outcome?
- Do students have multiple opportunities (that is, more than one course) to learn and demonstrate achievement of learning outcomes?
- Are learning outcomes addressed at several points in the curriculum, and not just clustered in introductory courses or senior-level courses?
- Does the curriculum map indicate increasing levels of proficiency?
- Are there any overlaps, gaps or misalignments between the curriculum and the expected student learning outcomes?
- Is there a senior capstone course in which several outcomes might be assessed?

Evidence of Student Learning

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- How will the review take place? What activities will be carried out during the review process? Will the process include review of student work, analysis of assessment results, and making recommendations for changes? Is a follow-up meeting planned to study the impact of the changes made?

Holistic Criteria

- Is the assessment plan meaningful, manageable and sustainable?
- Will only one or a few learning outcomes be assessed?
- Will students and student work be sampled?
- Will course-embedded assessment techniques be used?