

Assessment Handbook for Departments

Assessing Student Learning Outcomes

Office of Academic Assessment
University of Southern Maine
Summer 2014

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What is Outcomes Assessment?

Outcomes Assessment is a systematic process of gathering and interpreting information to discover if a program is meeting established objectives, and then using that information to enhance the program.

A good assessment process can answer three related questions:

- What are we trying to do?
- How well are we doing it?
- How are we using what we discover to improve the program?

Student learning outcomes assessment will determine whether a program is helping students achieve the intended learning outcomes in the major, in general education, or in other areas. More importantly, what are your students not learning. Knowing the areas where students are not learning is essential in order to inform the decision making process. Assessing outcomes allows programs to focus on what students know and can do after they complete a specific program.

It is good assessment practice to assess a program in a variety of ways: such as:

- Student and alumni surveys (self-reported information, feedback from students)
- Passing rates on comprehensive exams, certification tests, etc
- Performance assessments (evaluations or reports from supervisors, etc)
- Actual student work products (papers, assignments, research studies, etc.)

Of these listed above, actual student work products (direct assessment) is the information that is the most useful in determining if students have learned what is described in the outcomes. This is different from using grades. Even though course grades are based on actual student work products, what goes into the calculation of a grades might be more than what is necessary to see if a student has mastered material for a specific student learning outcome. For example, a grade might include attendance or other course requirements that are not part of a specific learning outcome. For these reasons, it is not

considered appropriate or meaningful to use grades as a measure for student outcomes assessment. (Walvoord, Assessment Update, 1998).

The purpose of assessing student learning outcomes is to:

1. Ensure that student are learning what we want them to learn.
2. Provide an opportunity to make programmatic improvements based on assessments.
3. Document student learning for interested stakeholders (NEASC accrediting agency, for the university as a whole, for students and parents, and general public).
4. Use valid and reliable evidence to demonstrate student learning and to improve it.

-Linda Suskie, Assessing Student Learning: A Common Sense Guide. New York; Jossey-Bass, 2009.

Important Note: Outcomes assessment is not an evaluation of individual students, or of individual faculty or staff; rather, it is a process that provides each academic program, department, school/college, or related administrative unit with valuable feedback about overall performance related to curriculum, learning success, and/or services and goals. The assessment focus of each department/unit is on showing how the purpose or mission of the university is being accomplished through that particular unit. The emphasis is on the benefits or results of the learning or services provided—specifically on the outcomes that are experienced by those involved.

Principles of Good Practice for Assessing Student Learning

Given the importance of assessment in planning for academic quality enhancement, the American Association for Higher Education (AAHE) asked key higher education leaders to develop guidance for good practice in assessing student learning. Many of these principles are quite useful for assessment of administrative and support areas as well. The principles recognize that our work is complex and meaningful. As you create an assessment plan in your department, think about how your plan puts the following nine principles into action:

1. The assessment of student learning begins with educational values.
 - Assessment is successful when it is based on the institution's educational values.
 - Assessment is successful when it is used as vehicle for educational improvement.
 - Assessment starts with the institution's mission statement.

2. Assessment is most effective when it reflects an understanding of learning as multidimensional, dynamic, and vital to the learning experience.

- Effective assessment measures not only the breadth and depth of the learning experience, but also the imaginative, creative, and energizing aspects of the learning experience.
- Learning can be measured in three ways: core content (traditional facts and learning), integrative learning (knowledge and processing skills), and attitudes and dispositions (“good citizen” attributes).
- Effective assessment considers the reliability and validity of its measures.

3. Assessment works best when the programs it seeks to improve have clear, explicit purposes.

- The values and mission of an institution must be translated into meaningful and specific goals.
- You must create or define measurable objectives or goals.

4. Assessment requires attention to outcomes and to the experiences that lead to those outcomes.

- Assessment is concerned with outcomes.
- Assessment also measures the teaching and learning process that leads to educational objectives.

6. Assessment works best when it is ongoing.

- Successful assessment is an iterative process.
- Assessment is powerful when it is considered part of institutional culture.
- Assessment should be embedded in the program planning.

7. Assessment fosters wider improvement when representatives from across the educational community are involved.

- Successful assessment is collaborative: it is not housed in one department, instead it is part of the curriculum and faculty development process.
- Having diverse participants does not guarantee success, but it does ensure all groups have “a voice.”
- Assessment is an active process of critiquing and improving educational performance.

8. Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about.

- The challenge is not only to collect data, but also to make meaningful connections to the data!
- Data should not sit on the shelf; it must be used to make good decisions to meet educational goals.

9. Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.

- Institutions must view the information from assessment as vital to decision making.
- Assessment focuses on the what, improvement focuses on the what-you-do-with-it.

10. Assessment is most effective when undertaken in an environment that is receptive, supportive, and enabling. Assessment requires an environment comprised of:

- Effective leadership
- Administrative commitment
- Adequate resources
- Faculty and staff development opportunities
- Time.

-Excerpt from: Assessment in Practice, Putting Principles to Work on College Campuses, Trudy W Banta, Jon P Lund, Karen E Black, and Frances W Oblander, 1996.

Assessment Learning Cycle

Assessment is just another way to look at the ongoing cycle of setting goals and outcomes, measuring them to see how well they have been achieved, and making appropriate changes to courses, programs, and the assessment process. This is important because the information gained through the assessment process can provide information to guide curriculum revision, planning, and the support of programs toward the goal of enhanced student learning.

The three elements (teaching, student involvement, and assessment) can gradually build a “culture of evidence” where the feedback from assessment becomes a regular and essential component of program development.

The Assessment Learning Cycle addresses the following basic questions:

Step 1: What are you trying to do?

Define intended program learning objectives/outcomes: what do you want your graduates to know and actually be able to do?

Step 2: How will you know if you are successful?

Define observable, measurable, actual outcomes that will tell you how well each objective has been met.

Step 3: How successful were you?

Compare observed outcomes to intended outcomes: how well do you meet your objectives in general, and your student learning outcomes in particular?

Step 4: What should you do about it?

Accept or modify program objectives, outcomes, and assessment measures to better achieve target objectives in next assessment cycle.

-Peggy Maki, Assessing for Learning: Building a Sustainable Commitment Across the Institution; AAHE publication (2004).

Assessment and Accreditation

The concept of assessment is not only an important process internal to the institution, but assessment of student learning is at the heart of the regional accrediting commissions. Please see the document from the higher education associations, and the assessment standards that are requested from our regional organization (NEASC) for our next accreditation cycle. *See section on Additional Resources for the link to the Accreditation document.

Outline of the Assessment Process: Steps for Departments

Follow these steps to complete the assessment process. This process is about determining whether your students are learning what is being taught, and to determine if your students have many opportunities to learn the required material. The process allows for faculty in your department to have continued and passionate discussions on how to enhance teaching and increase student learning in your program.

1. Define your program mission, goals, and expected student learning outcomes.
2. Align program components with learning outcomes.
3. Selecting and implementing assessment methods.
4. Using evidence gathered in the assessment to make improvements.

-Mary Allen, Assessing Academic Programs in Higher Education, Anker Publishing Company, Inc (2004).

**See section on Additional Resources for a link to the Assessment Worksheet for Departments; which is a visual format for addressing each of the following steps.*

Description of the Assessment Steps

STEP 1: PROGRAM MISSION, GOALS, and LEARNING OUTCOMES

- A. Articulate the mission and goals of your program/unit.

The **program mission statement** is a broad statement of the values and philosophy of the program, or a vision of what the program is supposed to do. The **program goals** are broad statements that provide a framework for determining the more specific educational objectives; the purpose of the curriculum. The program mission and goals should be consistent to the overall mission of the institution.

Consider these questions in formulating the purpose or mission of your program:

1. What is the primary function of your program?
2. What core activities are involved?
3. What should students experience after interacting with your program?

Example of a program mission: The mission of the department is to provide students with educational experiences and environment that promotes the mastery of discipline knowledge and methods, the ability to succeed in the discipline-related career, and the skills needed for dealing with diverse cultures.

Examples of program educational goals:

1. Understand and apply fundamental concepts of the discipline.
2. Create solutions to discipline-related issues and problems.
3. Respect persons from diverse cultures and backgrounds.

B. Articulate the educational objectives/student learning outcomes.

The **educational objectives or student learning outcomes** are statements derived from the program goals; more specifically, define the components of the goal, circumstances in which goal will be achieved, and criteria for achievement. Learning outcomes describe the observable evidence of a student's knowledge, skill, ability, attitude, or disposition. These should be precise statements that are measurable, achievable, and realistic.

Consider these questions in writing student learning outcomes for your program:

1. What are the most important results or impacts that should occur as a result of your program's activities?
2. What does the students experience through interaction with your program?
3. How would you recognize whether students have the skill you are seeking?

Examples of student learning outcomes:

1. Students will be able to describe the ethical viewpoints in the discipline.
2. Students will be able to apply quantitative concepts to a (discipline-related) question or issue.
3. Students will be able to demonstrate awareness of various cultures and backgrounds.

**See section on Additional Resources for links to Blooms Taxonomy, and Writing Student Learning outcomes.*

STEP 2: ALIGN PROGRAM COMPONENTS WITH LEARNING OUTCOMES

Identify **program components** that are designed to achieve each educational objective/outcome. Students will not demonstrate the desired learning outcomes if your program components have not provided sufficient opportunity to develop them during coursework and related experiences. Curricula should be structured to introduce key learning opportunities early and to reinforce this learning throughout.

A matrix is a tool commonly used to summarize the relationship between program components (curriculum, courses) and program goals and objectives, (I=introduced, P=practiced, R=reinforced).

Consider these activities when mapping program objectives to courses:

1. List the required and optional courses for your program.
2. List the instructors for these courses.
3. Which program goals or objectives are addressed in each course.

**See section on Additional Resources for a template of a matrix, curriculum map.*

STEP 3: SELECTING & IMPLEMENTING ASSESSMENT METHODS

Select **methods or instruments** for gathering evidence to show whether students have achieved the expected learning outcomes related to the educational objectives and goals. Avoid relying on only one measure for information about your program; as this would lead to misleading perceptions of what is going on in the department. Multiple measures allow you to explore what students know, what they can do with what they know, and what they think about the whole process.

Consider these questions when selecting assessment methods for each student outcome statement:

1. How do you know when a student has achieved the knowledge, skill, or ability?
2. What are the criteria you are using to judge whether a student has achieved a given level of knowledge or skill proficiency?
3. Will you use a rubric for scoring the assessments?
4. What will be the target of success (i.e. 80% of students met the specific outcome)?

Examples of assessment approaches for assessing student learning outcomes:

1. Capstone course projects, research reports, portfolios, thesis
2. Presentations, performances, video tapes, field work
3. Term papers, essays, specific course assignments, case studies
4. Standardized tests, locally-developed exams, embedded questions on exams

Implementing the Assessment Methods:

- You may not be able to assess all of your important learning outcomes in a single year, so only identify one or two outcomes to assess each year. Remember that outcomes assessment is an ongoing process.
- Select carefully only those outcomes that your department is most interested in having student achieve, and those outcomes that can be measured.
- Good assessment is meaningful, manageable, and sustainable. Planning for assessment requires setting priorities; it is not productive to measure everything.
- Set a schedule for conducting your assessment activities. One of the easiest ways is to administer the assessments in certain required courses, perhaps some courses in the fall and other courses in the spring. Set-up a 3-year plan.
- Decide when your department will gather to score the assessments; it is suggested that at least 2-3 faculty members agree to conduct the scoring process. If possible, all faculty in the department should participate on a rotating schedule.
- Assessment results reflect not only the accomplishments of students, but also those of the departmental faculty as a whole.

**See section on Additional Resources for a link to more information on Assessment Methods, Creating Rubrics, Preparing an Assessment Plan.*

STEP 4: USING EVIDENCE GATHERED IN ASSESSMENT

Review and use the assessment results for making improvements in the program. Specify the procedures for analyzing and interpreting the evidence that was gathered in the assessment process.

Once the results from your assessments have been collected, see what they can tell you about your program. Consider asking questions such as:

1. What can you infer from the data?
2. What future actions will you take?
3. What changes have you made, or will you make based on assessment results?

As each department/unit discusses the assessment results and their implications, celebrate when the unit has accomplished what it planned to accomplish. Come to a clear understanding and agreement on areas that still present opportunities for growth and improvement. Document the findings of assessment. As you discuss the results, revisit and make improvements for the next assessment cycle. The assessment cycle is not completed until the results are used (ending the assessment loop). Some of the typical changes might include: 1) making a modification in the curriculum; 2) revising the assessment process, such as in the learning outcome, conducting the assessment, or the scoring rubric; or 3) revamping administrative procedures, or organizational structure.

**See section on Additional Resources for a rubric on Assessing Quality of Learning Outcomes which may help Departments address their level of progress with the assessment process.*

***Please be sure to summarize your assessment results for institutional reporting purposes. For each academic program, the Department Chair will be asked (at the end of each academic year) to provide a summarized version of their assessment process for the Campus-wide Assessment Report.**

**See section on Additional Resources for the direct link to USM's ASLP form.*

Additional Resources on the Assessment Process:

- *Assessment and Accreditation: [Click here for NEASC assessment standards document.](#)
- *Assessment Worksheet for Depts: [Click here for visual template from Penn State Univ.](#)
- *Blooms Taxonomy: [Click here for a link to Blooms Taxonomy document.](#) .
- *Writing Student Learning Outcomes: [Click here for a resource from Univ of Hawaii.](#)
- *Curriculum Map Template: [Click here for a template of a matrix \(Excel version\).](#)
- *Direct and Indirect Assessment Methods: [Click here for some examples of methods.](#)
- *Creating and Using Rubrics: [Click here for a resource from Univ of Hawaii.](#)
- *Preparing an Assessment Plan-Visual Summary: [Click here for a visual example of an assessment plan.](#)
- *Assessing Quality of Learning Outcomes-Rubric: [Click here for visual chart from WASC.](#)
- *Assessing your Assessment Plan: [Click here for article from Winona State University.](#)
- *USM's Departmental Assessment Form: [Click here for the Assessment of Student Learning Plan \(ASLP\).](#)