

EVIDENCE

PROGRAM ASSESSMENT FOR CONTINUOUS IMPROVEMENT

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From the AAHE

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Why Program Assessment?

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If you resolved to avoid all discussion of, and activities relating to assessment in 2005, may I remind you that most new-year's resolutions have already been broken. If you are among the minority who keep their resolutions, then you need to stop here. Others should read on and join the rest of us who view resolutions as loose long-term goals with no specific outcomes that we plan to assess.

The question that faculty ask me most frequently about program assessment is "why do we need to do program assessment if we are doing assessment for grading in our program classes?"

We assess to find out about student learning, not just to measure. Assessing the student is not sufficient to help students learn, but it does provide useful information for

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Stockton Students' Classroom Experiences

In the spring of 2004 five faculty participated in a pedagogy survey by asking the students in their classes to complete a questionnaire about their classroom experiences. A total of 210 students were surveyed. The classes constituted a convenience sample, and moreover, a convenience sample of volunteers. Therefore, we cannot assume that the findings from these data are generalizable to the wider population of Stockton students. Seventy three percent of those surveyed were female, with 31% juniors, 30% seniors, 21% freshmen and 18% sophomores. Although a wide variety of majors were represented, the majority were literature majors (67%). Students in Advanced Statistics administered the surveys and analyzed the data. All faculty received their separate class reports as well as the composite data.

Students were asked about their experiences in specific classes. They were asked to rate the quality of instruction, and their level of learning and enjoyment. Additionally, they rated the frequency with which their instructors used twelve instructional strategies (lecture, discussion, group work, etc.) and the proportion of the instructional experiences that were at various levels of the cognitive domain (understanding, analysis, knowledge, etc.). Students were also asked about their motivation, how many of their classmates they knew, how interested they were in the subject matter and how hard they worked in an out of class.

Sixty percent of the students reported outstanding instructional experiences, and 62% said they were learning a lot. According to this sample, lectures are the predominant instructional method. Sixty percent said that their classes were "almost always" lecture. In contrast, 53% said that their professors "never" used group work. Seventy five percent said that most of the work in their classes required "understanding and applying."

Correlation analysis showed that students who said they were engaged in more class work that could be characterized as "understanding and applying" reported that they

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were learning more ($r = .338$, $p = .001$), and they rated the quality of instruction more highly ($r = .203$, $p = .003$). Responses to the most important question, "How would you rate your learning in this class" showed the strongest correlations with ratings of "interest in subject matter" ($r = .599$, $p < .001$), "quality of instruction" ($r = .574$, $p < .001$), and "enjoyment" ($r = .544$, $p < .001$). This means that students who were interested tended to say they were learning more, students who were learning more tended to rate the quality of instruction higher, and students who were learning more tended to enjoy classes more.

Faculty who participated used their class-specific data in class discussions about the nature of learning, the out-of-class expectations, and instructional strategies. Several of the questions are similar to those that deal with intellectual experiences on the National Survey of Student Engagement. The NSSE, however, samples only freshmen and seniors and they use random sampling methodology. The pedagogy survey will be administered again in April of this semester. A copy of the survey was sent out to all the faculty in the fall of 2003. If you would like to participate, please e-mail me and indicate what class or classes you would want to survey.

9 Principles of Good Practice for Assessing Student Learning

1. **The assessment of student learning begins with educational values.** Assessment is not an end in itself but a vehicle for educational improvement. Its effective practice, then, begins with and enacts a vision of the kinds of learning we most value for students and strive to help them achieve. Educational values should drive not only *what* we choose to assess but also *how* we do so. Where questions about educational mission and values are skipped over, assessment threatens to be an exercise in measuring what's easy, rather than a process of improving what we really care about.
2. **Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.** Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom. Assessment should reflect these understandings by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration. Such an approach aims for a more complete and accurate picture of learning, and therefore firmer bases for improving our students' educational experience.
3. **Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes.** Assessment is a goal-oriented process. It entails comparing educational performance with educational purposes and expectations -- those derived from the institution's mission, from faculty intentions in program and course design, and from knowledge of students' own goals. Where program purposes lack specificity or agreement, assessment as a process pushes a campus toward clarity about where to aim and what standards to apply; assessment also prompts attention to where and how program goals will be taught and learned. Clear, shared, implementable goals are the cornerstone for assessment that is focused and useful.
4. **Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes.** Information about outcomes is of high importance; where students "end up" matters greatly. But to improve outcomes, we need to know about student experience along the way -- about the curricula, teaching, and kind of student effort that lead to particular outcomes. Assessment can help us understand which students learn best under what conditions; with such knowledge comes the capacity to improve the whole of their learning.
5. **Assessment works best when it is ongoing not episodic.** Assessment is a process whose power is cumulative. Though isolated, "one-shot" assessment can be better than none, improvement is best fostered when assessment entails a linked series of activities undertaken over time. This may mean tracking the process of individual students, or of cohorts of students; it may mean collecting the same examples of student performance or using the same instrument semester after semester. The point is to monitor progress toward intended goals in a spirit of continuous improvement. Along the way, the assessment process itself should be evaluated and refined in light of emerging insights.

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faculty to facilitate student learning. Program assessment is a way for programs to see if majors can do the things that faculty expect them to be able to do in cognitive, metacognitive, affective, and performance terms. It is a systematic collection and analysis of information about program goals and objectives. This information is useful as program members make instructional decisions collectively and individually. For program assessment to serve its purpose, faculty must review the assessment data and evaluate what they have. Program assessment differs from the assessment that we do at the course level in several ways, and therefore a collection of course assessments cannot substitute for program assessment, although data from course assessment can be part of a program assessment plan. All program members have course assessment data; if there is no collective analysis of the information, these data are not yet being used for assessment.

Course outcomes are often more detailed than program ones, and therefore course assessment is more specific. Because assessment is goal and objective driven, the broader program outcomes will be approached differently. Learning outcomes in a course are assessed on a micro level, and program assessment is done on a macro level. For example, in one course I may have a specific objective for students to learn how to calculate a correlation coefficient. My program may have a broader goal for our majors to be able to conduct appropriate statistical analyses and interpret their results. The course objectives are subsumed under the broader program goals. At the course level we assess each student and each of our objectives. In program assessment, the outcomes are broader. We look for acceptable indicators of these outcomes, and we do not need to measure each student, just a good sample of students.

Course and program assessment also differ in accountability; faculty must make at least a global assessment of students' performance for grade assignment each semester in each course. Program coordinators are now responsible for spearheading the program assessment efforts. This process will be ongoing, and the responsibility will change hands with time, but each semester some aspect of program assessment should be addressed. The reporting deadlines are not as immediate, and it is easier to postpone the analysis of the data that you have on hand.

Course and program assessment are similar in that both can employ a combination of formative and summative approaches and can rely on measurement of all types of

outcomes from cognitive, affective, or performance domains.

How should you begin if you have not already done so?

The process has to start with some variant of the questions—What do we want our majors to know? What are we sure they know? When should they know this and how many actually do? The list can include all types of outcomes, cognitive, affective, metacognitive, and performance. Programs could start with one or two of the outcomes on the list that they put together and focus the initial efforts on those outcomes. Some pertinent questions:

- Do we want to do some pre-instructional assessment?
- When do students gain these skills or attitudes?
- How can we get a representative group to do our assessment?
- What is the best method to measure these outcomes?
- What data do we already have on hand?
- How often do we want to collect these data?
- How will we use these data?
- What outcomes should we address next?

Answers to these questions will vary with program focus. Throughout the college, programs will employ a diverse set of assessment approaches. For assessment to be useful, the methods must be valid and produce reliable results. The assessment office can help with the more technical questions about validity and analysis of results, but all the important decisions are program decisions.

When you get to the point of choosing methods, consider archival records, observations, focus group, locally developed exams, standardized exams, exit interviews, surveys, portfolios, performance appraisals, oral examinations, or capstone project assessment. Each method has advantages and disadvantages and is more appropriate for some outcomes than others. A program does not have to choose one method for its entire assessment plan; the plan can have a mix of appropriate methods for different outcomes.

How to proceed:

- Decide what learning outcomes you want to assess
- Select or create the best measurement tool
- Carry out the assessment

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- Look closely at the results
- Use the results to make changes
- Reassess the particular outcome after the changes have been made.

For the past three years programs have been charged with the responsibility of developing their own assessment plans and have been encouraged to start with one or two outcomes and to add to these each year until they have a set of processes that are acceptable to the program mem-

bers. This is still the recommendation, and programs are free to approach their assessment of student learning in whatever way they prefer, provided they include a mixture of direct (measured) and indirect (self-report) data.

All deans have some resources and can answer some of your questions. I have more resources and would welcome questions and comments by e-mail. This link <http://www.wvu.edu/depts/assess/slo.htm> has several very useful resources.

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6. Assessment fosters wider improvement when representatives from across the educational community are involved. Student learning is a campus-wide responsibility, and assessment is a way of enacting that responsibility. Thus, while assessment efforts may start small, the aim over time is to involve people from across the educational community. Faculty play an especially important role, but assessment's questions can't be fully addressed without participation by student-affairs educators, librarians, administrators, and students. Assessment may also involve individuals from beyond the campus (alumni/ae, trustees, employers) whose experience can enrich the sense of appropriate aims and standards for learning. Thus understood, assessment is not a task for small groups of experts but a collaborative activity; its aim is wider, better-informed attention to student learning by all parties with a stake in its improvement.

7. Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about. Assessment recognizes the value of information in the process of improvement. But to be useful, information must be connected to issues or questions that people really care about. This implies assessment approaches that produce evidence that relevant parties will find credible, suggestive, and applicable to decisions that need to be made. It means thinking in advance about how the information will be used, and by whom. The point of assessment is not to gather data and return "results"; it is a process that starts with the questions of decision-makers, that involves them in the gathering and interpreting of data, and that informs and helps guide continuous improvement.

8. Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change. Assessment alone changes little. Its greatest contribution comes on campuses where the quality of teaching and learning is visibly valued and worked at. On such campuses, the push to improve educational performance is a visible and primary goal of leadership; improving the quality of undergraduate education is central to the institution's planning, budgeting, and personnel decisions. On such campuses, information about learning outcomes is seen as an integral part of decision making, and avidly sought.

9. Through assessment, educators meet responsibilities to students and to the public. There is a compelling public stake in education. As educators, we have a responsibility to the publics that support or depend on us to provide information about the ways in which our students meet goals and expectations. But that responsibility goes beyond the reporting of such information; our deeper obligation -- to ourselves, our students, and society -- is to improve. Those to whom educators are accountable have a corresponding obligation to support such attempts at improvement.

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