

Academic Outcomes Assessment in Undergraduate Education: Rationale & Process

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Higher Education is a pervasive and powerful agent in American life. Estimates of undergraduate enrollment in the year 2000 range from approximately 18 to 22 million students (Hurst and Hudson, 2005). For a considerable number of our citizens, higher education is the highway to a better and more fulfilling life. However, that highway is a toll road, not a freeway. In 2006, the average cost of tuition, room and board was about \$13,000 per year at public four year institutions and over \$30,000 at similar private institutions. It is unlikely that these costs will decline in the foreseeable future.

Given the economic opportunities that a college education can provide and in light of the considerable cost involved in obtaining that education, it is not surprising that institutions of higher education have begun to ask a critical but complicated question: How do you measure the intellectual benefits that an academic program provides its students? In light of the cost that individuals bear to earn that degree, it is reasonable to ask whether an academic program delivers on that promise. Posing the question is easy; finding an answer is more problematic.

Higher education today is remarkably diverse. Community colleges, four-year institutions, comprehensive universities, technical institutes, and performing arts conservatories all compete for students and all offer different flavors of educational experience. One assessment tool could not possibly cover all institutions, so the astute academic will look for an assessment process that maps onto the objectives of each program.

In many ways, program assessment resembles the process of designing and constructing a home. Before a single board is hammered into place, it is important to think carefully about what you want the house to accomplish. Is it a summer home or a year-round residence? Does your social life revolve around elaborate dinner parties, viewing sports events or movies at home in a casual environment, holiday visits from an extended family, or time spent in the garden? Based on these different needs, one individual would design a larger dining room, another a more expansive family room featuring a

home theatre, a third would value additional bedrooms to house guests, whereas a fourth would prize glass doors that open out into a terraced garden. Once you have in mind the role which the house will play in your projected life style, you would then work to articulate a design that reflects what you expect to accomplish through building the house. The list of desired architectural features might be more extensive than time and money can provide and so you would temper your desires within realistic parameters. At the end of the process, you would decide which features worked and which did not. That evaluation would help you to decide if any modifications or additions should be planned for the future. This schema of priority setting, planning, execution, and evaluation is the heart of the academic assessment process. Let us now turn to that very topic.

The American Psychological Association (APA, 2007) proposes the following guidelines for departments engaged in the process of academic renewal. The major steps are:

- Laying the foundation for the assessment process
- Designing an assessment plan that fits the goals and objectives of the program
- Building a culture that values and sustains assessment while avoiding problems
- Applying assessment to the major.

Laying the Foundation for the Assessment Process

The key issues at the outset are ownership, definition of goals prior to the assessment, and the identification of multiple measures that are consistent with your departmental and institutional goals.

Assessment of a departmental curriculum works best when faculty are not only willing to become involved but to become invested in the process. Faculty that view the assessment process as an unwelcome intrusion on academic freedom are less likely to design and conduct a meaningful assessment, whereas those departments that view the

process as an opportunity to improve, gain recognition, and secure additional institutional resources are more likely to feel that the process lead to significant improvements in their program. A second point in the preparation phase is the clear articulation of the objectives of the assessment. Is the purpose of the assessment to accelerate student learning or to evaluate the strengths and weaknesses of the program? Faculty often report that they "know" what knowledge base and skill set the major is designed to convey to the students. In reality, extensive discussion about the objectives of the major and the relative importance of factors such as writing, content, statistical skills, hands-on clinical or lab skills will often lead to a thoughtful clarification of how the department should be articulating the mission of the institution through the curriculum. This discussion can then flow naturally into the consideration of assessment tools. A department at an institution that heavily values written expression as the tangible outcome of critical thought would likely chose a different set of assessment tools than an institute that is heavily focused on the development of skills that address technical, artistic, or clinical problems. It is unwise to put all your assessment eggs in one basket. The use of multiple measures that reflect departmental priorities is more likely to lead to a useful outcome than any single measure. Finally, be recursive. The fact that you have used a particular assessment measure in prior years does not mean that you are compelled to continue on with that same measure. Plan to revisit the selection of your assessment measures at the end of the procedure with the idea that you will use the outcome of the current process to guide future assessments.

Designing Your Assessment Plan

With your assessment goals in place, the next step is to design the blueprint you will follow. Just as no one house plan fits every family, there is no one best way to assess student learning and the quality of a curriculum. Some examples are:

- Classroom and curricular measures such as in house exams as well as standardized tests such as the Major Field Test, classroom visits and course evaluations.
- Archival measures such as transcript analysis, syllabi analysis, data on earned degrees, graduate enrollment over prior years.
- Individual and group projects such as term papers, research projects, poster presentations, oral presentations can be evaluated for content and originality.

- Interviews and surveys such as exit and transfer interviews, alumni interviews, and surveys and feedback from graduate schools that have accepted your graduates.
- Self-assessment measures such as personal journals and reaction papers.
- Summative measures such as standardized tests, portfolios, capstone experiences.

Each of these measures has its pros and cons. As there is no single best assessment plan, the prudent department will consider how various assessment measures fit into their particular curricular and institutional mission.

Implementing the Assessment Plan in a Sustainable Fashion while Avoiding Problems

Assessment works best when the process continuously informs the department's on-going strategic planning process. Assessment should not be an episodic activity conducted to satisfy the periodic requirements of regional accreditation groups. When assessment procedures address questions that motivate the faculty and can be clearly seen to play a role in the distribution of resources by the administration, then the foundation for sustaining a meaningful culture of assessment is in place.

Even with a clear assessment blueprint in hand, a department can go astray in its assessment procedure in several ways. Common avoidable errors are

- Selecting inappropriate measures or too few measures.
- Mistaking the collection of data for the analysis and interpretation of data.
- Failing to translate conclusions derived from assessment into program change.
- Mistaking the process of assessment for progress itself.
- Proposing fatal solutions; i.e. solutions that are clearly unworkable given current budgets or reasonable staffing expectations.

Although pitfalls may lie in wait for the unwary, one can build best practices into the department assessment procedure just as easily. Here are but a few examples.

- The collection of assessment measures can be built into courses and annual reports.
- Specific courses can be designated as assessment points where data are regularly gathered for evaluation.
- Including alumni in the assessment procedure can build strong ties to the department and the institution; alumni are a

priceless source of outcomes and satisfaction data.

Applying Assessment to the Major

After the planning process has led to a detailed and appropriately tailored blueprint for assessment and the assessment has occurred, the process is near but not yet at completion. Translating the output of the assessment process back into the classroom completes the circle that began at the pre-planning stage. Departments may feel overwhelmed by the end of the process or may adopt a defensive posture. If the assessment process does not lead to meaningful curricular change, the entire effort was a waste. Here are a few techniques that may be useful to insure that the final report is not filed and forgotten.

- When assessment leads to suggestions for positive change as opposed to remedies for deficiencies, colleagues are more likely to relish the role of active participants in renewal.
- Assessment procedures may lead to the identification of a host of issues. In that case, it's critical to remember that Rome was not built in a day. You don't have to address all the issues at once. Instead, rank order the problems from most critical to least pressing and work on them ad seriatim.
- One way to involve dubious faculty is for institutions to codify in their Faculty Handbook that the scholarship of assessment is considered to be a component of academic renewal that is counted and valued during review for rank and tenure.
- Finally, it's important to keep in mind that many faculty really are overburdened. To the extent that assessment responsibilities can be assigned in accord with faculty expertise and interests and that the additional load incurred by assessment is minimized, enthusiasm and participation will be maximized.

References

Hurst, D., & Hudson, L. (2005). *Estimating Undergraduate Enrollment in Postsecondary Education Using National Center for Education Statistics Data* (NCES 2005-063). U.S. Department of Education, National Center for Education Statistics. Washington, DC: Government Printing Office.

Web Resources

The following web resources were used in the construction of this chapter.

- The American Psychological Association maintains a web site that provides a great deal of guidance for departments engaging in assessment. The assessment cyberguide for learning goals and outcomes can be found at http://www.apa.org/ed/guide_preface.html.
- The American Association for Higher Education provides a site entitled Nine principles of good practice for assessing student learning. It can be found at: <http://cstl.syr.edu/cstl2/home/Teaching%20Support/Teaching%20Practice/14G000.htm>
- What is good assessment? A synthesis of the principles of good practice in academic assessment provided by Linda Suskie. It can be found at: <http://faculty.ccp.edu/dept/viewpoints/f03v4n1/suskie.html>
- Perhaps the most comprehensive site on assessment is contained on the North Carolina State University Planning and Analysis site, which contains hundreds of links to resources for faculty and administrators engaged in assessment. It can be found at: <http://www2.acs.ncsu.edu/upa/assmt/resource.htm>