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Principles for college outcomes assessment, as outlined in the literature, are reviewed. Drawing on the experience of the Virginia State Polytechnic Institute and State University (Virginia Tech) during a decade of state-mandated outcomes assessment, a number of salient issues are identified. Faculty and academic issues include these: faculty resistance to assessment and accountability; relationship of faculty development to assessment; maintaining continuity year-to-year; and continuous assessment and resulting curricular adjustment in academic units. Administrative considerations concern: data dissemination; financial support for assessment activities; curriculum changes resulting from frequent assessment; student involvement in learning; placement testing; evaluating success in introductory courses; qualifications of assessment personnel; and cooperation between assessment, institutional research, and planning. One additional issue is that at the state and national levels there appears to be a trend toward standardization of testing and opinion surveys. The paper foresees such trends as: statewide student testing; increased use of numerical indicators; common satisfaction questions such as those in alumni surveys; use of peer studies; increased sophistication of disciplinary accreditation bodies; close scrutiny of innovations; and increased pressure for assessment from the business sector. (MSE)
Lessons Learned from a Decade of Assessment

by

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Abstract

A summary of practical lessons learned from approximately ten years of doing assessment in an organized way is provided. The university involved was among the first of its size and complexity to be required to approach state mandated assessment along a model analogous to those used for institutional self studies, with heavy emphasis on the role of the department. The observations shared should be especially useful to individuals and/or institutions in the early stages of an outcomes assessment process.
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Jean Endo
Editor
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Introduction and Perspectives

In 1985 the Virginia legislature required the state coordinating board to study how the assessment of student learning might be undertaken. An advisory committee was formed from representatives of many different colleges and universities, and one conclusion was that each institution would address assessment in its own fashion within certain guidelines. Virginia Tech, the largest and most diverse university in the state, chose an approach which was aimed at formative evaluation, with a primary focus on departmental assessment.

Purpose

In the intervening years a great deal has been learned about what to do and not to do, some of it coming from evaluations of the assessment program. The conclusions below tend to be practical and experientially based. The purpose of the paper is to share, in a summary form, some lessons learned from a decade of experience in the field which are not readily available from other sources.

Literature Review

There is a large and growing body of literature on assessment topics, but few resources of the kind of practical advice offered here. Two recent books offering useful examples are exceptions to this general rule: *Making a Difference: Outcomes of a Decade of Assessment in Higher Education* (Banta & Associates, 1993) and *Assessment in Practice: Putting Principles...*
to Work on College Campuses (Banta & Associates, 1995). Both of these books include information gathered at Virginia Tech and other colleges and universities. The latter volume in particular is useful in addressing the issue of how to use assessment data for program improvement.

A relatively recent set of outcomes assessment principles was developed by a group affiliated with the American Association for Higher Education (1992). Entitled “Principles of Good Practice for Assessing Student Learning,” it presents nine statements describing sound assessment practices:

- The assessment of student learning begins with educational values.
- Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.
- Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes.
- Assessment requires attention to outcomes and also and equally to the experiences that lead to those outcomes.
- Assessment works best when it is ongoing, not episodic.
- Assessment fosters wider improvement when representatives from across the educational community are involved.
- Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about.
Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.

Through assessment, educators meet responsibilities to students and to the public.

Banta et al's most recent book developed nine thematic chapters around each of the above principles and added one of its own:

- Assessment is most effective when undertaken in an environment that is receptive, supportive, and enabling.

An earlier but similar set of principles was developed by the National Association of State Universities and Land Grant Colleges (1988). This set has more of an institutional and statewide policy flavor to it, as one might expect from such an organization witnessing the national interest in assessment and accountability generally at the time it was produced. It's Statement of Principles on Outcomes Assessment states the following:

- Institutional, program, and student outcomes assessment should focus, primarily, on the effectiveness of academic programs and on the improvement of student learning and performance.

- States and institutions should rely primarily on incentives rather than regulations or penalties to effect student outcomes assessment and foster improvement.

- Institutional programs for evaluation and assessment should be developed in collaboration with the faculty.
• Assessment requirements should permit colleges and universities to develop institutional programs and define indicators of quality appropriate to their missions and goals and consistent with state-wide objectives and standards.

• Colleges and universities should be encouraged to use multiple methods of assessment for improving teaching and learning and demonstrating achievement.

• Requirements for assessment should be fiscally conservative and avoid imposing costly evaluation programs on institutions or state agencies.

• Within an institution, assessment programs should be linked to strategic planning or program review, or to some comprehensive strategy intended to encourage change and improvement.

A survey conducted during the spring of 1990 found colleges and universities purporting to be involved in student outcomes assessment but not being able to point to curricular or other changes that has occurred as a result (Muffo, 1992). Most found the “Statement of Principles” to be useful as guidelines, however.

As of 1995, five years later, fully a fourth of those surveyed in another study (including 42 percent of two-year colleges) had not yet begun an assessment program and were not committed to doing so, while 43 percent were at the start-up stage (Steele, 1996). Approximately 30 percent were in the implementation or utilization/acceptance stages. None of the 144 responding institutions described itself as being in the commitment stage,
defined as, "Reflecting integration of assessment into decision-making and change process, widespread faculty involvement." (13)"

Recently Culver and Ridley (1995) developed their own set of principles of what not to do, requiring the reader to determine how best to go about assessment by reversing their advice. They report some very sound principles nonetheless:

- Talk to the administration and make sure they understand that assessment is just a fad and that there is no reason to support it either with words or cash.

- When sharing the results with others on campus, give no thought to the political fallout that may be caused by the information collected.

- Point out as quickly and clearly as possible that the purpose of assessment is to root out those faculty who have gotten by on inferior teaching skills for the past several years.

- Always assume that results deeply buried in the assessment report’s appendices will never be read or published in the newspaper because of the Freedom of Information Act.

- To implement assessment policies and procedures on your campus, create a large committee of at least 40 individuals so that all possible insights can be gained before movement begins.

- If no one on the faculty has asked to see the latest report on assessment, assume that they have no interest in assessment. wouldn’t understand it anyway, or are living the
unexamined academic life and are unworthy to receive your pearls.

- Make sure that assessment information is interpreted apart from the context in which it was collected. This makes interpretation cleaner and less complex.

- Never delegate to others the actual analysis and interpretation of data.

- Rely exclusively on hard data and stay away from squishy, qualitative, touchy-feely data.

- Always assume that lightning only strikes the computer next door and that your computer's hard drive will never crash.

- Rely heavily on standardized testing that has been developed outside the university and provides an objective view of student progress.

- Always depend on slick PERT charts and checklists to manage your projects.

- If you hear of something going on at another school, use it at your school without delay.

- Depend on it that new software always works perfectly the first time.

- So that longitudinal comparisons can be made, once measures have been put in place, they should remain forever. Change is a sign of weakness.

- Never show up at faculty meetings lest faculty get the idea that assessment is connected with teaching and learning.

- No attempt should be made to evaluate the assessment process on your campus.
While the development of "anti-principles" remains somewhat rare, the search for general principles seems to go on. As of February 20, 1996, for instance, a distinguished group of engineering educators were discussing a white paper entitled, "A Framework for the Assessment of Engineering Education." At that point it was available on the American Society for Engineering Education Internet home page at http://www.asee.org/asee/announce/frameworkee/.

Observations

The most basic observation is that there are lessons that can be learned and passed along; most of these apply in a variety of institutional settings.

A brief summary of these follows:

Faculty/Academic Issues

- Faculty are going to resist assessment/accountability. It's uncomfortable to be judged, especially on the achievement of others such as students. The process is time-consuming and can be frustrating at times; there are no easy answers. Faculty cannot completely control the process and results. Frequently in the end they are pleasantly surprised at what they discover.

- Faculty (and others) will only accept the results of studies if they gather the data themselves, especially if the data are about their department or unit. Consequently, faculty "ownership" of any data is one of the
most important factors. It's far better to have less-than-perfect data gathering by departmental faculty than perfect data from somewhere else. Only when they trust the veracity of the data are they likely to act upon them.

- Most assessment programs try to separate program assessment from that of individual faculty members, but often the discussion comes around to improvement of teaching by individuals. A major frustration soon arises in that there are few good ways in practice to evaluate teaching other than student evaluations which, while valid for a range of topics, are far from comprehensive but often are the only tool available. Faculty development and assessment cannot be artificially separated indefinitely. It is common to find overlapping interests where mature assessment programs exist.

- Continuity is easily lost year-to-year even without substantial turnover of departmental leadership, including major committee leadership, which rarely remains the same beyond five years. It's therefore important to constantly emphasize continuity over time in planning and reporting.

- "Assessment" and resulting curricular adjustments go on constantly in good academic units. Whenever possible, tie what is perceived to be an external assessment requirement to ongoing accreditation and/or other internal efforts. They should be mutually supportive.
Administrative Issues

- Data must be disseminated in an easy-to-understand manner in order to be effective. For example, a monthly or bi-monthly one-page newsletter with graphics and summary statements in bullet format can be quite effective in communicating with a large number of faculty and staff. More detailed back-up reports may be necessary for the small number of people desiring more information.

- A little bit of financial support for assessment activities goes a long way towards changing attitudes. It’s less the amount of money than the principle that counts. When asking people to spend a lot of time on doing something that they often are not anxious to do, it helps a lot to be able to offer a few dollars to help them defray out-of-pocket costs of surveys or other activities. As one chair of a large department noted, one often gets asked to do things, but seldom does anybody offer to help out financially in even a small way.

- Changes in the curriculum that are a result of assessment efforts often lead to improved student satisfaction, but not always. For instance, a highly regarded mathematics professor found that his students learned better than a comparative group when he employed interactive software in a calculus class. Despite their learning more, he received his lowest teaching ratings ever. It appears that the students preferred what they were used to doing: being passive recipients of lecture material rather than being active problems solvers as required by the software.
• There is strong evidence that student involvement in learning leads to improved learning. Technology is making it easier and cheaper to involve students in their own learning and to assess that learning.

• When testing for placement in particular, home grown tests are always better than standardized ones, since those developing the tests are the same faculty as those conducting the classes. They know what is taught and what skills are needed to succeed in their curriculum. Similarly, in determining if a program has been successful in producing the kinds of graduates that it attempts to produce, a local examination is far better than a standardized one. The latter is simply a compromise among experts and seldom tests exactly what any individual program is trying to accomplish. In addition, standardized tests sometimes do not report sub-scores to allow feedback on areas of strengths and weaknesses and/or report scores to individual students only as opposed to the academic program attempting to measure student learning.

• In beginning subjects such as mathematics, chemistry, biology, English, etc., the true mark of success is student performance in higher level courses in those or related subject areas. Tracking students over time, therefore, provides valid measures of success of earlier courses. This can be especially useful if the beginning courses are being taught in multiple sections using different modes of instruction. In the end, some would argue, the true measure of educational effectiveness is student performance in the career and in life in general.
• Assessment personnel often are from non-technical backgrounds and are selected because of perceived personal integrity and respect by other faculty. Such characteristics often become insufficient in more mature programs where technical skills are necessary in order for progress to be made.

• There is a need for strong cooperation between assessment, institutional research, and planning in order for all of the programs to be successful. In recent years this has led to combining the three areas under the same supervisor in order to improve the cooperative environment. (For a summary of related issues, see McLaughlin, Muffo, and Calhoun, 1995.)

State/Regional/National Issues

• There seems to be a drift at the state and national levels in the U.S. towards increased standardized testing and standardized questions on opinion surveys. An example of the latter are the required common questions on alumni surveys in Kentucky. This reflects another trend - what seems to be a constant and increasing desire on the part of policy makers to compare institutions and states to each other.

Future Trends

What are the trends to watch out for in the next several years? Here are some predictions based on observations from a variety of sources. Assume that all will be used in institutional budgeting in some fashion or another.
• Statewide student testing has been tried and discontinued in at least one state (New Jersey). Other states are piloting or planning to pilot statewide examinations of students; critical thinking skills seems to be the most likely area of interest in the beginning.

• Numerical indicators of various kinds have been developed in Texas, Florida, South Carolina, and other states; this trend is likely to accelerate.

• Common satisfaction questions, such as in the institutional alumni surveys done in Kentucky as mentioned above, are becoming more frequent. Colleges and universities will be held accountable for explaining why their former students, as an example, are less satisfied than those from their sister institutions.

• Peer studies will be used at the state level to compare colleges and universities across state lines; this will allow richer analyses based on institutional mission.

• Disciplinary accrediting bodies will continue to become more sophisticated in their assessment practices. Adoption of such measures should lead to more faculty and administrative interest in assessment.

• Innovations such as the use of technology in the classroom will be closely scrutinized. Cost-benefit and other such analyses will be common.
The business sector more frequently will require evidence of sound assessment practices of all institutions, private as well as public, as a pre-condition for providing financial (gift and research) and other support such as student internship opportunities.

Implications for Institutional Researchers

Many institutional researchers are directly or indirectly, e.g., via supporting roles, involved in outcomes assessment, with governmental entities requiring more and more in recent years. This paper has shared some lessons learned at one large, diverse university about what does and does not work in implementing assessment. It also has presented some predictions as to future directions, almost all of which are driven from accountability concerns of groups outside of higher education. These observations, taken along with the principles available from other sources, provide a basis on which to build a sound and forward looking assessment program.

Bibliography


