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ABSTRACT

Assessment in higher education is shifting from the state house to the college campus. Information is provided to help campus administrators make the best decision regarding their institutions. A general perspective is offered to senior administrators with little previous experience in systematic assessment. Section I, "Assessment: What Is It All About?" defines and explains the concern with assessment. Section II, "Should We Develop an Assessment Program?" considers the benefits of assessment, the way to balance assessment with other goals, and how to deal with external constituencies. "How Should We Start?" in section III, focuses on the leadership role, organizing for assessment, collecting data, determining costs of assessment, and establishing a schedule. The accompanying figures offer information on different approaches to assessment, state mandates on assessment, possible components of an assessment plan, and possible roles for presidents and chief academic officers in student assessment; and present a checklist of possible assessment costs, examples of a planning schedule, and advice from assessment pioneers. Twenty-two references are given and a concluding page is included, entitled, "Using Assessment to Greatest Effect." (SM)

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AMERICAN COUNCIL ON EDUCATION
Robert H. Atwell, President

The American Council on Education, founded in 1918, is a major national association serving higher education.

Thinking About Assessment:

PERSPECTIVES FOR PRESIDENTS AND CHIEF ACADEMIC OFFICERS

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JUNE 1987

American Council on Education
and the American Association for Higher Education

Washington, D.C.

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INTRODUCTION

Assessment in higher education is currently a "hot topic." Some state legislatures and governors are mandating that colleges and universities develop assessment plans. Regional and professional accrediting associations are sharpening their focus on the assessment of student achievement. And conferences on assessment abound. Why is there so much interest—and what do presidents and chief academic officers need to know about the topic?

Although assessment, as a buzzword, may fade away, the pressure for better information regarding student achievement is likely to continue. Based on a survey of state higher education officials in January 1987 (Boyer, et. al.), at least two-thirds of the states have formal initiatives that are labeled assessment. Significantly, however, the survey also reported a "strong trend among state authorities . . . to consider the design and conduct of assessment a matter of institutional prerogative."

With the assessment focus apparently shifting from the state house to the campus, the American Council on Education authorized this essay as a way to help campus administrators review some of the issues surrounding assessment so that they might make the best decisions for their institutions. This essay, cosponsored by the AAHE Assessment Forum, has three purposes:

- to offer perspective on what the assessment debate is all about;
- to suggest some considerations for deciding whether a campus should commit itself to the development of new assessment procedures; and
- to highlight some issues relevant to deciding how to approach assessment of student learning.

This is not a "how-to" manual. It does not review specific assessment techniques or offer guidance for how a campus committee might proceed to develop an assessment program. The American Association for Higher Education, through its Assessment Forum, is sponsoring a number of publications designed to offer such guidance. The Southern Association of Colleges and Schools and the Office of Educational Research and Improvement, U.S. Department of Education, are among the agencies that are developing detailed guides to available assessment measures. This essay, in contrast, seeks to offer general perspective for senior administrators who have little or no previous experience with systematic approaches to assessment.

Hood College

Section I:
Assessment: What is it all about?

In higher education today, assessment typically has ambiguous meaning. The term, which arises from the lexicon of psychological measurement and testing, has taken on a much broader meaning not unlike a closely related word, evaluation. In higher education, its meaning is sometimes associated with a few, well-publicized approaches to assessment at the college level. To date, assessment has focused almost entirely on undergraduate education.

DEFINING ASSESSMENT

While there is no single, commonly accepted definition of assessment, the current debate over its value for higher education reflects at least two critical aspects of its meaning:

- assessment tries to determine what students actually achieve in their college study; and
- assessment links educational objectives (of a course, a program, a field of study, or an institution) to some measures of student achievement.

The key purposes of assessment are to ask important questions about student learning, to get some meaningful information on these questions, and to use the information for academic improvement. An assessment program need not be expensive to achieve these goals. Nor is it necessary that elaborate research instruments and procedures be developed.

A typical pattern of assessment is the use of several measures of what students are learning, administered periodically. Often, this involves putting existing campus information to new and more systematic use. Examples of such information include registrar's information on course-taking patterns, on student completions and failures in specific courses, and on student progress toward a degree.

In other instances, campuses have begun collecting new data, often including proficiency

"The key purposes of assessment are to ask important questions about student learning, to get some meaningful information on these questions, and to use the information for academic improvement."

Figure 1. Different Approaches to Assessment: Some Examples

LIMITED APPROACHES
(These involve a specific program or assess an aspect of student performance.)

- **Assessment linked to efforts to increase student retention**
- **Senior-year projects, to demonstrate what seniors have learned and their ability to apply their knowledge**
- **Comprehensive exams based on the general education curriculum**
- **Evaluation of services to support and monitor remedial/developmental education**
- **Student development outcomes assessed during the college years**
- **For selected academic majors, statements of program objectives developed along with ways to evaluate them**
- **Results on job placement and employer satisfaction**
- **Surveys of graduating seniors or of alumni/ae to learn their opinions about the college's programs**

COMPREHENSIVE APPROACHES
(These include several different components, assess students at several points or cover the entire curriculum.)

- **Student surveys plus standardized tests administered as students enter and again as they complete college**
- **Competency-based curriculum in all occupational and professional programs**
- **New general education curriculum, with each course having defined objectives and criteria for assessing their achievement**
- **Use of assessment center techniques, which measure the performance of each student on specific learning objectives, usually at several times and by several different methods**

exams for writing skills and testing of achievement levels of entering students. New attention has also been given to assessments by graduating students of their college experience and to questionnaires sent to alumni/ae, employers, or graduate schools. As Figure 1 indicates, campuses have developed quite different approaches to assessment, based on each institution's own priorities and mission.

WHY THE CONCERN ABOUT ASSESSMENT?

A logical question to ask is "Why is all this going on?" A related question follows, "Can we ignore it?" Answers range widely and are quite speculative. Some common explanations for the current move toward assessment include:

- *Perceived weaknesses of higher education.* Some observers contend that current college instructional practices, rooted in the early 1970s, are shoddy, lenient and out-of-date. This explanation, which provided the underlying rationale for most of the national reports on higher education that have been issued in the last few years, focuses on weaknesses in the academic curriculum and, sometimes, blames shortcomings on excessive responses to student pressure for curricular flexibility. Such arguments contend that the curriculum at many colleges and universities is uneven, lacks overall coherence, and reflects very little attention to what students are actually learning. Others see a "backlash" against open-access policies, a call for returning to the "basics" and restoring stringent expectations. A related argument is that, because a few postsecondary institutions may provide low-quality programs, new requirements must be imposed on all institutions.

- *Trends in the workplace.* Another explanation looks to forces of change in the American economy. Dramatic changes are taking place in the occupational needs of the American workplace, with a sharply increased demand for workers with stronger academic skills. The needs of an information society—with an expanding service sector and with increasing skill levels needed for automated, high-technology industries—have created an urgent need for workers with good reading and mathematics skills and the ability to handle more complex tasks than previously required. Both the public school system and the collegiate sector are, therefore, under pressure to respond. Political leaders, in a context of a rising

imbalance in foreign trade, have responded to concerns of business and industry, in part by championing their need for a better educated workforce. Under this scenario, the greatest pressure is to improve the "minimum" levels of skills that workers possess; this pressure focuses on the high schools and, secondarily, on community and technical colleges.

• *Political pressures.* The increasingly important role of state government is another factor. Recent events—troubled state economies, economic development initiatives, revenue sharing, and cuts in federal spending programs—have shifted important responsibilities to the state level. State governments have gained increasing professionalism and are asking tougher questions about how state funds are being spent. Colleges are being asked to provide evidence of quality, in this view, as part of a generally tougher stance by the states.

There are also those who would offer a more political explanation. They argue that many state political leaders found perceived weaknesses in elementary and secondary education to be an effective political issue, and are now repeating that political scenario with a focus on higher education.

Despite the lack of clarity on "why" assessment has become a new rallying cry for reform, certain facts are quite evident: Two-thirds of the states have taken action to expect new information on student progress and performance, and most accrediting agencies now expect better information regarding student achievement and institutional effectiveness. The call for improved assessment is not something that colleges can ignore.

Indeed, findings from ACE's most recent *Campus Trends* survey (*Campus Trends*, 1987) indicate that a large number of colleges and universities are considering ways to develop new approaches to student assessment. Currently, one in four institutions reports that their states are requiring the development of assessment procedures. Among the institutions without state mandates, seven in ten nevertheless expect to introduce some form of assessment on their campuses in the next few years.

"Two-thirds of the states have taken action to expect new information on student progress and performance."

Northeastern University, The Northeastern Edition

Section II:
Should we develop an assessment program?

Given the current climate, most college administrators may be asking this question. Yet, many find it difficult to think objectively about how assessment might affect their own institutions when, at the same time, they must pay attention to external requirements for assessment. If the state legislature or higher education coordinating board requires some form of assessment, a college has no option but to do something, whether or not its leaders see the potential value in it. Similarly, in regions where the accrediting association emphasizes the assessment of student achievement or institutional effectiveness, colleges must take some action on student assessment, particularly if accreditation visits are scheduled in the near future.

Hood College

BENEFITS OF ASSESSMENT

Apart from external constraints, there are potential benefits that may make it worthwhile for a campus to consider assessment. Among them:

- *Academic introspection.* Perhaps the greatest long-term benefit is that assessment, once established, makes an institution more self-conscious about what its academic programs are accomplishing. A well-designed assessment program with strong faculty support should foster a strong collective—and continuing—focus on how effectively the institution is meeting its goals.

- *Information for recruitment.* Some institutions have realized that prospective students and their parents are keenly interested in information on the actual experiences and accomplishments of students. Colleges with large numbers of pre-professional students have found that applicants want to know the college's "success rate" in professional school admissions. College viewbooks increasingly provide such information.

- *A context for planning.* Information on student progress and performance also offers a factual context for academic planning. Some institutions have begun small-scale assessments as

"A well-designed assessment program with strong faculty support should foster a strong collective—and continuing—focus on how effectively the institution is meeting its goals."

part of a curriculum improvement project. Others conduct assessments of the post-college employment success of graduates as a way to keep their vocational programs up-to-date.

• *Readiness for accreditation studies.* Another potential benefit of an assessment program relates to regional accreditation. Within the past five to ten years, all of the regional accreditation associations have called for evidence about institutional effectiveness and the quality of student achievement. Most accrediting associations consider that assessing student achievement should be an on-going and integral part of the college's planning process. Development of an assessment approach may mean that, at the time of the college's next accreditation self-study, it already will have collected a good amount of information on student achievement and incorporated this into institutional decision-making.

• *Improvements in teaching and learning.* Institutions having some experience with assessment report such benefits as greater clarity on how course sequences fit together, vigorous and helpful faculty dialogue on educational purposes, new approaches to teaching, an improved basis for advising students about their academic progress, and the assurance that all students meet certain standards.

Other reported benefits include better student retention, improved public relations, and fund-raising gains. One university, for example, reports that the assessment process has helped its image with both students and legislators. Another college reports that its applicant pool has increased since it began a comprehensive assessment program about a decade ago.

"Institutions having some experience with assessment report such benefits as greater clarity on how course sequences fit together, vigorous and helpful faculty dialogue on educational purposes, . . . and the assurance that all students meet certain standards."

BALANCING ASSESSMENT WITH OTHER GOALS

With all the activity surrounding assessment in recent years, it is easy to lose sight of the fact that, at best, assessment is a vehicle for academic improvement: it is not an end in itself but a means to an educational purpose. An institution should not implement assessment at the expense of other important academic and institutional goals. As part of the planning process, colleges must examine an assessment plan's potential effect on other important goals. Among the issues colleges should consider:

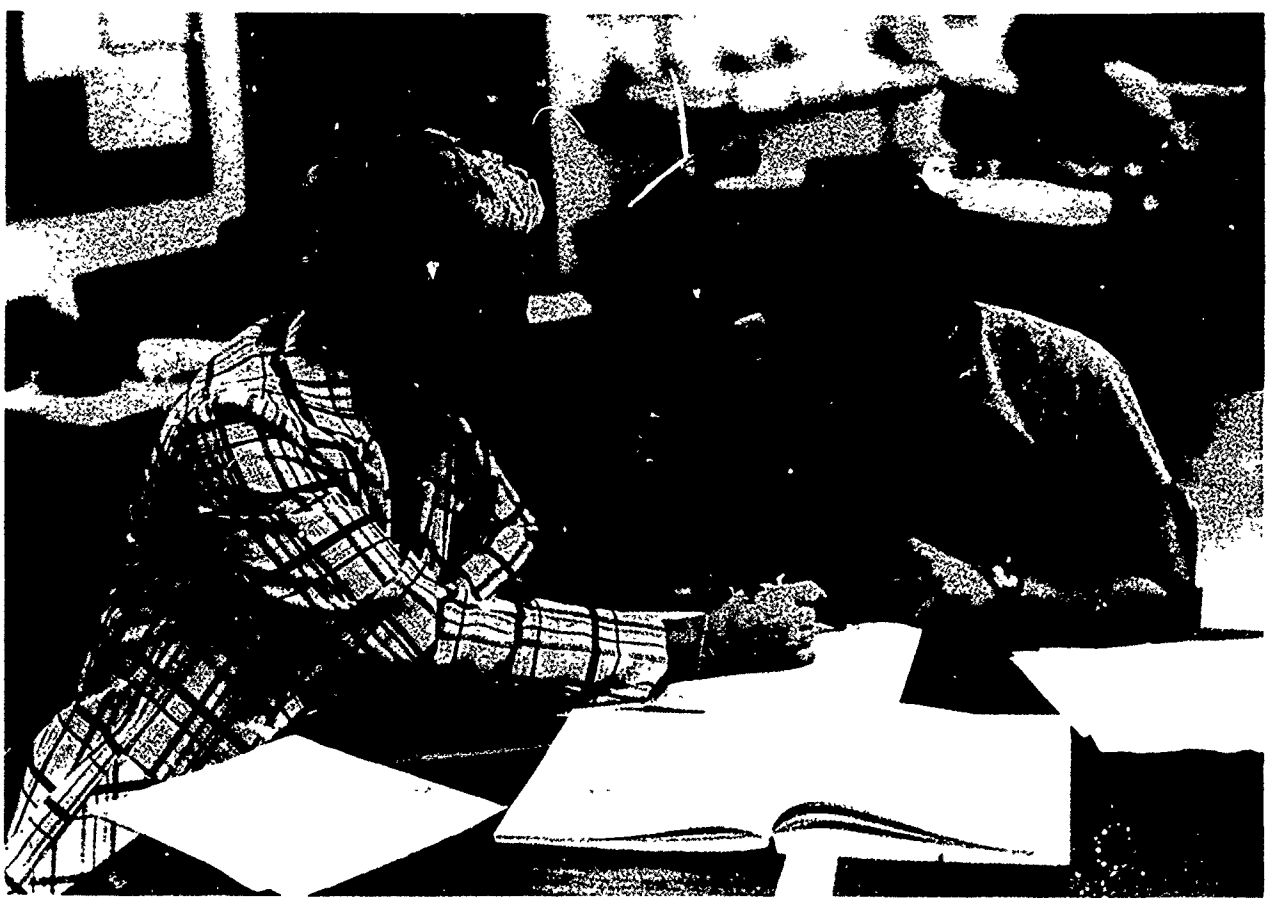
• *Current circumstances.* The timing may be wrong. There are special circumstances that may make it difficult to begin a new assessment

program: a financial crisis; a pending reorganization; retrenchment of programs; appointment of several key administrators; or other critical events in the college's life. Sometimes, college leaders have found that embarking on such a new initiative helps the campus to move beyond a crisis situation.

- *Minority access and opportunity.* Assessment can be a supportive mechanism for minority student achievement or can become a new obstacle that holds students back or discourages them from attending the college. If assessment plans include standardized tests, it becomes critical to examine the likely effects of such testing on student access. Are there alternative approaches that might resolve anticipated difficulties? Existing courses might be redesigned or new courses developed to ensure that students with academic weaknesses have assistance in preparing for such tests. Some institutions with well-developed assessment programs have taken the stance that assessment is used for academic program improvement, not for penalizing students.

- *Freedom of choice.* The design of an assessment plan must be consonant with the col-

"Some institutions with well-developed assessment programs have taken the stance that assessment is used for academic program improvement, not for penalizing students."



LaGuardia Community College

lege's other purposes. Many institutions, for example, pride themselves on the degree of choice they make available to students. Will an assessment program introduce pressure on students to take certain courses that "help" in passing an institution-wide test? A college's programs may be distinctive in certain fields. Is it inconsistent to require that all students participate in the same forms of assessment? Standardized examinations may be convenient to use but the test results are only appropriate for undergraduate majors where the curricular emphasis matches the subject emphasis of the exams.

• *Adaptation to change.* An assessment plan should be flexible so that it remains meaningful when curricular changes are made. Many colleges have recently introduced a new "core" curriculum and may plan to review and change certain elements after a few years of experience. They should anticipate parallel changes in the assessment plan. An institution may be planning to introduce new programs in the near future. Another institution may be concerned about institutional change and renewal. In both situations, it is important that an assessment plan not "lock in" any particular approach or work against change.

"It is important that an assessment plan not 'lock in' any particular approach or work against change."

DEALING WITH EXTERNAL CONSTITUENCIES

For many campuses, requests from governors, legislators, and state agencies have been the starting point for looking into assessment. For many other campuses, the impetus for considering assessment strategies has come from regional accrediting agencies.

Are these pressures dangerous for higher education? Are they unduly coercive, reflecting intrusion into issues that should be internal to the academy? Representatives of these agencies argue that their actions are a responsible call for greater accountability. They stress, too, that they generally give colleges considerable leeway in determining how to respond to these new mandates.

The institutional perspective is often at odds with this view. Even though many states have invited colleges and universities to develop assessment plans that fit their own circumstances, coercive elements often remain, especially in the form of short deadlines or specific requirements. Needless to say, some tension between the state's purposes and institutional purposes is inevitable: As one observer noted, state actions typically focus on "proving" something while the institution's interest is in "improving" education. Even

Stanford University

so, college presidents know well that there are some real dangers in state-mandated approaches to assessment. Institutional purposes and programs can become distorted; large numbers of students could have their educational progress tossed into confusion or delayed.

When states require colleges and universities to provide specific assessment information, a particular sore point is over the prospect that inter-institutional comparisons will be publicized. In the *Campus Trends* survey conducted by the American Council on Education *(Campus Trends, 1987)*, a majority of college administrators argued against a requirement that institutional data should be published, even though almost all survey respondents supported the use of assessment as a means of internal improvement. A key fear is that wide distribution of such comparisons invites a "rankings" game: The information that gets the most attention, often in the state's leading newspapers, is the information that is easy to use--perhaps a single statistic compared across all institutions. Yet, such information frequently offers a distorted picture because it describes only limited aspects of what each college does and ignores many relevant factors.

". . . decisions made to accommodate a testing mandate can conflict with decisions that make academic sense internally."

Figure 2. Facing the Prospect of State Mandates on Assessment

- ***Influence the direction of debate.*** **Get involved. Suggest resource people and forums that will allow full discussion of assessment and its implications for higher education.**
- ***Press for approaches that offer flexibility,*** **that recognize institutional differences in mission and program, and that do not unduly penalize students.**
- ***Make it clear that there are no "quick fixes"*** **in planning and implementing an assessment plan for higher education, and that several years of development time are needed.**
- ***Propose that special funding be allocated*** **to assist colleges and universities with the costs of developing assessment procedures.**

". . . colleges sometimes have considerable opportunity to shape specific aspects of what the state agency or legislature will decide regarding assessment."

Colleges having some experience with assessment often prefer to present assessment information as part of a larger document that puts results in context, points to the college's primary concerns, and states what the college intends to do about these areas of concern. In other instances, where inter-institutional comparisons are mandated, college administrators have found that they can sometimes avoid undue emphasis on "rankings" by the use of multiple indicators, i.e., information describing institutions in a number of different ways.

Broadly focused state-mandated tests are also a subject of major concern to college administrators. Their concern is not so much with the notion of testing as with the negative effects that statewide testing can have on academic programs. They contend that, despite good intentions, mandated tests of general competencies are likely to affect what courses are taught, the timing and sequence of courses, or the course choices of students. Furthermore, decisions made to accommodate a testing mandate can conflict with decisions that make academic sense internally. Distinctive programs can be seriously affected if students in those programs do not do well on some aspect of the mandated test.

What's to be done? Options may seem limited. To date, however, most colleges faced with new state mandates have found that, although they were coerced to do *something*, there was flexibility in choosing exactly what to do and what the timing would be. And colleges sometimes have considerable opportunity to shape specific aspects of what the state agency or legislature will decide regarding assessment. The advice shown in Figure 2, offered by college administrators who have some experience with assessment, speaks to such situations.

Many administrators with experience in assessment also suggest that each college take the initiative by planning for assessment. In advance of a state mandate, colleges could develop procedures for assessment that are responsive to external concerns yet are also meaningful for the college. A technical institute may choose to focus on reactions of local employers to the quality of the institute's recent graduates. A liberal arts college may wish to demonstrate the value of its general education curriculum. A university may wish to emphasize undergraduate professional programs that already are subject to external review. Such campus experience with assessment would generally prove useful, whatever the eventual direction of state activity on assessment.

Section III:
How should we start?

Because assessment is a tool for academic improvement, there is no "best" place for all campuses to start when they decide to develop an assessment procedure. Figure 3 illustrates the wide variety of options to consider. The starting point and focus can vary widely from college to college, depending on circumstances.

One of the most important tasks is to develop an initial position on what assessment means for the institution and what a process for implementation should include. Both the definition and process are likely to evolve, becoming more specific and more precisely tied to the college's own programs as efforts get underway. Thus, it is important to give careful thought to a "starting point" while also recognizing that new directions will emerge.

Implementation activities have generally started with a limited focus. The few institutions that have comprehensive approaches to assessment today either faced unusual circumstances or moved quite gradually toward a comprehensive approach, often over a decade's time.

Generally, it makes sense to try to link assessment efforts to the college's current priorities. If a new general education curriculum will be introduced soon, an assessment plan might be designed to test its effects. If improving student retention is a top concern, assessment might be linked to these efforts. Sometimes, an upcoming accreditation visit, whether for a particular program or for the entire institution, is a useful focus for planning new assessment activities.

THE LEADERSHIP ROLE

It is up to the president and chief academic officer to set the assessment process in motion. Once they have given the green light and indicated their support for the idea, faculty involvement should begin. Because discussions over assessment procedures inevitably raise quite fundamental issues about the institution's educational purposes and priorities, it is also important that the president or chief academic officer take the lead in helping the institution arrive at

Figure 3. Possible Components of an Assessment Plan

Early in a student's college career

1. Do placement testing in key academic skill areas.
2. Test before and after remedial/developmental courses.
3. Design competency-based skills courses.
4. Collect data for assessing changes in student knowledge, values, etc.

During middle years

1. Identify desired outcomes for the "core" curriculum and develop ways to show how they are achieved.
2. Identify desired outcomes in major fields of study and develop ways to show how they are achieved.
3. Develop methods for evaluating proficiency levels that students achieve in writing, critical thinking, and other general competencies.
4. Conduct continuing or periodic surveys of student values and attitudes.
5. Review student transcripts, papers, examinations, etc.

At college completion

1. Develop comprehensive examinations, oral interviews, or other ways to demonstrate accomplishments of graduating students.
2. Gather information on post-college plans of graduates, including employment and further study.
3. Conduct final surveys of student values and attitudes.

After college

1. Conduct periodic surveys of alumni/ae, employers, and graduate and professional schools.
2. Obtain information on placement rates (into jobs or for further schooling).

Figure 4. Possible Roles for Presidents and Chief Academic Officers in Student Assessment

Setting the direction for institutional activity

1. Set possible scope (and limits)
2. Indicate expectations
3. Propose an initial timetable
4. Demonstrate moral and financial support

Putting the idea into institutional context

1. Offer an appropriate rationale for developing an assessment program
2. Provide an initial definition of assessment for the campus
3. Distinguish between appropriate and inappropriate reasons for developing assessment
4. Emphasize that the goal is academic improvement
5. Respond to concerns

an initial working definition of assessment, a rationale for taking on the effort, and a planning procedure that is appropriate for its circumstances. Figure 4 outlines such roles for the college's leadership.

Just as important, the president or chief academic officer needs to explain what important goals and uses of assessment are envisioned. Is it important that all students be assessed? Why? Will information be shared with students? Should assessment data be tied to the courses offered by individual departments? Should assessment information be published and, if so, for whom?

The president or chief academic officer also needs to clarify limits. The concept of assessment can be controversial and can engender numerous misunderstandings. Unless the president makes it clear that assessment results will not be linked to faculty evaluations, for example, it is likely that many faculty will have fears in this regard. Unless the president clearly explains what impact the assessment procedures will have on students, confusion and distrust among current students are also likely.

ORGANIZING FOR ASSESSMENT

As soon as the president has committed the institution to assessment as a concept, the organization of an approach to assessment can begin. Substantial faculty involvement at the outset is essential. First steps will usually involve the formation of an assessment committee, generally including opinion leaders among the faculty and the chief academic officer. The involvement of others beyond this core group will vary by institution, personal experience, and special expertise. This core committee must develop a process that will allow the college to clarify the learning objectives to be assessed and to consider alternative approaches to assessment.

An important task for the assessment committee is to review all approaches to assessment in light of other important institutional priorities. As plans begin to take shape, the committee should consider what the effects of a plan might be in a few years. Unintended (and potentially damaging) outcomes are difficult to pinpoint, but a considerable degree of insight about them can be gained from a full discussion of the issues.

If, for example, departmental comprehensive examinations are to be required as students are completing their studies, there must be assurances that there is sufficient faculty time available to develop and conduct the examinations and that there are clear next steps available for students who fail. If assessment will rely on a standardardized test, the institution must decide whether results will be used solely for diagnostic information for programs or, instead, whether a specific passing score is to be expected of all students. If the latter, the institution must be prepared to justify this decision, including the choice of passing score and the fit between the test and the college's academic program.

COLLECTING DATA

In planning for assessment, the committee should consider from what sources information will be collected and how it will be analyzed. Often, a fair amount of relevant information already exists in campus data files and just requires further analysis. Other potential measures will require collecting new data.

Among the potential sources of existing data:

- *Student transcripts.* If an institution asserts that students receive a high-quality general education, is that assertion supported by an analysis of the transcripts? If it is assumed that student "good sense" combined with effective faculty advising will assure that students take courses in such core areas as a second language, mathematics, exposure to other cultures, historical and ethical perspectives, etc., to what extent is this assumption supported by the transcript evidence? Some institutions are also exploring ways in which standard sources of student evaluation like course examinations or papers can be "re-evaluated" as part of the college's broader assessment effort.

- *Student retention studies.* A focus on student retention can be an important part of the assessment activity. Of the students who enroll as first-time, full-time freshmen, what proportion receive their degrees within a reasonable time? How does this percentage relate to the retention rate at comparison institutions? Most institutions also could compare students who graduate with students who withdraw from the institution on such factors as cumulative grade-point-

"Often, a fair amount of relevant information already exists in campus data files and just requires further analysis."

Reed College

average and characteristics upon entrance (e.g. high school rank, aptitude test scores, career goals, financial needs). These comparisons help the college understand better why students are leaving the institution. For example, if high achieving students are more likely to leave, is it because these students are not challenged academically?

Among the new approaches to consider:

- *Standardized tests.* One of the most basic measures of student learning are tests of their academic skills. Examples include the administration of pre- and post-tests for remedial courses; the use of what are sometimes called "rising junior" tests in basic skill areas or in general education; and the assessment of higher order skills in the areas of critical thinking, quantitative problem-solving, oral communication, and writing.

Use of standardized tests for internal academic planning is another option. Major testing agencies are in the midst of developing new instruments for flexible use in undergraduate assessment. An advantage of using standardized instruments is that the results can be compared across departments and colleges within a single institution and, if appropriate, across institutions. Care must be taken that such comparisons are appropriate and that available instruments measure what the college wants to have measured.

"Academic achievement need not be the only factor measured by standardized test instruments."

Academic achievement need not be the only factor measured by standardized test instruments. A number of institutions recently have found it helpful to collect data related to the quality of student effort in a variety of areas (e.g., contacts with faculty, use of the library).

A critical factor in the interpretation of test results lies with the motivation of students taking them: a dilemma is that, if the tests don't count on the students' records, students may not make their best effort (or even show up for the tests) but, on the other hand, if the tests do count, it becomes critical that the content of a test closely parallel the objectives of the program that is being assessed.

- *Assessment centers.* One unique and comprehensive approach to assessing student achievement is the assessment center model. This approach focuses on individual student

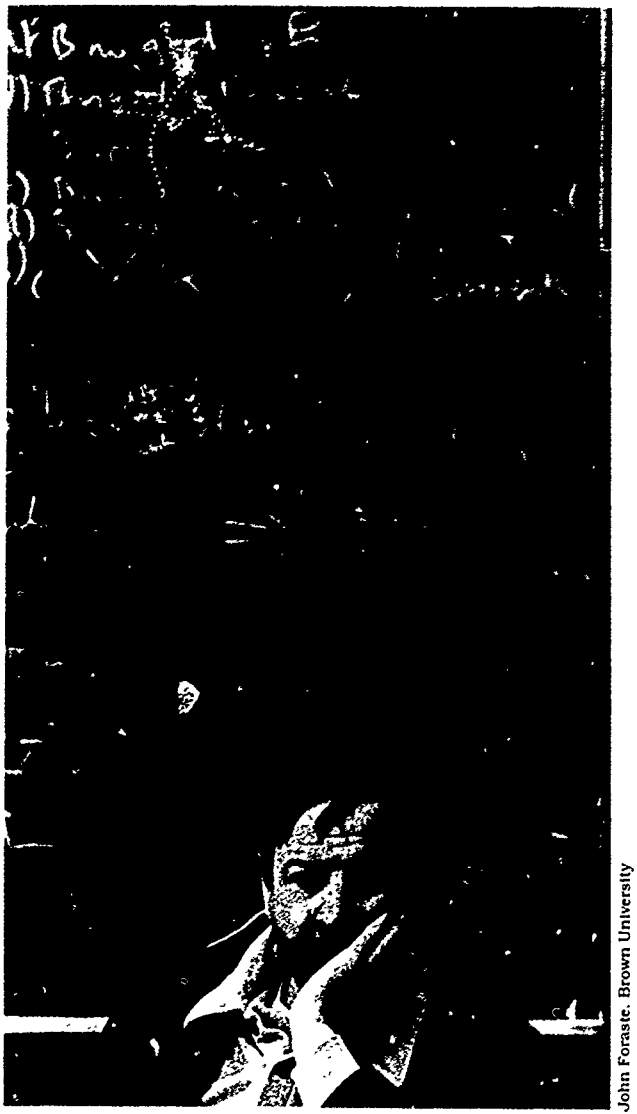
learning, with assessment based on student performance in simulated activities that draw on the student's knowledge as well as skill in applying that knowledge. Persons external to the institution are asked to determine whether each student has achieved certain specific learning objectives. Successful adoption of this powerful approach to assessment requires a total institutional commitment and a long period of implementation.

- *Departmental senior exams.* In assessing achievement in a student's major field, some four-year colleges have developed a senior comprehensive examination, in some cases using external examiners. Some fields already have a professional licensing examination. Both of these approaches can be effective components of the assessment of student outcomes.

- *Student evaluations.* Periodic assessment of their educational experience by students and former students can provide helpful information for planning. Some institutions have developed a pattern of collecting questionnaire data from graduating students every year and from a sample of alumni/ae every three to five years. These questionnaires can include items that ask the respondent to assess the extent to which she/he has developed competence in a variety of areas (e.g., written and oral communication, quantitative skills, solving complex problems). While the usual caveats that accompany self-assessment information are required, this approach can provide helpful insights regarding institutional strengths and weaknesses.

- *Employment information.* Other approaches to the collection of information involve data from the institution's career development center and from employers of graduates. Four-year institutions often seek information from the graduate and professional schools in which their graduates enroll.

As yet, it is difficult to find methods and instruments that are ideal for each institution and program. A good approach, used by most institutions that have developed assessment procedures, is to use several related measures and look for a consistent pattern of results before decisions are reached about weaknesses in an academic program.



John Foraste, Brown University

Figure 5. Checklist of Possible Assessment Costs

Start-up Costs
- Consultant visits
- Conference attendance
- Campus workshops
- Faculty and staff time
- Development of assessment instruments

Continuing Costs
- Computer time
- Purchase of books and related materials
- Conduct and analysis of surveys
- Test purchase and scoring
- Faculty and staff time

". . . some of the "pioneer" institutions have developed low-cost assessment programs largely through reallocation strategies."

DETERMINING COSTS OF ASSESSMENT

Potential costs of assessment are a major source of uncertainty. How much does it cost to test or survey students, to administer and analyze questionnaires, to develop an assessment center? Will assessment become a new budget item requiring large amounts of institutional resources? Where will the money come from?

In fact, as Figure 5 suggests, several different types of costs must be anticipated. During planning, for example, funds may be needed to cover consultant visits, trips to conferences or to other colleges, or special campus workshops. To put an assessment plan in place, there may be costs for extensive faculty participation in the development of new tests or examinations; purchase and scoring of standardized examinations; adaptation of existing computer information systems; or conduct of surveys among students or alumni/ae.

Once an assessment plan is in place, ongoing costs may include costs for periodic surveys or testing of student learning as well as necessary staff support for the assessment activity. Other costs, to be expected at all stages, include: released time for a small number of faculty; staff assistance from the office of institutional research or the office of the chief academic officer; additional computer time to assemble and analyze existing information on student performance; and costs to purchase relevant books and other resource materials.

How will all this be financed? Colleges that have already developed assessment plans have taken different approaches. There may be financial assistance with planning and start-up costs, whether from a special grant from the state, a foundation or other source. Some institutions in Virginia and New Jersey received special funding from state agencies, for example. Even a small grant from a foundation or private donor provides an important catalyst for getting started.

On the other hand, some of the "pioneer" institutions have developed low-cost assessment programs largely through reallocation strategies. They may give released time to committee members and assign new responsibilities to several administrators. The reallocation approach works best with aspects of an assessment plan that build on existing activities. An alumni/ae affairs office may have conducted an occasional survey

of alumni/ae and now might plan for a survey on a regular basis. Existing information on placement test results may be given more detailed analysis and wider circulation than before. A curriculum committee's mandate might be broadened to include review of assessment results.

Student fees are another funding source, especially appropriate to cover costs for tests or assessments that offer specific benefits to students. One college, which has an extensive and individualized assessment program, charges each student a one-time fee of $50 to cover assessment.

Most colleges have found that, in addition to these special sources of funding, costs for assessment also must be budgeted on a regular basis. Among colleges that currently have programs in place, costs typically have been $10 to $15 per student enrolled. There is no easy formula for estimating these costs, although key factors include the extent to which existing personnel can coordinate the effort, and the nature and scope of the assessment plan. If the college already has an extensive institutional research or testing program in place, a new assessment program simply may require a redirection of effort. If assessment activities will be focused within academic departments as part of ongoing planning or departmental review efforts, additional costs may be modest. If an entirely new, multi-staged assessment is planned, or if all students are to be assessed at several stages of their academic progress, costs could be substantial.

A valuable part of any planning committee's work is to discuss the costs of various assessment alternatives. The committee's charge might specify that any proposal must be cost-effective and realistic for the college's financial circumstances over the next decade.

A budgetary framework might be established at the outset. Indeed, some approaches have very different cost implications that are not immediately obvious: A "home-grown" test developed by the college's faculty may appear to be a low-cost option, but might prove to be very expensive because of the personnel costs involved. Different choices might be made that keep costs down without losing good information. A small-scale survey of a sample of students may be as useful as a canvas of the entire student body.

"Student fees are another funding source, especially appropriate to cover costs for tests or assessments that offer specific benefits to students."

Centre College

Figure 6. Examples of a Planning Schedule

EXAMPLE 1. During the first year, there might be a campus-wide discussion of the concept of assessment, what it means at this institution, possible approaches to assessment, etc. It is at this point that all the doubts and uncertainties need to be aired. By the end of the first year, however, there should be a good degree of consensus regarding the general approaches to assessment which the institution will be using. During the second year, the assessment committee would make decisions about specific processes (instruments, reports, etc.) that the institution will use. The committee keeps the entire campus informed throughout this decision-making process. Third-year activities would focus on pilot-testing instruments (tests, questionnaires, etc.) and analyzing these preliminary data. By the end of the third year, the institution should know what modifications it needs in the basic plan for assessment, so that the plan can be fully implemented in the fourth year.

EXAMPLE 2. Another approach to planning for assessment is less structured and may be more typical for college campuses. First, the president and chief academic officer set the planning process in motion, and appoint an assessment committee, comprised mainly of faculty members. During the first year, the assessment committee generates several ideas and sponsors faculty forums for discussion of possible approaches to assessment. During the second year, the committee sponsors experimental or "pilot" projects that try out different assessment approaches. Each of these projects may focus on a single academic department, a small number of students, or a particular method of assessment. During the third year, the committee and the faculty review the results of the pilot projects. They recommend successful projects, or aspects of them, for institution-wide use and suggest other new ideas to try.

Some colleges have introduced aspects of assessment as part of their planned activity for accreditation self-studies. Phasing of assessment activities—and their budgetary requirements—may be feasible: Individual schools and departments may be involved in assessment on different time schedules; surveys of alumni/ae, or of employers in the local community, may be conducted every few years rather than annually.

Budgetary needs for assessment should also be viewed in broader perspective. Assessment information can be of great benefit to the college, offering internal committees and administrators valuable planning information as well as providing external constituents—public officials, legislators, the media, students, and parents—with special assurances about the worth of programs offered. Administrators at several colleges have stated that an unexpected benefit has been additional funding, whether from state sources or other sources, that is tied to the fact that the college was able to demonstrate the academic performance of its students and the strength of its programs.

ESTABLISHING A SCHEDULE

The development of effective assessment programs takes time. Colleges and universities that today are recognized as leading institutions in the field of assessment have been developing their assessment programs for a decade or more. And their programs continue to evolve.

Recognizing then, that a high-quality assessment program is not likely to emerge within six months or a year, the president, in consultation with an assessment committee, should establish a timeline for implementation—probably involving activity over three to five years.

Two quite different examples of a three-year time schedule are shown in Figure 6.

No single model would be appropriate for all colleges. Some institutions may require an additional year or two for planning and exploratory activities. Other institutions may need to implement a plan in less than three years; in such situations, it is important to allow sufficient flexibility in an assessment plan so that later modifications can be made.

Conclusion:
Using assessment to greatest effect

In the months ahead, most colleges and universities are likely to be influenced by the debate over assessment. As the focus of activity moves to the development of assessment plans on individual campuses, colleges and universities have the opportunity to engage in assessment activities that make sense for their institution. The danger is that hasty reactions to mandates issued by state boards or other external agencies will not be useful, either for the institution or for its students.

As Figure 7 suggests, the process of developing an approach to assessment is much like other efforts directed to academic improvement. Faculty involvement is critical. Choices have to be made from among many alternatives. An exploratory or experimental stage is often necessary. The commitment of campus leaders is necessary, and fledgling efforts need both financial and moral support. Communication with all affected parties is also important, particularly when an effort will require several years of planning.

Thoughtful leadership from presidents and chief academic officers along with meaningful faculty involvement are crucial if an assessment plan is to benefit students and improve the institution. A key value of any assessment approach lies in the way it raises fundamental questions about the effectiveness of undergraduate education. When campus leaders—president, chief academic officer, administrators and faculty leaders alike—consistently raise such questions and consider ways to improve the academic program based on reliable and appropriate information, the assessment effort will be functioning effectively.

Figure 7. Advice from Assessment "Pioneers"

Involve faculty at the outset. Tap their knowledge and opinions. Rely on faculty to pose the key questions and to propose ways to answer those questions.

Provide sufficient resources—especially at the department level.

Communicate with students about assessment plans. Be sure they understand how assessment activities will (or won't) affect them.

Use plain English. Don't get hung up on psychometric or other jargon.

Get started, try something, expecting some change in direction as you learn more.

BUT.....

Don't scramble to do just anything. Don't run for the first test you hear about.

Start modestly if necessary, but be clear that the effort is not intended to be short-term.

Recognize that most successful comprehensive assessment efforts have taken years to develop.

Don't rely on any one test or measure for academic decisions that affect students or programs. Multiple measures provide a stronger basis for decisions.

Don't let assessment become just another assignment for some administrative office.

Stress that the process should lead to improvements in the educational experience for students. Don't mix assessment procedures with procedures to evaluate faculty.

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