

**A Decade of Assessing Student Learning:
What We Have Learned; What's Next?**

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I. Introduction

NCA introduced its Assessment Initiative by issuing its first “Statement on Assessment and Student Academic Achievement” in 1989. That Statement was the first public expression of the Commission’s growing belief that if its member institutions were to successfully serve learners of the 21st Century, they would need to become student-centered. Today, the Commission’s vision is that all of its affiliated colleges and universities will recognize the value of becoming student-centered learning organizations committed to continuous improvement in the quality of the education achieved by their students. It strengthened the Criteria for Accreditation so that each affiliated institution would plan and implement a program to assess student learning and discover for itself the power of assessment to transform institutional culture.

The Commission’s first step was to ask that every affiliated institution develop a plan for a program to assess student academic achievement within five years. Next it asked that each institution implement the program it had planned and begin to use the results of assessment to improve its students’ learning. Now, at the ten-year milestone, it is time for the Commission to take stock of where the NCA Board of Trustees and its member institutions are in relationship to that vision. We have come far enough to see clearly the impediments that we still need to overcome in order to arrive at our destination, and to recognize that we already have at hand the tools to overcome all obstacles if we will but use them.

II. The Commission’s Assessment Initiative: A Brief Overview

The Commission issued its first “Statement on Assessment and Student Academic Achievement” in October 1989. That statement made explicit two fundamental points in the Commission’s position on the assessment of student learning: first, that assessing student achievement is a critical component of evaluating overall institutional effectiveness, and second, that “assessment is not an end in itself, but a means of gathering information that assists institutions in making useful decisions about improvement.”

In 1996 the Commission strengthened its Statement by adding that an effective assessment program should be structured, systematic, ongoing, and implemented. It also clearly stated that an acceptable assessment program should be based on explicit statements published by the institution regarding its faculty's expectations for student achievement and should provide evidence that it uses the information gained from the systematic collection and examination of assessment data gathered at the academic program level both to document and to improve student learning (NCA, 1997).

III. What The Commission Has Learned and Achieved From the First Ten Years of the Assessment Initiative

After ten years of steady effort, the major lesson the Commission has learned from its Assessment Initiative is that it is not easy to gain universal acceptance of the efficacy of assessing student learning. This explains why it has been so difficult to have all NCA colleges and universities plan, introduce, and fully implement structured and on-going assessment programs—even over a ten-year period. Indeed, the number of institutions that have actually taken each of those steps and are now using the results of assessment to develop and test ideas for how to improve the level of student learning in each academic program is still relatively small. The number of institutions that have yet to engage each of their academic departments in every aspect of assessment is disappointingly large.

On the other hand, the Commission can point to several significant achievements. First, it has been successful in communicating the importance it places on the assessment of student learning. The message has been heard! No NCA institution is unaware that the Commission's commitment to assessment is strong and will last. Assessment is not a fad, and it will not go away. Instead, the emphasis upon assessment of student learning will continue to increase because assessment is the foundation upon which a student-centered learning institution must build if it is to continually improve the education its students achieve.

The Commission's second achievement has been to greatly expand the number of institutions familiar with assessment, with what good practice in assessment is, and with the ways in which a sound assessment program can be valuable to institutions and their students. Ten years ago less than a dozen institutions had any significant experience with ongoing, structured, and systematic processes to assess student learning across all academic programs or understood how the results

of assessment could be used to continually improve their educational programs. Today, because of the Assessment Initiative, virtually all affiliated colleges and universities have at the very least gone through the discipline of planning and then starting assessment programs. As a result, there is now a broad base of institutions within NCA that have first-hand experience in the assessment of student learning. These colleges and universities will testify (NCA, 1999) to the value that assessment activities on their campuses has added to their students, their faculty, and their institutions.

Finally, although the Assessment Initiative has not moved ahead as rapidly as originally envisioned, the Commission can claim as a significant achievement that its emphasis on the importance of assessing student learning has begun to have a major impact on the culture of many colleges and universities. Specifically, the Assessment Initiative has provided the impetus for a growing number of affiliated institutions to fulfill their potential by becoming student-centered learning institutions that use assessment to continuously improve the education their students obtain. This is evidence that the NCA—Commission and member institutions together—is actually accomplishing a shift in the accreditation paradigm from one that emphasized evaluating institutional inputs to one focused on assessing student outcomes. This basic change in paradigm frees institutions to keep pace with the profound social and technological transformations higher education is undergoing, while improving educational quality.

IV. What Institutions Have Learned From Planning and Implementing Programs to Assess Student Learning

What NCA colleges and universities have learned from planning and implementing programs to assess student learning is as important as the lessons the Commission has learned. Their most difficult lesson has been to discover that simply being made aware of the characteristics of an effective assessment program has not been sufficient for some institutions to successfully plan and implement an effective assessment program. We have learned from examining hundreds of Evaluation Team Reports and Self-Study Reports that institutions which do not have a fully operational assessment program after ten years of work are almost surely being held back by some combination of three factors: basic misunderstandings about the purpose and nature of assessment, emotionally based resistance to assessment from those responsible for it, and inadequate information and skills needed to conduct assessment.

IV. A. How Far Have NCA Member Institutions Come?

The most recent Team Reports—those written in the past year—give us a clear picture of just how far the 989 institutions that comprise the NCA/CIHE have come in ten years toward realizing the Commission’s vision. Virtually all institutions accredited by NCA are now actively working to complete implementation of their assessment programs. Some are still trying to introduce missing components in their programs; some are trying to engage academic departments that have lagged behind; and a small but modest number have complete and well-established assessment programs. Their assessment programs fall along a continuum of implementation and reflect varying degrees of commitment to continuously improving student learning.

By comparing the number of assessment program elements an institution has in place and the proportion of its academic departments that conduct assessment across each program it offers, we can usefully describe institutions as having reached one of three levels of implementing their assessment programs (López, 1998 & 1999). Each level has a distinguishing cluster of characteristics that enable us to say with some certainty that the level of program implementation a college or university has reached reveals its institutional priorities. It accurately reflects where improvement of student learning and assessment, as the critical means to that end, fall within those priorities. Institutions that are at Level One, “Beginning Implementation,” have still not agreed on effective means to assess student learning in general education competencies and skills or to document learning across each of their majors or any other academic programs. Institutions at Level Two, “Some Implementation,” have a substantial number of the essential components of an assessment program in place, demonstrating that assessment and improvement of student learning are becoming an institutional priority.

Institutions that have reached Level Three have fully implemented assessment programs; they are engaged in “Ongoing Implementation.” Level Three colleges and universities typically have progressed to a point where their Mission and Purpose Statements include explicit language about the importance the institution places on the assessment of student learning and student outcomes. Their assessment programs display all of the characteristics described as important by NCA Consultant-Evaluators. Faculty in academic programs regularly recommend and introduce changes to increase students’ academic achievement and track the results of those changes. In short, an effective assessment program has transformed each college and university at Level

Three into a student-centered organization focused on students' learning that uses the results of assessment to continually improve the learning it students achieve.

What lessons can we learn from the institutions that encountered problems early on and are now “stuck” at Level One, or from those now at Level Two but making slow progress toward implementing their assessment programs? What can we learn from the other institutions that have encountered very similar problems, but have overcome them and, with implemented programs in place, are now able to concentrate fully on *using* assessment results to improve learning? Fortunately, we have a rich store of information about common difficulties colleges and universities have met, the reasons some institutions have been blocked by these problems, and the positive and creative ways faculty and administrators have found to overcome them.

The problems most frequently described as preventing or slowing an institution's progress toward reaching full implementation of its assessment plan fall into seven broad areas:

- Difficulties in involving faculty and students in assessment;
- Difficulties in developing program goals and measurable objectives;
- Difficulties in selecting or developing direct and indirect measures aligned with program goals and measurable objectives;
- Difficulties in collecting and interpreting data;
- Difficulties in disseminating assessment data and information because of insufficient or incomplete feedback loops;
- Difficulties in obtaining or reallocating the funds needed for assessment activities;
- Difficulties in linking the assessment processes with operational planning and annual budgeting processes; and
- Difficulties in understanding and providing for the collaborative roles of academic administrators and faculty.

IV. B. What Institutions Have Learned and Taught Us About Involving Faculty and Students in the Assessment Program

1. Involving Faculty. We have all known from the beginning of the Assessment Initiative that in order for assessment to become an integral permanent component of campus culture, faculty would need to recognize its potential value, be committed to its inclusion in the regular on-going processes of their institution, accept ownership and responsibility for the assessment program, and participate fully in all its components. However, as soon as institutions began to respond to NCA's request for their assessment plans, we discovered that not all faculty were immediately enthusiastic about the Assessment Initiative. Although many faculty were quick to embrace assessment of student learning and could see its possibilities, others were antagonistic, fearful, or passive when faced with the request to introduce it. In colleges and universities where key faculty have not claimed ownership or participated wholeheartedly and in large numbers, institutions have had great difficulty in launching and developing their assessment programs. Institutions repeatedly remark on three factors that make it difficult to draw faculty into the assessment effort on their campus:

- (a) misunderstandings about the nature and purpose of assessing student academic achievement and about what constitutes an assessment program, academic program review, and evaluation of institutional effectiveness;
- (b) strongly negative reactions to the idea of "measuring" learning and the thought that assessment results could be used to actually improve students' learning; and
- (c) lack of the information and technical skills needed to understand and implement assessment.

IV. B. 1 (a) Problems Caused by Misunderstandings

Three frequently encountered misunderstandings account for much of the difficulty some institutions have had in recruiting faculty to participate in planning and implementing their assessment programs. One has been misunderstanding on the part of faculty and administrative officers about the purpose of assessing student learning. Some college and university personnel have assumed the purpose of NCA's increased emphasis on assessment of student learning was to force colleges and universities to comply with additional regulations, or thought it was only a new fad among accrediting bodies that would pass. Institutions where faculty or administration have reacted to the Assessment Initiative as an intrusive imposition by outsiders or a bureaucratic chore, rather than a useful tool for the purpose of effectively accomplishing educational

goals and intended student outcomes, were slow to plan an assessment program and have been even slower to carry out the plan. They have resisted taking advantage of what is known about learning and how to measure it. Even now a few still seem far from recognizing the benefits of the Assessment Initiative that so many of their peer institutions are beginning to reap.

In contrast, institutions that understood early on that the motivation for NCA's Assessment Initiative was to help colleges and universities carry out their respective educational missions and reach their own goals for the improvement of student learning, seized the opportunity to build a useful assessment program. They have moved rapidly to formulate or reaffirm an educational philosophy and agree upon a statement of purpose for the assessment program that would guide faculty and academic administrators as they began to plan and then implement the program. In these colleges and universities, faculty wrote clearly expressed educational goals and precise descriptions of what students were to demonstrate they knew, believed, and could do at the completion of every educational program. They understood that their statements would be the markers for determining how much students learn of what their faculty value most. Today these institutions are well along in implementing their assessment programs. Many report that soon, for the first time, faculty will discover how close or far their students are from meeting the educational goals and measurable objectives they set for graduates of their programs.

A second very different misunderstanding initially prevented other institutions from being able to attract faculty to join colleagues in developing assessment plans and implementing acceptable assessment programs. Faculty and academic administrators in this second group of colleges and universities were confused about the difference between assessment of student learning and evaluation of overall institutional effectiveness. For instance, they often erroneously described evaluation of instruction and faculty performance as measures they would use to document student learning.

They did not understand that neither the quality of teaching nor any other aspect of faculty performance measures what students know and can apply, although important to conducting academic program review. These institutions typically needed to resubmit plans demonstrating that they could differentiate between how well faculty teach and how much students learn. In contrast, successful plans dealt exclusively with the assessment of student learning, or showed that

the college or university understood assessment of student learning to be one of several separate but related components of the institution's total program for evaluating its overall effectiveness.

A third misunderstanding that caused some faculty, and particularly chairs of academic departments, to draw back from participating in developing assessment programs was the mistaken impression that assessment of student learning would be duplicative of academic program review. They did not see either the difference or the connection between academic program review and the assessment program. They did not recognize, for instance, that academic program review is typically resource-oriented and episodic, whereas a program to assess student learning, is outcomes-centered and ongoing. In institutions where this misunderstanding existed, Evaluation Teams noted that even Assessment Committees were perplexed about how to report the outcomes of assessment of student academic achievement in a form that would be useful to faculty in recognizing areas where student learning could improve and in turn, suggesting ameliorative changes. Faculty in those institutions were often slow to recognize that an academic department could submit assessment results and documentation of initiatives intended to improve learning as one among the many kinds of evidence peer evaluators would consider during program review.

IV. B. 1. (b) Problems Caused by Negative Beliefs

Misunderstandings about the nature and purpose of assessment and those about its relation to institutional evaluation and program review are relatively straightforward to resolve. While they can directly inhibit faculty participation in assessment if not addressed, institutions typically do find the necessary external help to clear up these confusions. There is, however, a greater obstacle to faculty participation that institutions are reluctant to bring up in conversation or written documents, and that can only be overcome within a campus community itself. This obstacle is the active or passive opposition of influential faculty who have intensely personal reasons for resisting institution-wide assessment and who refuse to take any constructive role in it. Strongly negative, emotionally charged positions held by even a few powerful campus figures can be a potent hindrance to gaining the cooperation of other faculty in developing, or participating in, the assessment program. If left unaddressed, it can be the most persistent and deleterious. The influence of faculty leaders who ignore or refuse to introduce assessment at the department level or speak negatively about the institution-wide program can slow progress on both fronts for a very long time. When a college or university has such a problem, its institutional leaders need to ac-

knowledge the nature of the difficulty and deal directly and sympathetically with its human sources.

Some faculty fear that the results of assessment, especially those that may reveal how many students have not learned what faculty had assumed, will somehow, someday be used against them professionally. They believe the results of any assessment of student learning at the program level will be taken into account during faculty evaluation and could affect tenure, promotion, or salary decisions. A few refuse to participate because they view assessment of student learning as an additional time-consuming responsibility not included in the duties specified in their union contract and therefore an infringement on academic freedom. Some faculty and academic administrators are reluctant to commit their own or their department's human and financial resources to assessment because they believe that nothing any faculty can do individually or collectively within a department will ever make a *real* difference in improving its students' learning. They assume that because students are endowed with differing degrees of academic aptitude, motivation, and preparation, some will never "be good students" or learn much.

Some faculty have come to believe that it is impossible to assess, let alone quantify, what students are learning about the "really important things." They may be unaware of the differences between qualitative and quantitative research and know little about psychometrics. Others hold tenaciously to an unexamined belief that grades within individual classrooms attest to academic achievement across an entire academic program and that no other kind of assessment can add anything useful to faculty perceptions about what their students are learning. And some faculty, particularly those in large decentralized universities, are unwilling to help introduce any new institutional program because they are convinced that nothing can or should change the culture of the department, college, or school in which they work.

However intransigent these men and women may appear, most are fiercely loyal to the institutions where they teach, and they are devoted to their students. They can usually be persuaded to give assessment a fair trial if the colleagues they most highly regard make a personal request for their cooperation and assistance. Concerned and informed peers need to engage each individual who clings to these kinds of negative beliefs in ongoing dialogue. Every erroneous belief needs be countered with facts each time it is expressed until at last it loses its energy and can no longer contribute to the delay or prevention of full implementation of assessment.

Three examples suggest the kinds of information that faculty and administrators might use to help colleges and universities correct misinformation or erroneous beliefs that have held them back from participating in their institution's assessment effort. In the first instance, an institution might need to address a campus rumor that documentation of student academic achievement is going to be used to discredit or penalize faculty whose students have scored less high than others. Such rumors would certainly be unsettling to many faculty who then would very likely express their discomfort by ignoring or rejecting efforts to get them to become active in departmental and institution-wide assessment activities. In such a case, the Assessment Committee and all other faculty and administrators in the institution who understand assessment would have a responsibility to strenuously rebut the rumors that the results of assessing student learning were to be used against individual faculty. They would need to reiterate that NCA does not have nor will it ever have a policy that could link assessment with decisions about faculty promotion, tenure, or compensation. They would also need to assure worried colleagues that the results of assessment are always to be used solely as the basis for improving student learning across entire academic programs and *would never be used for the evaluation of individual faculty*. Of course, even in institutions where no such rumor exists, everyone, from the President and Board members through the administrative ranks and Department Chairs, needs to constantly remind faculty, students, and all other constituents about the purpose of assessment and the uses that will be made of its results. The mantra on every campus must be: "assessment is about student learning; it is *not* about faculty evaluation."

A second example of a situation where an institution might use peer interaction and authoritative information to correct erroneous beliefs would be if a need to respond to the allegations of some faculty that to require or strongly encourage them to participate in assessment of student learning would be an infringement on academic freedom. Colleagues with expertise in contractual matters might be asked to meet with concerned faculty to revisit the "1940 Statement of Principles on Academic Freedom and Tenure with 1970 Interpretive Comments" (AAUP 1990), the language of the letter of initial appointment, the institution's faculty handbook, or any contract between the institution and a faculty union that describes the responsibilities and rights of individual faculty members. They could point out that virtually none of these documents describe participation in institutional or departmental academic affairs as "overload" or even as part of compensated workload.

The AAUP statement refers specifically to faculty entitlement to conduct research on any subject, to publish the results of that research, and to discuss controversial topics related to their subject in the classroom. It does not refer to faculty participation in departmental, programmatic, or institutional processes, including assessment activities and the use of assessment results to improve student learning. Faculty working with concerned colleagues could also remind them of the faculty's traditional responsibilities as set forth by the AAUP (1990, pp. 3-4). Seen in this light, to refuse to accept a primary role or participate in the development and implementation of programs and processes related to the educational process (including their institution and department's assessment programs) is to abdicate a fundamental faculty responsibility.

A third example of a situation where collegial discussion and exposure by a colleague to new information that could be used to correct erroneous beliefs about assessment of student learning would be if some faculty on a campus were to hold that any college student who received poor grades in a course taught through lecture and readings is either lazy or of limited ability. Faculty might be able induce colleagues to consider the potential of assessment to improve student learning by making them aware of studies showing that students have the capacity to achieve high levels of competence and personal growth than may have been realized. Assessment Committees, department chairs, and academic administrators might also help change the perspective of colleagues by holding faculty seminars on multiple intelligences (Gardner, 1993) and on differing learning styles (e.g., Kolb 1971, 1977; & Messick, 1994). Participation could open them to the possibility that faculty have been successful in teaching students who possess less recognized kinds of intellectual giftedness. They might profit from discussion of why many students who are considered slow learners may in fact be bright people who learn better by doing than by listening.

They could also be invited to brown-bag faculty lunches and campus lectures by visiting scholars on constructivism. Hearing from other scholars that learning can be defined as "an active process of constructing rather than acquiring knowledge" (Duffy & Cunningham, 1996, p. 171), could help many faculty to better understand the potential of students not easily reached by a single, oral mode of instruction such as the lecture. Becoming familiar with research and theory in those three areas could reduce some faculty's pessimism about the possibility of enabling students to learn more. It could also move some faculty to adopt pedagogies of active learning such as

problem-based learning (Major, 1999), collaborative learning, student-faculty partnerships (Jenkins & Romer, 1998), service learning, and engaging undergraduate students in faculty research (Edgerton, 1997).

Faculty know that the image of the student as an “empty vessel that passively gets filled” is not an accurate portrayal and never has been. Most faculty have discovered that “teaching as telling” and “learning as memorizing” do not work very well for most learners. Yet, some may not be aware of the evidence that when students are actively engaged in learning, they are more likely to apply and demonstrate the knowledge and skills they have acquired. The educational process that achieves these results invigorates both faculty and students. Faculty need to convey to their colleagues who are pessimistic about the likelihood that student learning across entire programs could be demonstrably improved that as an academy, we know a lot more than we used to about how adults learn. They need to persuade them that what is known should make faculty realistically hopeful that their students can learn more but only if their faculty are willing to assess their academic achievement, determine where improvement is needed, and try new ways to involve and assist them in their learning.

IV. B. 1. (c) Problems Caused by Lack of Information or Skills

Misunderstandings about assessment and negative attitudes toward it have not been the only deterrents to faculty participation in the construction and operation of successful assessment programs. A widespread lack of information and skills basic to carrying on assessment has been an equally formidable obstacle that many colleges and universities have had to face.

In many institutions, faculty and administrators were unfamiliar with good practice in institutional processes and structures. In some, individual faculty members knew a considerable amount about assessment but declined to assist in setting up their college or university’s program because they recognized that to assess learning across academic programs would require a level of professional and technical advice and assistance beyond that which they or any individual in their department was qualified to give.

Faculty and other campus leaders who had never had an opportunity to participate in well-organized, participatory institutional processes in their college or university often did not know

to include provisions in the assessment plan for essentials such as administrative leadership, clear lines of authority, faculty ownership and student participation, a carefully structured process with a realistic timetable, and adequate funding. In contrast, faculty and academic administrators who had taken part in effective planning and budgeting processes or similar complex institutional governance processes were not daunted by the challenge of helping establish an institution-wide assessment program. They were both willing and able to transfer their prior knowledge directly to the design of their institutional assessment program.

When most colleges and universities began to develop a plan for an assessment program, few, if any, of their faculty had technical information and skills in testing, research design, and statistics, all areas they would need if they were to take a significant part in developing and executing an assessment program beyond the early phase of working out educational goals and measurable objectives. This made it particularly difficult for their institutions to encourage faculty to participate in the implementation of the next phases of the assessment program. Faculty members who had neither training or experience in areas such as psychometrics were typically unable to distinguish accurately between direct and indirect measures of student learning, found it difficult to move beyond the assessment of easy-to-quantify skills, did not understand the meaning of or purpose for using multiple measures and methods, and did not grasp the necessity for valid and reliable instruments. They were at a loss about how to select or create tests or other measures that aligned with the educational goals and measurable objectives. In institutions where there have been few, if any, faculty with the knowledge to provide leadership and teach their colleagues, it has often been slow and difficult to educate faculty about good practice in measuring student academic achievement and about the potential benefits of assessment to their institution and its students. In contrast, institutions that had faculty and administrators on staff already familiar with the literature of adult learning and the construction of tests and measures were able to involve them in planning the proposed assessment program and later as Assessment Committee members. These institutions have moved forward in implementing their programs and are conducting sound and useful assessment of learning across all or nearly all of their academic programs.

IV. B. 1. (d) Faculty Development as the Primary Solution to Problems in Faculty Participation in Assessment

We know from Self-Studies and Team Reports that the vast majority of NCA colleges and universities had to grapple with some or all of the types of problems just described as they attempted to get their faculties to assume ownership of institutional and departmental assessment programs. We have also learned, however, that an impressive number of institutions have found it possible to interest faculty and students in assessment and gradually build a knowledgeable, enthusiastic cadre of faculty who are actively engaged in all aspects of the assessment program.

IV. B. 1. (e) Roles of Assessment Committees in Increasing Faculty Involvement in Assessment at the Departmental Level

Not surprisingly, the most effective way a majority of colleges and universities have found to build broad faculty participation in their assessment programs has been to arrange for all faculty and academic administrators to learn about assessment from persons knowledgeable in the field. They have found that training cannot be accomplished in just one session, but requires any number of different kinds of opportunities to learn about various aspects of assessment over several years. Institutions that have been successful in educating their faculty about assessment have high rates of faculty involvement in the assessment program at both the institutional and departmental levels.

We know that the administrators of most institutions provide and fund opportunities for faculty development in assessment of student learning through the standing Assessment Committee. Some Assessment Committees have found it possible to integrate assessment into the culture of the academic departments by bringing to campus trained, experienced departmental chairs and faculty from comparable colleges and universities. Because they are peers, these guest consultants will be accepted as authorities when they speak at workshops for departmental chairs and faculty on how to measure student learning across academic programs, and they are credible when they describe the ways in which assessment has proven beneficial at their institutions. They help the host departments design their departmental assessment programs, or single components of it, on an “as needed” basis and are available to give practical advice on any perplexing assessment activities.

Assessment Committees at a number of institutions have reported that, in addition to the usefulness of bringing outside peer consultants to work on campus with individual departments or groups of departments, it has proven valuable to have their own members work one-on-one as consultants on assessment. They report that they often do this first with individual department chairs. Once individual chairs have become receptive to learning more about assessment, the Assessment Committee or one or more of its members hold workshops for all chairs, and seminars for the faculty and chairs of single departments or divisions.

Some Assessment Committees have found that their members are able to serve individually as respected peer advisors to any faculty members who are known to be misinformed, suspicious, or critical of assessment. They report that although this process is time consuming, it markedly contributes to developing a climate of trust in the assessment process. They have learned that when their members work privately with individual faculty members and department chairs, they find it is often possible to persuade faculty that they will personally benefit if they obtain program assessment results, and will be able to use the results in ways that will not only increase their students' learning, but also serve the best interests of the department and the institution as a whole.

Assessment Committees report in Self-Studies that arranging for external consultants and having their members serve as mentors to individual faculty are only two of the ways in which they help educate faculty about assessment. The third way is simply by carrying out the ongoing responsibilities set forth in their original charge. They point out that as they coordinate, monitor, and review institutional and academic departmental assessment activities, they are constantly educating, reassuring, and encouraging faculty. Many Assessment Committees form review teams drawn from their membership to systematically review and comment on all aspects of departments' assessment programs and activities and on their annual assessment reports. Typically, the review teams of the Assessment Committee make a written response to every document sent to them by the departmental faculty. When responding to the Annual Reports, the Committee tells the department what level of implementation of their assessment program they have reached and what they could do next to gain more benefit from their work.

Assessment Committee review teams also provide suggestions for specific activities and/or recommend how to use the assessment results included in the department's reports as the basis

for discussion of changes that could improve student learning. The review teams have found that when they include this information in the assessment reports they routinely distribute throughout the institution, faculty gradually become more comfortable with assessment. As faculty read the Committee's assessment reports, they become more interested in assessment and begin to borrow ideas from other departments to try on their own. Assessment Committees have also observed that as faculty respond to their Committee's suggestions for improvement, departmental assessment programs begin to yield more useful formative and summative information about their students and their graduates. As faculty discover for themselves the usefulness of assessment results, they become more enthusiastic about assessment. Evaluation Teams have noted that when Assessment Committees provide this kind of peer-review of individual departmental assessment programs, participation in the assessment programs at both the institutional and departmental levels increases.

We have learned that for Assessment Committees to perform these numerous functions optimally, its members need to be trained in all aspects of assessment. They also need to be well respected, and in some types of institutions, senior faculty. Having highly regarded peers on the Assessment Committee greatly improves the likelihood that its members will be able to reduce the reluctance or hostility of some individuals and draw them into their program. Admired and respected faculty members of the Assessment Committee have also proven to be effective assessment tutors and resources to chairs and department faculty. Having them in this position also increases the probability that faculty and department chairs will respect the process by which the assessment program has evolved and believe the Committee's statements that the call for assessment of student learning is from peers, not a requirement imposed on faculty by administration. It also encourages faculty to trust the Assessment Committee's reports on assessment activities and accept its suggestions and recommendations for improvement, and to turn to that group for whatever kind of assistance they need in their assessment program activities.

IV.B.1. (f) Uses of Financial Incentives and Rewards to Engage Faculty in the Assessment Program

A large number of institutions report that they have found financial incentives and rewards to be particularly effective as a means to increase faculty knowledge about assessment and to engage them, as individuals and as entire academic departments, in all aspects of the institution's assessment program. Institutions have been able to build faculty interest in the assessment pro-

gram by funding Assessment Committee members and other individual faculty members to participate in statewide, regional, and national assessment conferences. They have established summer grants for faculty to design assessment activities and provided stipends for those who carry out a particularly heavy load of assessment activities in addition to their regular duties. They have also subsidized travel for faculty to present results of their assessment activities at conferences and workshops.

Many institutions have found that to get faculty's continued support and participation in assessment activities is has been necessary to provide each academic department with increased resources by setting up a line designated for assessment expenses in their annual operating budgets. They reward departments by increasing their budgets for assessment if they that have made documented progress in assessment activities during the previous year and have developed operational plans that include initiatives to introduce changes to increase student academic achievement in areas where assessment results indicate improvement is possible. One institution, for example, found that "Challenge Grants" provided a significant impetus for departmental faculty to (1) develop assessment plans, (2) revise assessment plans prior to starting data collection, (3) "collect data on identified measures related to specific indicators in their assessment plans," and (4) "implement carefully considered new practices and to achieve performance goals" (Hatfield, 1999).

IV. B. 2. Involving Students

We have learned that involving students in assessment has proven no less challenging for institutions than engaging faculty and that it is equally important if an assessment program is to work well. "How to get students to take assessment seriously" has been a topic discussed widely both in papers and in informal conversation at assessment conferences and workshops. Students can be strong advocates and good will ambassadors for the assessment program, but for this to happen, they need to understand the purpose and content of the assessment program and they need to receive results (data and interpretations) from the assessment activities in which they participate.

We know that when students in an institution appear cynical or negative about assessment, it is usually because they have been disenfranchised; their representatives had not been involved in the discussions and decisions that led to the development and implementation of the assessment

program. Students in colleges and universities where they have not been purposively educated about their institution's assessment program are poorly informed and likely to feel alienated. They have no way to make the connection between a nationally normed test and the published goals for the curriculum. They have no idea what the results of the assessment show or how results will be used. As a group, these students seem totally unaware that the mode of instruction they are receiving could be changed, or its quality improved in any way. Not surprisingly, without any real information, students form ambivalent or negative impressions of assessment and are likely to "blow off" tests that are part of the assessment program.

We have learned that institutions that have been successful in gaining positive student response to the introduction of assessment have actively solicited student input into decisions about the assessment program from its planning stage forward. These colleges and universities have involved their students by arranging for them to work closely with faculty in the design and implementation of processes and procedures for carrying out assessment activities such as formulating the rationale for assessment and designing locally developed tests. On campuses where students are kept fully informed and given opportunities to share responsibility with faculty for the planning and implementation of the assessment program, they appear to take the assessment process and its intended outcomes seriously and consider the measures rigorous and worth their time.

Institutions have described a variety of approaches that they find valuable in successfully raising students' enthusiasm about assessment and attracting their participation in assessment activities. Many have found that to gain student support it is necessary to include the rationale and philosophy for assessing students' learning in the catalog to signal its importance. A growing number of institutions are finding it effective to publish information about assessment at the program level on their web pages and in their catalogues. When students read this information on the web and in catalogs, institutions find that they are more likely to understand that the assessment program is integral to every academic department and to the institution as a whole. When they recognize its importance, they are more interested in participating in assessment activities.

Some institutions with large numbers of part-time or transfer students have decided that it is not feasible to involve students in planning or implementing the assessment program. These colleges and universities often have mandated annual assessment of students' academic achievement at

the beginning and completion of their first year, and then with each successive year, rather than measuring value-added between entry into and completion of an entire program. Typically, these institutions require new students to enroll in introductory seminars that include the rationale and explanation for assessment as well as guidance in understanding the faculty's expectations for the assessment program.

A growing number of institutions have mentioned in Self-Studies that their students are more willing to participate in assessment activities in part because faculty regularly provide them with individualized reports of their scores on the standardized tests they have taken so that they can compare them to nationally normed groups. Voluntary participation by students appears to rise in institutions where faculty advisors or counseling staff share assessment results with them in individual advising sessions or in senior seminars. Colleges and universities with relatively high rates of student participation in assessment also report that students' motivation both to do well on tests and to participate in other assessment program activities is heightened by well-publicized Assessment Days devoted to assessment activities and to honoring student achievement

Not surprisingly, we have learned that faculty attitudes toward assessment have a direct impact on the level of student involvement. Institutions have observed that high levels of student interest and participation in assessment activities is closely associated with faculty advocacy of and contributions to the assessment program. It appears that one unexpected reward for an institution's investment in faculty professional development in assessment is greater student participation in the assessment program.

In sum, from the beginning of the Assessment Initiative, NCA has consistently stressed that for an institution's assessment program to be successful, it must be faculty owned and faculty driven. We have learned that it should also have the support and participation of students. Recently, a faculty member from a small private liberal arts college wrote an e-mail message to an NCA staff liaison that says it all! She wrote:

The best thing we can do for our students and our faculty is bring them to a place where they can see for themselves not only what they are learning and teaching, not only why they are learning and teaching certain things, but how this process is taking place, for what end, and to what level of success. As a teacher, I've often

found that students who struggle do so more often than not because they have never been given the confidence that they can actually learn, and have never been shown in any practical way that they actually are learning.

IV. C. Developing Program Goals and Measurable Objectives and Selecting Measures of Student Learning

A second area where institutions have learned important lessons from developing an assessment program is that of coming to agreement on program goals, measurable objectives, and instruments to measure student learning. Consultant-Evaluators say that after engaging the faculty and academic administrators in planning and mounting the assessment program, the next major challenge most institutions encounter is the need for academic departments to develop common educational goals for their academic programs and to agree upon measurable objectives for each of those goals. We have discovered that in virtually all NCA colleges and universities, the single most important lesson faculty and administrators have learned from that exercise is that goals and objectives need to focus on *students*, on what students will be able to demonstrate that they know, believe, and can do, not on what the institution or its faculty provide, offer, or do for students.

This usually calls for faculty to make a major adjustment in their thinking about the nature of the institution and its work. Some faculty have experienced the shift in emphasis to be painful. They have found it difficult to write new educational goals and measurable objectives from the perspective of student learning rather than faculty offerings, primarily because it was unfamiliar and caused them to rethink their own long-held assumptions about what education is and about the role of the institution and faculty in education. But many other faculty have described the process of developing educational goals and measurable objectives as exciting and satisfying. They have enjoyed working with other members of their departments to sharpen their expectations of what students who complete each of their undergraduate programs and graduate programs will have learned. They report finding it stimulating to join colleagues from other disciplines to work on the general education program and examine, discuss, define, and finally operationalize such “fuzzy” domains as “critical thinking” or “global perspectives.”

In this area, as in that of attracting faculty to participate in creating and operating the assessment program, a number of colleges and universities have discovered that their academic officers as well as their faculty and participating students needed seminars designed for faculty to master the

vocabulary and techniques of quantitative and qualitative research. They have also learned that after providing this basic preparation, they needed to arrange for faculty to attend professional development workshops in assessment in order for them to progress further and build the skills needed to develop and implement departmental programs in assessment. In these workshops, faculty have learned how to formulate educational goals for a course and then “translate” each goal into a sequence of measurable objectives that they can include in the course syllabus. Institutions have found that once academic department members have become individually adept at formulating goals and measurable objectives for their own courses, the entire department has a common basis on which they can work together at the program level. They are prepared to arrive at educational goals and measurable objectives for general education, a major, a graduate program or a professional degree program because they now have the tools to work out and articulate their common hopes and expectations for student learning across an entire program.

Colleges and universities have discovered that even after faculty have agreed upon educational goals and measurable objectives for a program, they find it a formidable task to select sound measures that align well enough with one or more of their objectives for each goal to yield meaningful information about value added, i.e., about the student learning that will have occurred across an entire academic program. They have seen that faculty find it difficult and time-consuming to arrive at decisions about whether to use a nationally normed standardized exam, a locally developed test, a combination of the two, or performance-based measures such as portfolios, internships, and capstone projects. In institutions where a core of faculty possesses the expertise needed for assessment, some or all are appointed to the Assessment Committee. These Assessment Committees have become an invaluable resource for everyone involved in this aspect of assessment. Some have developed assessment manuals, workbooks, handbooks, or guides that provide guidance on how to select measures and that describe the conceptual and structural framework needed for departmental and institutional assessment activities.

As described earlier, in their role as in-house consultants, Assessment Committees meet with departments on an ongoing basis and are able to provide faculty and students working to develop a departmental assessment program with a comfortable environment in which to ask questions about any aspects of assessment they are having difficulty with. One of the areas in which their assistance has been welcome and successful has been in assisting departments to align program

goals and measurable objectives with reliable measures that will yield useful assessment data and information.

IV. D. Collecting and Interpreting Data

Institutions have discovered that when departmental faculty have been able to agree upon educational goals and measurable objectives and have selected the best measures for each, they will have taken the first steps toward collecting evidence of how close students' actual learning comes to meeting faculty's expected outcomes for any given academic program. Institutions have learned that even after faculty have taken advantage of opportunities for professional development in the area of assessment, they usually need both senior administrative oversight and the technical support of trained professional staff to carry out the actual assessment process. This is particularly true for institutions where few if any faculty have previous experience in assessment and where there is little disciplinary knowledge and skill to transfer to assessment activities. Then, unless the institution provides direct assistance or supervision, some academic departments are likely either to ignore the call for assessment or submit easily obtained data that may not be responsive to the critical questions of what has and has not been learned and by what cohort of the student population that has completed a particular program.

Institutions have found that even when Assessment Committee members and colleagues in the fields of higher education and the social sciences have served as consultants and introduced faculty to the basic concepts and vocabulary of assessment and have helped them develop program goals and measurable objectives and select valid and reliable measures, some may not have gained adequate expertise, or have the necessary time to design and carry out assessment projects for their departments. They find they are unable as an Assessment Committee or as an academic department to administer the tests and then collect, score, and analyze the data as provided for in their assessment program. Many institutions have found that when this is the case, they need to employ specialized professionals with training, experience, and expertise in assessment to be support staff to the assessment program as a whole and to individual academic departments.

We have learned that in spite of these difficulties, some institutions that had not previously made extensive or systematic use of assessment are now making steady progress in their implementation of a well-planned assessment program. Teams have discovered that in these colleges and

universities, faculty and administration have developed a number of ways to ensure sound practice in their assessment efforts. Small institutions have in some cases appointed one of their own faculty members with a strong background in statistics, tests and measurements, or psychology to be the institution's resource person on anything having to do with assessing student learning. She or he is available to academic units and individual faculty and administrators when they need help with aspects of their assessment program. The faculty member is typically given release time or a reduction in workload for a specified number of academic years to act as the institutional in-house consultant on assessment.

We have found that larger or more affluent small institutions have appointed one or more individuals with training and experience in assessment to provide consultative advice and technical support to the Assessment Committee and academic departments. These professionals assist faculty in designing and carrying out assessment at the departmental level and in coordinating institutional and departmental assessment projects with one another and with the planning and budgeting processes and timetables. They also are expected to decide on such matters as methodology, research design, appropriate sampling design techniques, validity and reliability of instruments, item analysis, and scoring protocols and rubrics. They frequently administer and score the results of the measures selected by departments and also write analyses of the data in a form that can be understood and used by faculty at the departmental and institutional levels.

We have learned that colleges and universities with operating budgets adequate to staff and fund an Office of Institutional Research typically have that office offer all of the technical support and services needed for monitoring and operating the institution's assessment program at every level. A number of institutions that already had an Office of Institutional Research when they started their assessment program, report they have formally expanded the office's responsibilities to include the provision of on-going assistance with the assessment activities of all departments and programs and support for institutional aspects of the program. Some institutions with well-established Office of Institutional Research have reported that they have needed to add research staff to support the assessment effort.

We have found that large decentralized universities are those that most often have needed to expand the Office of Institutional Research so that it is able to provide all the kinds of support, instruction, and technical assistance needed to carry on assessment at every level of the institution.

We also have learned that the Office of Institutional Research can be of great value to the institution when it is ready to conceptualize how to evaluate the entire institutional assessment program, including the efficacy and effectiveness of all components of the institutional assessment efforts. It can be equally helpful to departments when they need to develop and carry out parallel evaluations of their departmental assessment programs.

IV. E. Feedback Loops: Communicating Information about the Outcomes of Assessment

We have learned that the absence of a system of “feedback loops” is often associated with lack of progress in implementing an assessment program. Conversely, successfully implemented assessment programs characteristically include a carefully designed feedback system that assures an accurate and timely flow of information. We know that Assessment Committees have emerged as the hubs of these systems, communicating meaningful information about assessment activities and results throughout the college or university. How well the Assessment Committee carries out its communications function has much to do with how rapidly institutions progress toward implementing their assessment programs. As described earlier, the Assessment Committee’s responsibilities for communication include reporting regularly on new developments in the institution’s assessment program, on all assessment activities throughout the institution, on upcoming deadlines in the assessment timetable, and on the results of departmental assessment efforts.

Assessment Committees use both written and oral, formal and informal presentations to the entire institutional community, to academic departments individually, and to all committees directly involved in assessment. The Annual Report is typically the most widely distributed of all its reports. It usually: includes the actual assessment programs of all departments; gives assessment results for each degree program; identifies areas where the levels of documented student academic achievement suggest improvements are needed; and describes how the results have led faculty to propose changes in curriculum, instruction, academic support services, or other areas that could increase student learning. Some Assessment Committees use an annual report to document changes that have been proposed, funded, and instituted by each department and to describe any apparent effect a change has been documented to have had on student learning over several years.

We have learned that many Assessment Committees send out executive summaries or progress reports between issues of the extensive Annual Report. The summary or progress reports provide an overview of all assessment projects and activities in progress throughout the institution and an update of assessment findings from a number of projects. In this way, an Assessment Committee is able to keep the entire institutional community apprised of developments in the assessment program as they occur. We have observed that Assessment Committees also prepare special reports on individual major assessment activities and distribute them to senior administrators, deans, and academic chairs who, in turn, circulate the reports to their offices and academic departments. These reports focus exclusively on a single assessment project, explain its purpose, and give the findings.

We know that a number of Assessment Committees issue assessment newsletters distributed directly to individual faculty members and administrators during the course of the academic year. The newsletters include matters of general interest about the assessment program, findings from important assessment projects, and information about specific assessment topics. The Assessment Committee may also submit abstracts of assessment studies for inclusion in university publications. Finally, the Assessment Committee encourages departments to share the results of assessment projects through presentations and discussion throughout the institution.

We have learned how important to the success of the assessment program it is for institutions to have well-functioning feedback loops, i.e., to provide information generated by assessment activities in a form that can be readily understood and used by academic departments and administrative personnel to make reasonable proposals for improvements in curriculum, instructional delivery, or in other areas that faculty feel could increase student academic achievement. We have also learned that to keep students positive and involved in assessment, the Assessment Committee and Institutional Research Office need to provide feedback to individual students. Whether feedback is intended for faculty, administrators, or students, or all three, we have found that it needs to be specific, provided in a form that can be readily comprehended and delivered as promptly as possible so that the recipient can use the information transmitted to improve current performance.

Another important lesson we have learned is that some institutions have adequate provisions for feedback in their assessment program processes, but show little or no progress in improving stu-

dent learning because departments are failing to “close the feedback loop.” For example, some departments report assessment data to the Assessment Committee but then do not use the information they have obtained about their students’ academic achievement to consider what modifications could be tried to improve learning across the program. We have also learned that failure to provide for and use a well-designed communication system in the assessment program is one of the most common reasons why many of the institutions that have not yet fully implemented their assessment programs are having difficulty in carrying out an otherwise acceptable plan.

IV. F. Costs, Revenues, and Reallocation of Resources for Assessment Activities

Some administrators and faculty are concerned that operating a fully implemented assessment program can be an added expense to institutions already coping with limited resources. However, the Commission has said (NCA 1991a, p. 38) that an assessment program should be “cost-effective,” not “costly.” NCA has explained that by “cost-effective” it means the program must be designed so that maximum information is gathered for the time and money given to all assessment staffing and activities. That there are real costs associated with operating an effective assessment program is an indisputable reality. Evaluation Teams have observed that institutions that have demonstrated improvements in their assessment programs have administrators who recognize that assessment activities require an investment of institutional dollars. These administrators have typically approved budget lines for assessment in departmental and institutional annual operating budgets affected by assessment activities so that the financial requirements for carrying out assessment will be considered in the context of the institution’s total needs and resources. When there are a number of competing requests for new or additional money, they give highest priority to those that show the greatest potential of improving student learning.

We know that successful assessment programs can only be mounted and sustained where there is strong institutional commitment to the primary importance of student learning, hence to any programs or activities that support it. For this reason, Evaluation Teams have observed that that inclusion of funds for assessment activities in successive annual budgets is always an indicator of strong institutional commitment to the improvement of student learning. In institutions where the assessment program is a high priority of the administration and strongly supported by the faculty, they find that the approved annual budget for the Assessment Committee will be adequate to

meet the costs of institutional assessment activities such as faculty development, speakers and consultants, incentives to faculty who have made outstanding contributions to institutional-wide assessment activities, and monetary recognition of departments that have made improvements in their students' learning across one or more programs they offer. They note that, in addition, there will be lines for assessment-related expenses in the annual operating budget requests forms completed by academic departments and that the approved departmental budgets will be adequate to meet the costs of departmental assessment activities.

We are aware that in the social and economic climate within which colleges and universities operate in, few will be able to raise new funds for assessment. However, we know that some institutions have been able to increase their revenues by adding an "Assessment Fee" to cover direct costs of assessment. This has occurred in institutions where there are stringent operating budgets and very little flexibility to reapportion limited fiscal and human resources, but a strong faculty, administrative, and student belief that because assessment can be an effective means to improve students' learning funds need some how to be raised to meet the costs. Some colleges and universities have added two fees, one to fund the assessment activities of academic units, and another to meet the costs of institution-wide assessment projects. In some instances, the fee may be per capita, e.g., \$5 per student per term, regardless of hours enrolled. In other instances, the fee may be a small amount, e.g., a dollar or less attached to each credit hour for which a student registers.

We are also aware that in some colleges and universities where adding a fee is not an option, or where the revenues generated by a specific fee are not sufficient to cover the costs of assessment, institutions have had to reallocate their existing resources in order to carry on their assessment programs and accomplish their goals for improving student learning. It has long been recognized that how an institution uses its resources is a direct reflection of its values. As Darrell Krueger, President of Winona State University (MN) is quoted as having said: "what is measured is what is valued; what is valued is what is funded" (NCA, 1996, p.88).

As institutions experience the positive effects of their assessment program on students' learning, we believe they are likely to reconsider their former budget priorities and give preference to expenditures for assessment. We have already learned that in some institutions, when departmental faculty propose changes they believe could increase student learning based on assessment re-

sults, high priority is assigned to those proposed expenditures in their annual budget requests in order to ensure that they can be tested and evaluated for their effect on academic achievement. As colleges and universities actually experience the value of assessment to their students and faculty, many find themselves becoming student-centered learning organizations committed to constantly finding ways to improve student academic achievement. We are confident that as this occurs many will view reconfiguration of their former funding patterns as an appropriate reflection of the change in their institutional culture.

IV. G. Linking Assessment with Operational Planning and Budgeting

It has been written in many Commission documents over the past decade that linking the assessment process of an institution with its operational planning and budgeting processes is essential to the ongoing success and cost effectiveness of every assessment program. Yet, we have learned that a number of institutions remain perplexed about what is meant by “linking” the three processes or, in some cases, how to connect them.

The reasons for linking assessment, planning, and budgeting is to ensure that assessment, like the planning and budgeting processes, will be an on-going process, and that its results will be used to improve student learning. For that to occur, each project within the assessment program and every proposed change based on the results of assessment need to be sequenced and timed so that it can be included in the operating plan, and if there are costs associated with the proposed change, into the requested budget of the Assessment Committee or of the appropriate department for the following academic/fiscal year. Unless that happens, requests cannot be funneled into the institutional planning and budgeting cycles in a timely fashion. The risk of long delays between requests and authorizations can badly damage morale and progress.

Stated in practical terms, refocusing the culture of a college or university on how students’ learning can be improved requires that both departmental and institutional processes of the assessment program, the operational planning process, and the annual operating budgeting process be integrated into a single, seamless system with a common calendar of events and flow chart to guide the institution through each cycle. When there is an integrated system that encompasses assessment, action planning, and annual budgeting, requests for expenditures to support ongoing assessment activities and agreed-upon changes intended to improve student learning can be con-

sidered in the normal institutional processes. In a student-centered learning institution, they are likely to be given priority in the allocation of resources and appear in the approved departmental and institutional action plans and budgets for the next academic year.

We have found that in colleges and universities where the expression “linking assessment to planning and budgeting” is not understood, there is always the danger that no special funds will be set aside for the assessment program and that activities it generates will have to be delayed for two or even three years. If that occurs, the assessment program is likely to lose its momentum, and disaffection will replace the satisfaction that faculty experience when they are able to propose, document, test, and evaluate the effects of a change that could increase students’ learning within one academic year. Figure 1 is a depiction of the relationship of assessment of student academic learning and the evaluation of other operational units to operational planning and budgeting.

Like the processes of assessment of student learning and academic program review, evaluation of academic and non-academic administrative units and programs is conducted through a prescribed annual cycle of actions. The cycle typically includes: (1) review of the unit’s purpose, goals, and objectives; (2) the collection, analysis, interpretation, and dissemination of data; (3) discussion among unit personnel of the data collected followed by agreement upon changes to improve the performance of the unit; (4) the recommendation of changes that personnel believe will improve performance are forwarded for action; (5) inclusion of approved changes are included in updated unit operational plans and proposed annual operational budgets; and (6) preparation of proposed annual operating budgets. Once the updated unit operational plans have been reviewed and acted upon, they are modified or approved and incorporated into the updated institutional operating plan. If changes in the unit’s plan would require reallocation of funds or additional resources, requests are prepared for inclusion in the departmental budget for the following fiscal year. Proposed annual budgets based upon unit plans are then reviewed and acted upon through the institutional budget process. Unit budgets are incorporated as approved in the institution’s annual operating budget. When units receive authorization to implement some or all of the changes they have recommended in their plans, and any associated costs have been included in their approved operating budgets for the coming year, the cycle begins again. When the process of evaluating institutional effectiveness works well, the result is continuous improvement of the college or university’s total educational enterprise.

IV. H. Collaborative Roles of Administrative Officers and Faculty in Successful Assessment Programs

Although financial resources adequate to cover the direct and hidden costs of assessment has been found important for implementation of assessment programs, we have learned that even generous funding could never alone assure their long-term success. We know that for an assessment program to be successful, both faculty and administrators need to understand the purpose of assessment and agree upon the necessity of documenting what students know and can do by the end of an academic program. Both must take active and positive parts in advancing assessment goals and activities, and both must contribute energy, time, and leadership so that assessment becomes part and parcel of an institution's way-of-life, its culture. To bring this about, faculty and administrators need to work collaboratively to fulfill the purpose of assessment which is to increase the quality of education their students achieve.

In the operations of assessment programs, as in institutional governance, in institutional planning and budgeting, and in institutional self-study and evaluation, the chief academic officer, the deans, the academic department heads, and the faculty each have specific roles. Some of their roles are shared; some are separate but complementary. All are essential in establishing and maintaining an effective assessment program.

We have learned what academic officers and faculty are doing, separately and together, to build, operate, and continuously strengthen assessment programs in those institutions that have shown the greatest progress in shifting their attention from institutional inputs to student outcomes. Institutions that do not have all of the elements of a complete assessment program or have not been able to involve all of their academic departments in assessing student learning, may find it useful to review the lessons we have learned concerning the respective contributions that academic officers and faculty have made to planning and building strong assessment programs and that they will need to continue.

We have learned from institutions where a strong assessment program is in place that their chief academic officers (CAO) working collaboratively with faculty have:

1. led the governing board and CEO to an understanding of the meaning and importance of assessing student learning;
2. provided opportunities and support for faculty and academic administrators to be trained in every aspect of assessment;
3. appointed a standing Assessment Committee and a chair who reports directly to the CAO, provided each with a written charge and adequate budget;
4. established a line and allocated sufficient resources in the annual E&G operations budget to sustain on-going assessment efforts for the institution as a whole and for each academic program;
5. added “responsibility for assessment” to the position description of each academic department and program chair and assigned the chair sufficient authority and resources to be effective;
6. expanded the written responsibilities of the Office of Institutional Research (or broadened the position description of an administrator or faculty member assigned responsibility for those functions) to include technical and staff support to the administrators, the Assessment Committee and the departmental and program faculty engaged in assessment of student learning;
7. supported the on-going operation of a campus-wide, systematic data collection process;
8. ensured that the findings from the assessment of student learning at the program level are incorporated into the review of each academic department or school;
9. required departments to describe provisions being made for assessing student learning on their applications for approval of new courses and approval of new or revised programs;
10. integrated the timelines of the assessment process, the planning process, and the budgeting process into a single calendar to be followed by academic units and the institution as a whole;

We have also learned from institutions where a strong assessment program is in place that their faculty, working collaboratively with the chief academic officer and other academic administrators, have:

1. given thoughtful consideration to the reasons for and uses of measuring student academic achievement across entire academic programs, and continue to discuss these in departmental and full faculty meetings and informally with peers;
2. taken advantage of opportunities and support offered by the administration to be trained in various aspects of assessment of student learning;

3. become fully conversant with the institution's total student academic achievement program, including its structure, components, and annual cycle (timetable);
4. participated in their academic units' assessment programs by:
 - (a) formulating of a rationale to guide assessment activities;
 - (b) helping to develop goals and measurable objectives for each academic program within the department;
 - (c) ensuring that the objectives include both what the faculty agree students will have learned in knowledge, skills, and attitudes (values) by the program's completion; and by
 - (d) stipulating the percentage of students who shall have attained and can demonstrate a particular level of competency in each domain as indicators for the faculty to gauge how well their objectives are being met;
5. accepted responsibility for ensuring that:
 - (a) measures are linked to measurable objectives;
 - (b) multiple measures are used since no one instrument can successfully measure the range of student achievement;
 - (c) both quantitative and qualitative measures (including capstone experiences, student senior projects and research, and/or supervised internships) are used;
 - (d) direct measures of student learning are employed;
 - (e) instruments are reliable and valid;
 - (f) measures yield useful results;
 - (g) results of assessment are used to make changes intended to improve student learning;
6. investigated instruments or measures other than those currently in use, and have suggested that any which seem to be a "better fit" in meeting the department's objectives for student learning or could yield more useful information be pilot-tested;
7. become engaged in departmental discussions of the data gathered from the administration of measures of student learning and the interpretation of these data;
8. contributed ideas for making changes in mode of instruction, curriculum, library holdings, academic support equipment, personnel, and/or introducing innovations that could increase student learning whenever comparison of the results of measuring student learning with the faculty's educational goals and objectives for the program have suggested improvement is needed;

9. ensured that procedures are in place for
 - (a) prioritizing proposed changes for inclusion in departmental or program plans and budgets;
 - (b) determining whether or not the changes introduced correlate with actual improvements in student learning, and;
 - (c) documenting the changes that have been recommended, funded (if required), and implemented.
10. made provision for external evaluation of all assessment efforts to ensure the best possible process (methodology) and use of results, and to establish a high level of credibility among the institution's internal and external constituents.

V. "Connecting the Disconnects": What Remains to be Done

Nearly ten years after the Assessment Initiative began, too many member institutions have either just begun to implement their assessment programs or have only been able to implement their programs partially. Many have yet to realize a level of on-going assessment that could position them to become a student-centered learning organization committed to continuous improvement of the education their students obtain. Institutions that have not achieved as much as they had hoped to typically want to understand why their progress has been slow and what actions they might take to move from the early stages of implementation to full implementation of their assessment programs. Institutions that have fully implemented assessment programs are eager to know what remains to be accomplished. NCA has provided a wealth of information and advice intended to be helpful to institutions at every stage in the development and operation of their assessment programs.

V. A. What Remains to be Done By Institutions Beginning to Implement Their Assessment Programs

The thoughtful reports of NCA Teams that have evaluated assessment programs over the last four years provide institutions with an extraordinarily rich array of accepted good practice in assessment, of commonly encountered obstacles to assessment, and of practical suggestions for how to overcome them. Earlier sections of this paper summarize a considerable amount of their information and wisdom. Administrators and faculty leaders from institutions that are still struggling to implement various components of their assessment programs or to engage non-

participating departments may want to return at a later time to those sections for insights and practical information. They may also find assistance by referring to the many publications dealing with assessment programs that NCA has released over the past ten years (López 1996, 1997, 1998, 1999; NCA 1991a, 1991b, 1999).

Wherever institutions may be along the continuum from partial to full implementation of their assessment programs, they may find it helpful to review NCA's list of the characteristics of an assessment program (NCA, 1997, pp. 43-44) and the characteristics associated with levels of implementation proposed by staff (López, 1998). When they have done that, they may want to ask themselves these questions:

1. Have we used every means known to be effective in involving faculty and student in the assessment program?
2. Have we appointed or elected respected senior faculty to serve on the Assessment Committee? They become the assessment program's goodwill ambassadors and the tutors and mentors for other faculty.
3. Have we done all we can to help every department agree upon program goals and measurable objectives and the measures that align with them? Have we provided opportunities for faculty development so that faculty understand the vocabulary and concepts of measuring student learning with reliable and multiple measures of learning?
4. Have we provided faculty with the technical support they need to select multiple, valid and reliable measures of learning, and to collect and interpret data?
5. Have we established and published a system of feedback loops for reporting the results of assessment activities to all types of internal and external constituencies, and for capturing the decisions on how student learning could be improved that result from departmental discussion of the results?
6. Have we instructed the governing Board about the purposes of assessment? Have we kept the governing Board informed about the institution's assessment results and its efforts to use them to improve student learning? Have we gained active Board and Senior Administration support for the assessment program? Their support is vital to the success of an assessment program.
7. Have we integrated the assessment process, the planning process, and the budgeting process into a single timetable, and made certain that all faculty and administrators understand the sequence of steps and dates?
8. Have we made certain that faculty and academic administrators know their roles in assessment? Are we promoting collaborative efforts between them? Collaboration is essential, even if not sufficient, for successful implementation to occur.

This checklist is far from exhaustive, but for institutions that are already familiar with the observations, advice, and suggestions given in NCA publications (NCA, 1991 & 1997) and by Evaluation Teams in the earlier years of the Assessment Initiative (López, 1996 & 1997), it may prove to be a useful resource.

V. B. What Remains To Be Done By Institutions That Are Implementing Their Assessment Programs

When an institution has fully implemented a structured, systematic, and ongoing assessment program, it will typically have become a student-centered learning organization that is committed to continuously improving the education its students obtain. Because its culture is focused on student learning, assessment is woven into the fabric of everything its faculty, staff, and students regularly do. For these institutions, there are other exciting challenges to be faced.

V. B. 1. Developing Strategies to Increase Student Learning

We have learned that some institutions with fully implemented assessment plans have collected a considerable amount of data but may not be sure what steps to take next. Good practice suggests that they systematically watch for any indications of an appreciable gap between the faculty's measurable objectives of educational goals for a program and evidence provided by assessment of what students completing the academic program have learned and can do. Whenever a gap is found, their faculty can then consider the possibilities of what could be changed or instituted that might help students learn more in that particular area. We are aware that there has been a tendency for some departments to concentrate on interventions such as modifying the program's curricular design or the contents of an individual course.

Over time, however, institutions that are student-centered learning organizations are likely to consider the possibility that students' learning in some areas could be increased by improvements in other areas. They may propose changes in the library, in physical space and equipment, in electronic information systems, and in academic support services such as tutoring and academic advising, areas that have traditionally been recognized to support teaching and learning. Departments could also consider and propose changes to improve or enrich student life, extra-

curricular activities, student residences, and campus events as means to increasing some kinds of learning.

We have discovered that as an institution becomes increasingly adept in obtaining useful information about what its students' have learned from books, lectures, and seminars, its faculty and administrators are likely to become interested in scholarship that explains the multiple intelligences of their students and the variety of their learning styles. They may also want to test strategies for engaging students in active learning, and explore the possibilities of interactive, computer-mediated instruction. When this occurs, faculty are likely to need to develop new means to assess how much students have learned from these less familiar strategies and sources of instruction. Similarly, they will need to find new ways to improve learning in areas where results from these new assessment techniques suggest students are not meeting the objectives set. Take the case of a faculty that has introduced active learning into its curriculum, or a department that is offering one or more courses and degrees on-line. In each case, the faculty will want to discover ways to evaluate what and how much students have obtained from the active learning experience or from the asynchronous mediated instruction.

We know that in a number of institutions after faculty have introduced a strategy to provide students with an opportunity for active learning, they have begun to explore innovative ways that they could assess the outcome. The faculty of one university, for example, is pilot testing an assessment tool for measuring the effectiveness of its learning communities. They have defined the terms, *learning community*, as a curriculum device for linking two courses from different disciplines. It is characterized as student-centered and focused on collaboration and the construction of knowledge (Chesebro, Snider, & Venable (1999). It is particularly interesting that in the faculty's definition, they have operationalized *learning communities* using such active learning dimensions as student-student collaboration, student-faculty collaboration, academic involvement, interdisciplinary learning, and knowledge constructivism, thereby establishing identifiable areas and measurable objectives by which to assess their students' learning.

At another university, faculty have chosen to explore ways to evaluate the impact of "interactivity" web-based courses has on cognition, knowledge construction, skills acquisition, motivation, perspective, or adoption of group learning strategies. Interactivity is defined as the interaction between: (1) the student to the content; (2) the student to the faculty mentor/content specialist;

(3) the student to other students; and (4) the student to his/her environment, physical and/or virtual (Hoey, 1999).

As indicated by Figure 1, regardless of the kind of changes faculty propose on the basis of assessment results, we have found that in most institutions a proposed change in any academic or non-academic unit needs to be reviewed and acted upon by groups and individuals that may include departmental or college curriculum committees, advisory bodies, and academic administrators. Once approved, a proposed change needs to be included in the departmental operational (action) plan. If the change would require additional dollars or the reallocation of existing dollars in a department's budget, the department needs to include the request in its next annual budget request before the request is forwarded for action through the normal annual budgeting process of the institution as a whole. In many institutions budget requests far exceed available revenues and new requests for expenditures on items that could improve learning must compete with each other as well as with other pressing needs of the institution. This requires careful consideration of which interventions are both cost effective and most likely to produce a significant improvement in student academic achievement. Whether only a few or most of the approved recommendations for change based on assessment outcomes data are ultimately included in any given budget, the departments and Assessment Committee will need to closely monitor subsequent assessment results to see whether the funded changes can be shown to have a direct affect on or correlate positively with improved student learning.

V. B. 2. Benchmarking and its Uses

We have discovered that faculty and academic administrators in an institution that has fully implemented its assessment program face a second challenge. They question what their specific goals for their students' learning in each domain should be in each department's programs. They ask what percentage of students completing a program should perform at what level and against what (or whose) standards for them to be satisfied with the evidence of students' learning generated by assessment across the academic program or major. They may also be concerned about how the results of assessing their students' level of learning in a given program compares with the results of student achievement in programs by the same name at institutions with whom they compete for students.

How will the student-centered institution respond to faculty that ask questions such as the following. “What *is* the desired state?” and “On what basis do we decide that a sufficiently high percentage of our students have been shown to have learned a sufficient amount for us to say “This is ‘good enough’?” One means to answer those questions is to use benchmarks or comparative data sets.

Benchmarks are useful for accurate assessment of current student achievement and for setting goals that assist faculty and students to “stretch” to achieve them. Comparing student performance and overall institutional performance relative to comparable student populations and to comparable, competing institutions provides valuable information for colleges and universities interested in maintaining or improving their competitive edge. Comparative information and data on the results of student assessment from other colleges and universities assist decision-makers in knowing where the institution stands relative to comparable institutions (Oehler & Sergel, 1999). Comparative information and data also allow the institution to set “stretch targets” for where it would like to be. Such comparative data sets can provide the impetus to stimulate innovation in strategies for improving teaching and learning and can signal changes occurring in educational practice. In short, comparative information and data sets constitute an effective external driver of improvement that may be valuable to institutions committed to the continual improvement of their educational programs and/or those who want to become student-centered learning organizations.

We have learned that even among institutions that have now fully mounted their assessment programs, many have little useful data concerning the academic performance of various populations of students in comparable institutions; some do not know how to collect or use such information and data. For these colleges and universities, the next great challenge will be to form networks with comparable institutions, agree on the data to be shared, ensure that the data corresponds from one institution to another, and learn how to collect and use information from other institutions.

VI. Conclusion

NCA’s Assessment Initiative has consumed extraordinary amounts of the time and energy of faculty, staff, and administrators in its member institutions. It has confused some, invigorated

others. It has breathed new meaning into the mission statements of many institutions. It has become the rationale for rethinking the general education curriculum of numerous colleges and universities. It has provided the opportunity for institutions to publicly state what their faculty, administration, and governing boards truly value by formulating and publishing educational goals and measurable objectives for all their undergraduate and graduate programs. It has stimulated lively debates on campuses across nineteen states about what faculty know they have always cared about but have kept private too long-- student learning.

The Assessment Initiative has also given institutions principles of good practice and tools to demonstrate that students are learning what is stated or implied in their catalogs, viewbooks, and program brochures. It has made it possible for academic departments to use the demonstrated learning of their students and graduates as the basis for curricular revisions, for modifications of academic plans, and for annual budgets that reflect that improvement of student learning is of primary importance to the faculty and the institution. In short, NCA's emphasis upon the assessment of student learning is helping transform an academy focused on what institutions and faculty *offer to* or *do for* students, to an academy focused on what students can demonstrate they *know* and can *do*.

NCA and its member institutions have indeed come far in understanding the importance of assessing student learning since 1989. Yet much remains to be accomplished before the Commission will have realized its vision that in the new century all NCA accredited colleges and universities will be demonstrating continuous improvement in the quality of education its students obtain. Realization of the former is reason for pride; acknowledgement of the latter is an indication that wherever an individual institution may be on the path to implementing its assessment program, the very fact that it is working to reach that goal is recognition of its belief that student learning can be improved.

So now is the time to celebrate how much NCA's institutions have learned about planning assessment programs and implementing assessment plans. Now is also a good time to celebrate that the assessment efforts of all NCA colleges and universities remain firmly focused on students—their learning, their achievement, their development. And finally, this is an especially good time to rejoice in the challenge of what is yet to be learned. For we know to a certainty that

our progress will be measured not by the questions we have already answered, but by those we have yet to ask.

References

- AAUP (1990). *Policy documents and reports*. Washington, D.C.: American Association of University Professors.
- Chesebro, J., Snider, K., & Venable, A. (1999, April). *Measuring learning community effectiveness: Conceptions, an instrument, and results*. Paper presentation at the Conference of the Consortium for Assessment and Planning Support (CAPS), Monroe, LA.
- Duffy, T. M., & Cunningham, D. J. (1996). Constructivism: Implications for the design and delivery of instruction. In D. H. Jonassen (Ed.), *Handbook of research for educational communications and technology* (pp. 170-198). New York: Macmillan.
- Edgerton, R. (1997). *Education White Paper*. Philadelphia, PA: Pew Charitable Trusts. [On-line]. Available: <http://www.pewtrusts.com/Programs/edu/edwp1.cfm>
- Gardner, H. (1993). *Frames of mind; the theory of multiple intelligences*. New York: Basic Books.
- Hatfield, S. R. (1999, April). *Best practices in assessment: Building an assessment culture*. Presentation at the Minnesota State Colleges and Universities (MNSCU) Assessment Day Workshop, St. Paul, MN. [On-line]. Available: <http://phil.winona.msus.edu/atoos/lrp/lrpchallengegrants.htm>
- Hoey, J. J. (1999, April). Effectively sharing knowledge in cyberspace: A comparative analysis of faculty experiences, student attitudes and student outcomes in web-based courses within the research university setting. Paper presentation at the Conference of the Consortium for Assessment and Planning Support, Monroe, LA. [On-line] Available: http://courses.ncsu.edu/info/f97_assessment.html
- Jenkins, R. R., & Romer, K. T. (1998). *Who teachers? Who learns? Authentic student/faculty partners*. Providence, RI: IVY Publishers.
- Kolb, D. A. (1971). *Individual learning styles and the learning process*. Cambridge, MA: MIT Press.
- López, C. L. (1999, February). *Assessment of student learning: An update*. Presented at the Working Conference of the Association of American Colleges and Universities, Tampa, FL.
- (1998). *Assessment of student learning: A progress report*. Presented at the 103rd Annual Meeting of the North Central Association, Commission on Institutions of Higher Education [On-line]. Available: <http://www.ncacihe.org/conference/amtglopez.cfm>
- (1996). Classroom research and regional accreditation: Common ground. Special Insert, *Briefing*, 14(3), 1-4.
- (1997). *Opportunities for improvement: Advice from Consultant-Evaluators on programs*

- to assess student learning*. Chicago, IL: Commission on Institutions of Higher Education.
- Major, C. H. (1999, March). Connecting what we know and what we do through problem-based learning. *AAHE Bulletin*, 51(7), 7-9.
- Messick, S. (1994). The matter of style: manifestations of personality in cognition, learning and teaching. *Educational Psychologist*, 29, 121-136.
- NCA (1999). *A collection of papers on self-study and institutional improvement*. Chicago, IL: Commission on Institutions of Higher Education.
- (1996). *A collection of papers on self-study and institutional improvement*. Chicago, IL: Commission on Institutions of Higher Education.
- (1991). *Assessment workbook*. Chicago, IL: Commission on Institutions of Higher Education.
- (1997). *Handbook of accreditation*, 2nd Ed. Chicago, IL: Commission on Institutions of Higher Education.
- Oehler, D., & Sergel, D. (1999, April). *Performance-based assessment of general education in Missouri: Common outcomes across institutions*. Paper presentation at the Conference of the Consortium for Assessment and Planning Support (CAPS), Monroe, LA.

Figure 1. Institutional Effectiveness: Conceptualizing the Relationship of Assessment & Evaluation Processes to Operational Planning & Budgeting

