Important Components of an Effective Assessment Program

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SEVERAL years ago, there was a cartoon in the *The Wall Street Journal* that featured a man, obviously the company president, seated behind a large desk. In front of the desk stood a somewhat older and tired-looking man. In the caption, the company president was addressing the older man. He said, "Jones, you've been with this company for 27 years. That shows a lack of ambition."

What effective assessment programs do is prevent such "surprise" evaluations. Although the criteria and requirements for assessment programs can vary from state to state and from one campus to another, assessment activity is directed toward monitoring student progress. Put more simply, assessment asks the question: Are students learning what the program is designed to teach?

Assessment of student learning outcomes is setting new records as a fast growing nation-wide initiative. Experts such as T. Dary Erwin, Director of Student Assessment at James Madison University, reference the "first wave" of institutions who made "early commitments to establish assessment programs and became national pioneers" (1991, pp. 20-21). Alverno College, the University of Tennessee at Knoxville, and Northeast Missouri State University are the three institutions usually credited as leading this first wave. It is important to note, however, that these pioneering efforts only began in the early 1980s, just 10 to 12 years ago.

By July of 1988, a national survey conducted by the American Council on Education found that 55% of the colleges and universities reported that some assessment activity was underway (El-Khawas, 1991). One year later, it was reported in *Campus Trends, 1989* that some assessment activity was underway at 7 out of 10 institutions, and by July, 1991, this statistic increased to eighty-one percent of the institutions surveyed (El-Khawas, 1991).

Those individuals who still harbor a hope that assessment is a fad that will die as quickly as it grew are probably unaware of the external forces that are driving the assessment initiative. The pressing motivation to assess the outcomes of undergraduate education is driven by at least two forces. The first is what Peter Ewell (1991, p.1) terms "a reemerging concern about the structure and content of the undergraduate curriculum." Ewell points out

that this concern has been partly fueled by "national investigations of deficiencies in elementary and secondary education" and by reform proposals that originated within the academic establishment and were directed toward improving undergraduate education. Ewell (1991) notes that among those released in the mid-1980s were *Improvement in Learning* (the report of the National Institute on Education's Study Group on the Conditions of Excellence in American Higher Education), *Integrity in the College Curriculum* (issued by the American Association of Colleges), *To Reclaim a Legacy* (a report of the National Endowment for the Humanities), and *Access to Quality Undergraduate Education* (a report issued by the Southern Regional Education Board).

The findings echoed in these and other similar reports suggested that undergraduate instruction needed careful examination and significant revision. Two of the specific recommendations were that institutions of higher education needed (1) to improve their ability to identify and remediate learning deficiencies in incoming students, and (2) to develop better mechanisms for providing "feedback" on learning to students, faculty, and administrators in order to guide improvements. These very recommendations have become two goals of assessment.

The second force driving assessment stems from growing pressure for accountability in the use of public funds in higher education. As Ewell (1991, p.2) points out, "Both legislation and governors have become increasingly sensitive (especially in tight budget years)" to their inability to explain or document the actual impact or benefit of general revenue investments made in higher education. In addition, popular books such as *ProfScam* by Charles Sykes (1988) did much to perpetuate the belief that undergraduate students were being denied quality instruction while faculty focused their attention on research and graduate instruction.

During the 1980s it was virtually impossible to pick up any issue of such publications as *The Wall Street Journal, Forbes Magazine, Fortune, Business Week*, or *The Economist*, without reading some attack on higher education. Industry leaders argue that public higher education has been allowed to spend increasing state revenues at tax payer expense only to deliver an ever deteriorating product, the graduate who is ill prepared and unequipped to assume her or his place in the business world. Business leaders also point out that industry has needed to design and support its own multi-billion dollar post secondary education system through on-the-job training that takes our graduates and prepares them finally for productive employment. It is unlikely that mandates for assessment, whether issued by the legislature, the governor, or the state board of higher education, will disappear. Accepting this reality, more institutions of higher education have begun to focus on the task of designing and implementing assessment programs.

Assessment is a complicated and time consuming task. Consequently, it becomes a waste of time and resources to put in place an assessment program for the express purpose of satisfying an external mandate. Effective assessment programs are ones that have a recognized campus value in addition to satisfying the requirements established by any external mandate.

What follows is a description of those components that are characteristic of effective assessment programs. Because assessment is a campus-wide initiative the components of effective assessment encompass the full range of participants at all levels of the institution. No matter what position one holds, one will never have direct control over all of the components essential to developing an effective assessment program. Nevertheless this list of important components can serve as a guide for administrators at all levels in evaluating the health of assessment activity on a particular campus and influencing how assessment is approached. In fairness, I should add that these conclusions are based upon my personal experience in coordinating the assessment initiative at Southern Illinois University at Carbondale from 1987 through 1991 and observations made while traveling and teaching for the American Council on Education.

COMPONENT 1: ASSESSMENT MUST BE A CAMPUS PRIORITY.

Any assessment mandate is seeking institutional change. For this change to be implemented in a positive way, assessment must first become a campus priority for faculty, students and administrators. Unfortunately, when assessment is driven by an external mandate it tends to be viewed on campus as an administrative activity. There is good reason for this. Administrators are the first to receive the mandate and it becomes the task of the administration to interpret the mandate to faculty and students. As a result administrators are inevitably placed in the role of initiating a substantial change in the campus culture (Ewell 1988).

The first step then for administrators is to work toward having assessment accepted as a campus priority. Achieving this acceptance involves more than informing faculty and students that assessment will now be "required." On an operational level, it means that effort in the area of assessment must be valued, supported and rewarded. Administrators at any level of the institution can undermine the best developed assessment program if they fail to demonstrate that the activity is valued by supporting and rewarding the effort. Consider, for example, the enormous effort expended by a basic speech course director who may be asked to design and implement assessment measures that document student learning in the basic speech course that is required as part of the institution's general education program. How can the administration expect genuine commitment and effort if, for purposes of merit pay or tenure and promotion review, this task is categorized as "service" and evaluated as being comparable to membership on a department committee?

The administration gives a mixed signal when faculty are asked (or expected) to assume major responsibility for assessment, but the effort is not recognized as part of the faculty workload, and is not rewarded during merit pay or promotion and tenure decisions. For assessment to be effective, it must be a campus priority. Assessment cannot remain a campus priority if administrators at all levels do not demonstrate that the activity is valued by supporting and rewarding it.

COMPONENT 2: EFFECTIVE ASSESSMENT PROGRAMS REQUIRE A CLIMATE OF TRUST.

Assessment initiatives are frequently viewed with suspicion by faculty. After all, faculty are accustomed to evaluating their students, so why should resources be directed toward the establishment of some elaborate assessment program. If trust is lacking between the faculty and the administration, faculty become more fearful and suspicious about the purposes for doing assessment. Faculty will ask: Is the assessment program being implemented as a mechanism of program improvement or as a measure of instructor accountability? Who will have access to the assessment scores? How will assessment scores be used?

The only way to overcome such fear and strengthen the belief that assessment can be a vehicle for program improvement is open and continuous communication with faculty and the campus about the assessment mandate, the expectation for faculty involvement, and the institution's commitment to assessment (Knight & Lumsden, 1992).

Trust cannot be built unless the purpose for assessment is clearly communicated. For this reason, administrators at each level of the institution must do more than parrot or interpret the rhetoric and requirements of the external mandate. Central administration should understand and be able to explain how the assessment mandate fits the mission and existing practices of the institution. Academic deans and chairpersons need to articulate the assessment mandate in terms of the potential benefit to college and department. Nothing is gained if an externally imposed mandate is presented as an extraneous and undesirable exercise. Administrators who fail to connect assessment activity with the institution's

mission and practice typically find that faculty resent not only the assessment requirement, but also the administrators who expect faculty to complete an assignment that all perceive as tedious and irrelevant.

Only after a positive climate is established can the process move forward into the essential activities of doing assessment, i.e., setting goals, developing measures, piloting procedures, and analyzing the results. If assessment is to be effective, the process of designing and implementing assessment measures must be constructive. This will not happen unless the faculty perceive that the motives of the administration are genuine.

COMPONENT 3: ASSESSMENT ACTIVITY MUST BE SEEN AS AN OPPORTUNITY.

Administrators must recognize that, in the best case scenario, assessment is likely to be perceived initially by the faculty as unnecessary. In the worst case scenario, faculty will feel threatened by an assessment mandate (Ewell, 1988). Frequently, assessment initiatives are perceived by faculty as proof that external agencies and perhaps the central administration believe that they are not doing an effective job in the classroom. Some faculty, understandably, take the assessment mandate as a personal attack. When this happens, faculty become very defensive and unwilling participants in the process of designing and implementing an assessment program.

The truth is that assessment mandates can be directed toward documenting whether or not students are learning what is taught without implying that faculty are to blame when students graduate without the skills and knowledge deemed necessary for successful employment.

Two stories I heard while teaching a leadership seminar for the American Council on Education illustrate this point. Several individuals began swapping "teacher stories," or tales of "real classroom" events that only other teachers would believe. One story was about a college course in public speaking in which the instructor had distributed printed copies of several speeches from the Civil Rights movement, including one by Malcolm X. After devoting a full week to class discussion of the speeches, students were asked to submit a written analysis. One student wrote, "My favorite was the speech by Malcolm the Tenth because he explained the British crown's position on civil rights."

Another in the group told a story of a grade school class that had completed a unit on aviation. For this unit, the teacher had brought in brochures and pictures from a recent trip to Kitty Hawk, North Carolina where Orville and Wilbur Wright first flew their glider plane. On the test that followed the unit, students were asked to name the famous brothers who taught us to fly. One student answered, "Ernest and Julio Gallo."

These stories are humorous to us because, as faculty, we are confident that the teachers in these stories, whom we have not met, did not teach the incorrect information that appeared on the test paper. Yet, the test did assess the students' mastery of the subject. Assessment can measure whether students have learned what faculty teach without indicting the efforts of individual faculty.

It is more constructive to conceptualize assessment as an extension of what faculty have always done, namely evaluate student work. Presented to faculty in this manner, assessment is merely an extension of the grading system. Further, assessment represents an improvement on the grading system in that it offers dedicated faculty a new perspective on student progress that is more comprehensive than the grade earned in any single course.

Time can do a lot to minimize the resentment and alter faculty attitudes toward assessment. The more successful programs are the ones that have started slowly. A slow start allows for the much needed campus dialog that will evolve and make clear the campus purposes for conducting assessment and the plans for utilizing the results of assessment. This

dialog over time can help faculty to transform their attitudes toward assessment from one of fear and suspicion to one of viewing assessment as a opportunity.

COMPONENT 4: FACULTY SHOULD OWN THE PROCESS.

The implementation of assessment represents a major cultural change on campus. Experts on change remind us that, "All cultural changes are initiated by individuals" (Miller, 1988, p. 8). The role of the individual faculty member cannot be overlooked in the implementation of an assessment program. There is virtually unanimous agreement among assessment experts that effective assessment programs are ones in which faculty are involved in the design or selection of assessment measures and in the interpretation of assessment results. It is indefensible to separate the task of designing a system that measures student learning from those individuals who possess the most direct control over the content and quality of what is taught. To be more specific, assessment items that test student mastery of the material covered in the department's organizational communication sequence are best written by the faculty who teach the courses in that area.

Enlisting faculty participation is not always easy especially on a campus where assessment is not a priority, where there is little trust between faculty and the administration, and where assessment is resented and feared. Erwin (1991) describes this process of having faculty assume an active role in assessment as moving through four stages: discovery, questioning, resistance, and, finally, participation.

My experience has been that frequently the transitions are more parallel to Kubler-Ross' (1969) five stages of grieving death. The first being denial which encompasses reactions of shock and disbelief. During this stage, faculty are heard to make statements such as: "They can't be serious." or "It'll never happen here." or "Some bureaucrat didn't have enough to do." or "It's not my problem." or "I'm tenured, I don't have to do this."
The second stage is anger. At this point, faculty are beginning to grasp the underlying premises inherent in an assessment mandate which is evidenced by statements like: "How can they expect us to get this done?" or "What difference will any of this make?" or "Why can't we have bureaucrats who understand and care about education?"

The third stage is bargaining. Faculty who were unable to face the sad facts in the first stage, and who became angry at uninformed bureaucrats in the second stage will now attempt to work out some agreement that may postpone the inevitable. The statements characteristic of this stage include: "We can't possibly start an effective assessment program without new resources." or "If assessment is truly meant to improve the curriculum, then assessment scores should be reviewed and interpreted by faculty only."

The fourth stage is depression. When the faculty can no longer deny the assessment mandate, the anger is replaced by depression. This stage is characterized by such statements as: "They will use assessment scores to cut our program budget." or "Students will never take this seriously and their low scores on assessment measures will be used to deny promotion and tenure."

The fifth and final stage is acceptance. No longer either angry or depressed about their fate, faculty begin to focus on how to best accomplish the feat. Faculty statements in this stage typically ask: "How can we learn more about the progress being made by our students?" and "How can we identify needed improvements in the curriculum?" When faculty reach this stage, they are more able to design and implement assessment measures that will have utility for the program.

COMPONENT 5: PROGRAM LEARNING OBJECTIVES MUST BE CLEARLY DEFINED AND ACCEPTED BY FACULTY.

It is impossible to measure student learning if there is confusion over what is to be taught. Faculty are the proper group to reach consensus on what the program learning objectives

should be. This is not always easy. In fact, in some instances, the department chair's task of helping faculty reach agreement on the program learning objectives has been likened to the task of herding chickens.

I have observed departments in which there was a very congenial atmosphere among colleagues only because faculty did not discuss or attempt to define the program objectives. In such departments, it is possible to have a required course taught with a different scope and focus each semester depending upon the instructor assigned to teach the course.

Faculty must also understand and recognize the difference between program objectives and individual course objectives. Program objectives are not the collective sum of all course objectives. Rather, program objectives represent the core components of the degree program. The program objectives answer the question: What, at a minimum, do we expect our graduates to know and be able to do?

Reaching agreement on the program objectives has immediate and long-term benefits for the department. It clarifies a common direction that can influence the content of all required and elective courses. In departments of communication, for example, faculty should know whether the primary instructional mission of the academic program is on skill development and theory application in order to prepare undergraduates for the work force or on communication theory in order to prepare students for graduate study. If the instructional mission of the communication program is to blend theory and pragmatic applications, then faculty need to understand how the two objectives are to mesh within the curriculum and what level of proficiency will be expected of students on each dimension. Faculty need to be equipped with a central purpose from which they can generate assignments for individual courses. Reaching consensus on the program mission and core learning objectives helps a department of individual faculty to assume a collective identity.

COMPONENT 6: PROGRAM LEARNING OBJECTIVES
SHOULD BE SPECIFIC AND MEASURABLE.

Clearly worded learning objectives that are both specific and measurable are essential to effective assessment. Frequently, learning objectives are so abstract that it becomes impossible to measure student success. Learning objectives that assert that students will "have a greater appreciation of" or "become more familiar with" or "gain a more complete understanding of" course content make it difficult to measure in any clear way that a student has mastered the learning objective.

Think for example, what measure might be used to assess a student's mastery of a learning objective which asserts that a student will have a "greater appreciation of the performing arts." How would one measure a "greater appreciation of the performing arts?" While this may be a hopeful outcome for an introductory course in theater or oral interpretation, there is, for all practical purposes no concrete way to measure the objective. Only if the learning objectives focus on the specific knowledge and skill that students are expected to learn, can measures be designed or selected to assess student learning in a reliable way (Higgerson, 1992).

COMPONENT 7: ASSESSMENT MEASURES
MUST BE LINKED TO THE CURRICULUM.

Student progress can be masked if the measures used to assess student learning are inconsistent with the expectations established by the program objectives. Consider how comfortable you would be as a passenger in a commercial aircraft if the only requirement for becoming a pilot was a pencil and paper exam. Student progress in a baccalaureate degree program that expects graduates to be proficient in the art and science of communication

cannot be measured only by a pencil and paper exam. Only when assessment measures test the students' mastery of both knowledge of, and skill in, communication will the students' scores reflect their true mastery of the core program learning objectives.

Similarly, when considering the use of a standardized test, it is imperative that the standardized test selected be one that indeed measures the objectives taught in the program. By definition, standardized tests cannot possibly reflect the specific objectives of any one particular program. For this reason, the trend has been for institutions to design and develop their own assessment measures. A national survey conducted in 1990 by the American Council on Education revealed that 66% of colleges and universities were developing their own instruments for assessing student learning (El-Khawas, 1991, p.4). Of the institutions that indicated they were exploring ways to assess student learning in the academic major, more than two-thirds reported using locally developed methods. Whether using locally designed instruments or considering a standardized test, be certain it measures what is taught and has local relevance. Assessment must be linked to the curriculum.

COMPONENT 8: CAPITALIZE UPON EXISTING DATA COLLECTION PROCESSES.

There is tremendous advantage in utilizing existing data collection processes as part of the overall assessment program. These may be internal or external to the department. For example, the survey of alumni that is typically required as part of a formal program review or reaccreditation process contains information that may be useful for assessment purposes. As a self-report assessment measure, alumni responses on such survey instruments offer one evaluation of the graduates' mastery of the discipline. The alumni office may conduct its own survey of graduates that is likely to contain some question items that will produce valid assessment information.

If there is reason to believe that students would not show up to take the assessment test or be cooperative while taking an assessment test, specific assessment test items can be masked on the final exams of core courses. This is another way in which a department can take full advantage of an existing data collection process for assessment purposes.

Significant economies of time and fiscal resources can be accrued by capitalizing on existing data collection processes. There is no need to collect the same information for multiple purposes on different instruments. This type of coordination will also serve to keep the assessment results in the loop of other campus initiatives.

Peter Ewell, senior associate with the National Center for Higher Education Management Systems, (1988) cautions against falling for the "Perfect Data Fallacy" or the "Single Indicator Fallacy". The perfect data fallacy occurs when considerable time is wasted in attempts to locate or design one big study that will ultimately answer every question.

The Single indicator fallacy represents the belief that there exists a single measure that can answer all questions. It has been Ewell's experience, and I must agree with him, that the perfect data fallacy is most typical of faculty, while the single indicator fallacy is most typical of administrators and governing bodies. Effective assessment of student learning is not limited to a single look at students' progress. Rather, effective assessment is a combination of measures that, collectively, monitor student learning throughout the degree program. In the same way that course prerequisites are intended to ensure that students have the background needed to be successful in a particular course, assessment measures that are interspersed at appropriate intervals throughout the degree program allow faculty to monitor student progress on a continual basis.

COMPONENT 9: ASSESSMENT RESULTS SHOULD HAVE CAMPUS UTILITY.

If faculty assume ownership of the assessment process then assessment measures are more likely to test what is being taught. Only then will the results produce valuable

information for students and faculty. Specifically, assessment data can answer some key questions which, before assessment, were not always asked. These questions include:

- Does the content covered in the required courses enable students to satisfy the program learning objectives?
- Are the courses properly sequenced for mastery of the program learning objectives?
- What percent of the graduates have mastered the program learning objectives and does that finding correlate with the students' GPA and job placement record?
- Do students know what the program learning objectives are?
- Are the program learning objectives being taught in the most effective way possible?
- Can student scores be used to improve student advisement?

Effective assessment programs can provide useful information to both faculty and students. On an individual basis, assessment scores can be used in the continued advisement of students. In the aggregate, assessment scores offer faculty a perspective on the value and effectiveness of the academic program that is essential to continued program improvement.

One caution must be noted. Although assessment results can provide useful information, they are not diagnostic. Assessment results rarely dictate what action should be taken to improve student learning. For example, assessment scores might show that 40 percent of the students have not mastered one of five program learning objectives. These same assessment results, however, do not indicate what change will improve the situation. Is it because the required courses are not sequenced appropriately? Or is it that more content needs to be added to teach the troublesome learning objective? Or is it that a percentage of incoming students don't have the prerequisite knowledge to comprehend and master the one learning objective? This range of possible explanations illustrates the need for careful analysis of assessment results for the purpose of benefiting either individual student advisement or curricular revision. While professional accrediting bodies and other external agencies have pushed for assessment of undergraduate student learning, faculty remain the best qualified to interpret assessment results and transform the outcomes into meaningful curricular change.

COMPONENT 10: EVALUATE AND REVISE THE ASSESSMENT PROGRAM.

It is important to remember that assessment programs are evolving and improving in the same way that a new course or degree program improves and matures. Assessment is a process that must evolve as the variables that influence it continue to change. Changes in the curriculum, learning objectives, or student population can all necessitate changes in the assessment program. The most effective assessment program will become ineffective if it does not evolve with changes in the academic program. As the insightful humorist, Will Rogers, pointed out, "Even if you're on the right track, you'll get run over if you just stand there."

CONCLUSION

Whether your institution is just getting started or well along the way in implementing an assessment program, please recognize that it is worthwhile to take the steps necessary to develop an assessment program that has real and significant benefit for the department, the students, the faculty, and the institution. Without campus value, assessment is too time consuming and costly. Any assessment program that is designed only to respond to external

mandates is not worth the effort.

Institutions and faculty have a choice. They can respond to external mandates and create a bureaucratic system of assessment which is managed separately from the academic enterprise or they can invest the extra effort needed to develop an effective assessment program which is owned and managed by the faculty and, therefore, integrated closely with the academic program. In the immortal words of Yogi Berra, "When you come to the fork in the road, take it. "

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