The need for improvement in undergraduate general education, as well as the need for colleges and universities to test student knowledge and ability on a systematic basis, is discussed. Four obstacles to improved undergraduate effectiveness are pinpointed: (1) lack of visible commitment; (2) fragmented responsibility; (3) lack of incentives for improvement; and (4) lack of acceptable information about outcomes attained. In order to improve undergraduate instruction, academic leaders must change organizational structure and provide clear incentives. Several proven "levers" available to academic leaders to effect the necessary changes are discussed. Five broad directives, drawn from the experience of institutions that have tried new approaches to improving undergraduate instruction, are given to state and campus leaders: insist on concrete information about student learning and development; create visible centers for improvement; create incentives for improvement; concentrate on the level of actual student experience; and use external requirements as opportunities for improvement. (KM)
Transformation Leadership for Improving Student Outcomes

By Peter T. Ewell

1985

NCHEMS MONOGRAPH #6
NCHEMS monographs are directed primarily toward administrators of higher education and are useful for researchers in higher education, as well. The monographs are informative studies of a variety of problems and issues that confront college and university administrators, especially in these times of dwindling enrollments and resources. The topics range from how to manage the internal processes of institutions of higher education to how to improve the outcomes of colleges and universities. While the monographs are based on careful research, they offer practical advice and solutions that are relevant for different types and sizes of colleges and universities.

The Link Between Planning and Budgeting (1981)
By Ellen Earle Chaffee
It is difficult for administrators to link planning and budgeting under the financial stringency now faced by most institutions of higher education. This monograph notes how solutions prescribed by theory do not work in higher education. Four characteristics of an optimal solution to linking planning to budgeting are proposed.

On Deciding How to Decide: To Centralize or Decentralize (1981)
By Ellen Earle Chaffee
Suppose the university must for the first time make drastic budget cuts. How should the process for distributing the reductions be defined? Credibility for a decision can be enhanced when those affected by it trust the decisionmaking process. This monograph suggests a six-step decisionmaking process to match information, expertise, values, and concern for people who must live with the decision.

Management Fads in Higher Education (1981)
By Richard Allen and Ellen Earle Chaffee
This monograph examines three popular management innovations that might be fads: (1) program budgeting, (2) costing, and (3) strategic planning. The origin and characteristics of each innovation are described, and the reasons why they became popular are analyzed. A number of potential pitfalls for administrators to avoid when using these management techniques are suggested.

Promoting the Effective Use of Information in Decisionmaking (1984)
By Peter T. Ewell and Ellen Earle Chaffee
Case studies drawn from different types of institutions illustrate how information is used for various purposes and with different outcomes depending upon the decisionmaking setting in which it is used. An alternative to traditional models of decisionmaking is proposed—"multiple advocacy"—in which superior decisions result from adopting a conflicting or dialectical decisionmaking process.

Program Reviews, Inputs, and Outcomes (1983)
By Peter T. Ewell
This monograph shows how program reviews can become an integral part of institutional decisionmaking. Some of the ingredients of an effective review process are discussed from both a conceptual and data-gathering perspective, as are typical problems encountered in designing and conducting program reviews.

Transformation Leadership for Improving Student Outcomes (1985)
By Peter T. Ewell
This monograph addresses the need for improvement in undergraduate general education, as well as the need for colleges and universities to test student knowledge and ability on a systematic basis. Four obstacles to improved undergraduate effectiveness are pinpointed. Several proven levers which are available to academic leaders to use to implement a campuswide instructional improvement program are then noted.

By Peter T. Ewell
This monograph proposes a model to guide a comprehensive institutional research program designed to inform enrollment management decisionmaking. It examines the design requirements for a research program, illustrates how to model longitudinal student flow, and discusses the determination of enrollment structure. Case studies provide illustrations of the proposed model.

The Costs of Assessment (1985)
By Peter T. Ewell and Dennis P. Jones
This monograph examines the direct costs of establishing an institutional assessment program as called for in recent national reports. A number of different examples are presented. Estimates of typical incremental costs for establishing and maintaining assessment programs are provided, including costs of test instruments, administration, analysis, and coordination.
Summary

Four obstacles inherent in the system of higher education combine to prevent institutions from improving undergraduate instruction: (1) lack of visible commitment, (2) fragmented responsibility, (3) lack of incentives for improvement, and (4) lack of acceptable information about outcomes attained. In order to improve undergraduate instruction, academic leaders must change organizational structure and provide clear incentives. This monograph discusses the proven levers available to academic leaders to effect the necessary changes.

Five lessons have emerged from institutions that have started to experiment with new approaches to improving undergraduate instruction. These can be summarized in terms of five broad directives to state and campus leaders: (1) insist on concrete information about student learning and development, (2) create visible centers for improvement, (3) create incentives for improvement, (4) concentrate on the level of actual student experience, and (5) use external requirements as opportunities for improvement.

After examining these directives, this monograph concludes that institutional leaders must develop their own approaches to improving undergraduate instruction that serve the particular needs of their organizations.
Recent national reports and public discussion of the need to improve educational outcomes in colleges and universities have called attention to the fact that all is not well in this arena. The repeated return to the same set of issues emphasizes the difficulty of finding workable solutions and, once these are found, the difficulty of making them stick. The persistence of the issue, in fact, suggests that lack of knowledge of what to do may never have been the problem. Rather, the problem apparently is the presence of a complex set of structural obstacles and disincentives toward improved undergraduate instruction that have been present in the system of higher education for at least the past four decades. If this is indeed the case, it brings to light the need for leadership and application, rather than new knowledge.

That the key problem is one of applied leadership is highlighted by a comparison of the issue of quality in higher education with parallel national concerns about elementary and secondary education. Unlike the elementary and secondary world, there is no lack of basic talent in college classrooms. Nor is the problem one of a student population so
deficient in basic skills as to make it essentially ungovernable or unteachable. Rather, the problem has to do with establishing improvement as a priority, changing organizational structures to facilitate improvement, and providing clear incentives for change. These are the jobs of leaders and managers at both the state and institutional levels.

Over the past four years, more than 40 different colleges and universities, assisted by researchers and consultants at the National Center for Higher Education Management Systems (NCHEMS), have been improving the effectiveness of undergraduate instruction by making better use of assessment of programs and information about student outcomes. Because the work of NCHEMS has centered on the use of information and because the role of leadership and administration is key to the improvement process, this monograph concentrates on ways campus leaders can use assessment information to promote dialogue, mobilize action, and effect change.

Four Obstacles to Improved Undergraduate Effectiveness

In order to begin the process of change, it is necessary to determine what stands in the way of change. For most institutions of higher education, particularly the large, public universities and community colleges that enroll the majority of students, there are four obstructions to improved undergraduate learning and development. Each should be addressed as part of a comprehensive institutional improvement strategy.

1. Lack of Visible Commitment. Most colleges and universities, particularly in the public sector, are multipurpose enterprises. Research, graduate instruction, and public service compete with undergraduate teaching for the attention of faculty
members and administrators. In the absence of incentives to the contrary, faculty members follow the demands of their disciplines when approaching these tasks. Moreover, many institutions that concentrate exclusively on undergraduate teaching, especially community colleges, are characterized by considerable diversity of clientele and instructional goals. This diversity is mirrored in the blandness of the mission statements of the majority of colleges and universities, as well as in the blandness of most public pronouncements about the institutions. The similarity of such statements is what is most remarkable about them. Moreover, they provide little focus for collective action. Although undergraduate education is often a part of such statements, it is generally held as a given, rather than singled out as a priority.

2. Fragmented Responsibility. While commitment from top administrators is a necessary condition for change, it certainly is not enough. A second major obstacle to change is the fragmented responsibility for student success. For the most part, the effectiveness of undergraduate instruction, particularly in general education, is everybody's business but nobody's explicit responsibility. Considerable division of labor with respect to student development generally means that different individuals or offices are charged with dealing with particular "pieces of students."

There is typically no single place in the institution that can monitor or be held accountable for undergraduate performance as a whole. Two manifestations of this problem are present in most institutions. The first is a marked distinction in the organization between academic affairs and student services. This distinction is reinforced, particularly in large institutions, by major differences in perceived roles. Faculty members in these institutions tend to abdicate responsibility for total intellectual development because they
assume that student services are being professionally handled elsewhere. However, student-service professionals tend to develop services and activities for their own sake.

A second area of fragmentation results due to the fact that the "center of gravity" for undergraduate education generally lies in the major field. Because of the disciplinary training of faculty members, they concentrate their efforts on instruction in upper-division courses. In professional fields, moreover, the demands of accreditation crowd out virtually all unrelated coursework.

3. **Lack of Incentives for Improvement**. Reinforcing fragmentation in the organization is the lack of concrete rewards for improving undergraduate education. In the public sector, institutional budgets are largely driven by formulas. This is a practice that encourages quantity production rather than quality improvement. Within institutions, the constraints of formula budgeting are apparent in reallocation strategies which are based on enrollments, as well as in the signals which are given to deans and faculty members that clearly imply that the achievement of high numbers is important. These tendencies are magnified at private institutions that are largely driven by tuition.

4. **Lack of Acceptable Information About Outcomes Attained**. A major reason for lack of incentives is that there is little agreement about how they should be structured. A root cause of this difficulty is the perception that instructional effectiveness is impossible to measure when it is defined in terms of student outcomes. Many difficulties underly this issue. The first is purely cultural. Many of the presumed outcomes of higher education are held to be unmeasurable, and attempts to assess them are resisted purely on this basis. A second problem is disagreement about what to measure. The intended outcomes of higher
education are magnificently diverse, and they vary markedly across institutions. Furthermore, different external constituencies have their own criteria for assessing and rewarding outcomes. A third problem is that data on educational development is more complex than other kinds of managerial data. Because the data are collected indirectly through measurement instruments (rather than being directly observed), and because the technology of measurement often involves the use of techniques that are not always considered valid by policy makers, the implications of the data are neither obvious nor readily accepted. Most institutional and state leaders would rather make decisions based on information which they understand. Fourth, information on educational outcomes rarely informs institutional leaders about appropriate actions that should be taken. Unlike the kinds of decisions that managers are used to making, it is difficult to say that an institutional policy or program should be changed based on a particular outcome. Rather, the function of data about student outcomes is to highlight the presence of a problem, provide a context for the decision, and serve as a stimulant for discussion.

These four obstacles combine in complex ways to prevent most institutions from devoting systematic attention to improving the effectiveness of undergraduate instruction. Under pressure from external authorities, including boards, legislatures, and accrediting bodies, the first variable--lack of visible commitment--has changed, and institutional leaders are increasingly willing to make a commitment. The question is less one of, "Should I act?" than "What should I do?" To answer the question about what should be done requires examination of the body of evidence provided by institutions that have tried to improve undergraduate instruction.

It should be pointed out that there are examples of successful reforms of undergraduate instruction throughout the history of education in America. Many directly address the need for improvement in
general education and the need for colleges and universities to test student knowledge and ability. Among these are the Hutchins College at the University of Chicago, the General College at the University of Minnesota, and the unchanging curricula of institutions such as St. Johns College. At the same time, a significant number of institutions have already started to experiment with new approaches.

Five Lessons from Institutional Experience

It is important, first, to remember that important changes in institutional attention, structure, and reward do not happen overnight. Gains in this arena come about as the result of steady and consistent reform rather than spectacular, short-term actions. Indeed, one of the major dangers in the current situation is that many external authorities and, consequently, institutional leaders are demanding too much too fast. Models cannot be imported from one institution or state to another and be expected to work as originally designed. Building commitment to a common goal takes a considerable amount of time. Leadership in this arena thus means both patience and restraint.

What has NCHEMS learned from its work with institutions that have been experimenting with innovations? Most of their experiences can be summarized in terms of five broad directives to state and campus leaders:

1. Insist on concrete information about student learning and development. Instructional quality remains an elusive concept until it is pinned down by a set of admittedly rude, but agreed-upon indicators of effectiveness. A foundation of successful programs for improving
instruction consists of solid information about what students are learning, how they are progressing through the curriculum, and how they are faring after they leave the institution. Admittedly, the measurement of outcomes is difficult, but experience shows that even partial information is of immense value. A good motto to adopt is the one used by the Tennessee Higher Education Commission (THEC) when it developed its initiative in performance funding: "Act on the possible while awaiting perfection."

Many instruments for student assessment have already been developed and used to explore different dimensions of college outcomes. Instruments such as the Graduate Record Exam (GRE), College Level Examination Program (CLEP), American College Testing Program's College Outcomes Measures Project (ACT-COMP) Assessment Examination, as well as a number of professional certification examinations, have been successfully used by colleges and universities as capstone tests. Other institutions, most notably Alverno College, have experimented with a range of cognitive skills and personality tests. Furthermore, most institutions do not realize that they might already have data on student development that is scattered across campus. Considerable gains were achieved in the Kellogg Project by simply taking inventory of existing information and making it available to decisionmakers in a useful form.

The overriding lesson for campus leaders is to insist that claims of quality be backed by concrete data, and concrete data be used to raise questions about the effectiveness of individual units and curricula. Multiple indicators should be used wherever possible, and imperfect data should be sensitively and appropriately applied. Furthermore, data on effectiveness should be regularly and visibly used in decisionmaking. Indeed, some of the greatest successes in the Kellogg Project were achieved when institutions visibly incorporated such information into their regular planning, budgeting, and program-review processes.
2. **Create visible centers for improvement.** Fragmentation of responsibility for undergraduate instruction generally means that no forum or administrative center for promoting instructional effectiveness exists on campus. As a result, a primary role of leaders is to designate such responsibility and provide it with needed administrative and research support. For example, a requirement to participate in the NCHEMS/Kellogg Project was that each institution create a campuswide steering committee composed of members drawn from faculty, administration, student-services staff, and students. The committees reviewed information, coordinated the initiatives of different units, and developed recommendations for action to be taken by the institution. More important, they served as vehicles for transmitting knowledge and concern to the wider faculty and staff communities.

Other institutions have experimented with formal assignments of responsibility for promoting instructional effectiveness to administrative units. A good example is the Academic Skills Program at North Carolina State University that unites disparate programs into a single unit, including advising, counseling, special-service and learning-assistance programs. Other institutions have centered their efforts on a research or assessment office, such as the Assessment Office at Alverno College and the Learning Research Center at the University of Tennessee, Knoxville.

3. **Create concrete incentives for improvement.** Without changing the incentive structure of institutions of higher education, deep-rooted change cannot be expected. Mechanisms must be found to reward quality and provide a funding base for risk-taking and experimentation at the unit and curriculum levels. The same is necessary for the relationship between institutions and state-level governing authorities.
The Performance Funding Program in Tennessee is an excellent example of an incentive structure at the state level. Under this program, a state institution of higher education can receive funding for up to five percent of its instructional budget for demonstrated effectiveness in terms of five defined instructional performance criteria.

Another example is in Florida where the implementation of new statewide performance-accountability standards was accompanied by a significant additional funding allocation to institutions in order to support development. Several other states are experimenting with special-purpose, quality-improvement funds to support innovation. At the institutional level, these efforts have many parallels.

Several institutions, including the University of Tennessee, Knoxville, and Montana State University, have made extensive use of minigrants to fund improvements and innovations. Others have started to shape their budgetary allocation process around performance criteria rather than level of activity. At the State University of New York-Albany, for example, information about student performance is now a required part of the planning/budgeting process.

An important key to success in all such efforts is to provide incentives for cooperation and rewards for performance. Special set-aside funds are excellent vehicles for achieving this purpose.

4. Concentrate on the level of actual student experience. Viewed from an institutional perspective, college and university environments are decentralized and complex to a bewildering degree. As a result, the most effective assessment and improvement efforts are directed toward problems occurring in individual units or particular curricula. To some extent, fostering decentralization of authority is recognition of the reality
of the organization. It is hard for particular faculty members, for example, to take responsibility for the intellectual development of all students; but they can be induced to take responsibility if it is their own students who need help.

In general, at least two kinds of disaggre-gations are necessary. The first is by curriculum. Some assessment should be directed at each program in the institution, and performance on more general assessments should be broken down and discussed by curriculum. The second disaggregation should be a breakdown of key behavioral groups in the student population. Different types of students experience the institution and its curricula in different ways. Assessing the different outcomes for each group can help an institution avoid the common mistake of adopting institutionwide academic policies that, while uniform, are effective only in dealing with the typical student.

5. Use external requirements as opportunities for improvement. Much of the recent pressure for improved instructional performance in higher education is coming from outside the institution. It is coming from the state, professional associations, accrediting bodies, and the public at large. Much of it is uninformed, and the solutions advocated are often simplistic and at variance with important academic values. But successful improvement programs harness the energy of external pressure to accomplish needed and appropriate changes within the institution.

The successful effort at the University of Tennessee, Knoxville, for example, would never have come about were it not for the state’s adoption of performance funding. At North Carolina State, leverage for student success programs was given by a desegregation Consent Decree. And many institutions in the Southeast are discovering the power to promote needed change of a newly adopted performance
standard for accreditation that was adopted by the Southern Association of Colleges and Schools.

A strong argument can be made that this is indeed the proper role of external authority because state-level action to improve the quality of the output of the institution is often needed to induce institutions to address the issue. But such action is most effective when it indirectly induces institutions to undertake self-improvement, rather than directly mandate changes in particular policies and procedures. Instructional improvement does not occur as a result of compliance mechanisms. More likely in such cases is that institutions will go on the defensive and block needed efforts to share information about effectiveness.

This discussion only scratches the surface of the problems encountered when implementing a campuswide program to improve undergraduate instruction. Each institution must develop a process of its own that is suited to its distinct mission, program array, and clientele. Examples of such programs now exist in growing numbers, and it is up to institutional leaders to discover how the directives can be applied most effectively to their own situations.