

CHAPTER 14

INSTITUTIONAL EFFECTIVENESS

INTRODUCTION

This chapter provides an overview of the institutional planning and evaluation functions of the University. It also presents an overview of institutional research within the University. In doing so, the Institutional Effectiveness Committee has concentrated on the years since 1989 in order to focus on the current situation. The University has been engaged in institutional research for many years, however, and many approaches to assessing program effectiveness have been part of the fabric of UK in its efforts to improve quality over the years. Therefore, brief summaries of the situation before 1989 are also given in order to set the historical context for what currently exists.

The Self-Study Steering Committee charged the Institutional Effectiveness Committee to "review and examine the institutional research and planning processes and functions, the University's effectiveness plans, and the extent to which the University is assessing its intended outcomes and systematically incorporating these findings within its planning and program improvement processes."

The Committee examined planning documents, accreditation reports of professional colleges, and assessment plans of departments and units along with other materials provided as part of extensive presentations by each of the University's institutional effectiveness coordinators. Some time was devoted to clarifying the relationship of the Self-Study and the strategic planning process, which were coordinated, as described in Chapter 1, to make both processes part of the University's ongoing activities and to avoid duplication of effort on the part of the many members of the University community involved in both.

In addition, individuals involved in various aspects of institutional data administration and institutional research were consulted, as were responses to the Self-Study survey regarding the availability and usefulness of data and involvement in planning. The committee also held forums to solicit ideas from the University community and to provide feedback.

UNIVERSITY PLANNING AND EVALUATION: CONTEXT

Since 1968, the University has engaged in a nationally recognized comprehensive planning process. Organized around the development of five-year comprehensive plans, it melded the goals of individual units into an overall university-wide plan supporting the biennial budget request (Exhibit B). Although the process was effective and comprehensive, evaluations suggested that if it were driven more by institutional goals than by budget-building requirements, the results would be even better.

In 1988-1989, the President directed that a new approach to planning be established, one that would consider the broad mission of the University and the realities and opportunities of the environment within which the institution exists. He appointed a Strategic Planning Group to represent the major areas of the University. The task force of two faculty and 11 administrators

from major divisions of the University met from January through March, 1989, to consider these issues and to develop a strategic plan for the University. The Committee reviewed a variety of written materials, met with topical experts, and discussed the direction of the University in the ensuing years. They issued a draft plan which was examined by faculty and administrators in all major sectors of the institution and was returned for further consideration and redrafting. The result was the *Strategic Plan of the University of Kentucky*.

The plan was to guide the University in accomplishing its three major strategic goals and 16 specific objectives (Exhibit 14-A). Each objective was associated with a group of strategies designed to enable attainment of the objective. The Plan also specified five-year and ten-year indicators of progress toward achieving the objectives. The *Strategic Plan* was approved by the Board of Trustees in September 1989 and transmitted campus-wide. Each area of the University was directed to develop its own strategic plan within the framework provided by the University-wide *Strategic Plan*.

The original strategic planning group met again in May 1991 to make adjustments to the Plan. These modifications included a strengthening of the commitment to the teaching and learning environment, a commitment to the University's role in the successful implementation of the Kentucky Education Reform Act, more explicit language regarding the Rural Healthcare Initiative, and the addition of an objective speaking specifically to the cultural diversity commitment of the University. These changes were approved by the Board of Trustees in September 1991 (Exhibit A).

Assessments of unit and program effectiveness have long been institutionalized by University regulations through a process of unit reviews every four to six years and annual reports and by external accrediting agencies (Exhibits 14-B and C). The University's new strategic approach to planning, as well as the accreditation requirements of the Southern Association of Colleges and Schools, suggested a new emphasis on assessment of program effectiveness. Toward this end, institutional effectiveness coordinators from seven major segments of the University were appointed (Appendix 14-A). Their responsibility is to ensure the coordination, compatibility, and comparability of institutional effectiveness and assessment efforts across the whole institution. In this coordinating role, the group developed a survey of assessment practices currently in use (Exhibit 14-D). The group, along with the Self-Study Executive Committee, also designed a framework and outline that would support and guide units in planning and assessment (Appendix 1-B). It contains an enumeration of unit purposes, goals, objectives, with intended outcomes, and methods and measures for use in assessment. In addition to their contributions to institution-wide coordinating, the coordinators carry out a variety of activities in support of planning and assessment in their own sectors of the institution. As a result of these efforts, most units across the University now have strategic planning and assessment documents and processes. This accomplishment has resulted from sector-wide efforts to introduce the logic and method of strategic planning and assessment to many units that had previously approached them only informally.

A brief description of ways in which the major University areas have developed their own strategic and assessment plans within the outlines set in the *Strategic Plan* follows.

Lexington Campus Planning and Assessment

As the *Strategic Plan* was being promulgated campus-wide in the fall of 1989, the Lexington Campus appointed task forces to consider the 10 objectives contained in the Lexington Campus Agenda, a document articulating the priorities of the new Chancellor of the Lexington Campus (Exhibit 14-E). This Agenda became the sector's initial response to the *Strategic Plan*. It was introduced to the faculty and staff of the Lexington Campus through a series of "town meetings" at which the Chancellor described the objectives and received feedback from those who attended. More than 200 suggestions were offered and were passed on to the appropriate task forces. These task forces, composed of some 60 faculty, staff, and students, were asked to devise strategies for achieving each of the 10 Agenda items. These subcommittees worked independently but occasionally consulted with standing committees of the University concerned with related matters. They submitted reports by the close of the 1990 Spring Semester, and each group outlined five concrete suggestions for furthering the 10 major objectives of the Agenda (Exhibit 14-F).

In fall 1990, the Lexington Campus initiated two efforts to highlight and define Strategic Plan and assessment activities. First, the Chancellor's Office invited all units to submit proposals for funding of initiatives that would further the objectives of the Lexington Campus Agenda and Strategic Plan and implement suggestions developed in the Task Forces. These proposals were evaluated with reference to the *Strategic Plan* objectives and strategies of the Sector (Exhibit 14-G). Second, an inventory of assessment practices was conducted to determine the range of existing assessments (Appendix 14-B). Third, all Lexington Campus units prepared institutional effectiveness plans which identified unit goals and implementation strategies consistent with the University and Sector Strategic Plans. These plans also specified indicators to be taken as evidence that progress is being made on the particular objective. These unit plans were reviewed at the College and Sector levels, and they became the basis for modification of the Sector Strategic Plan and financial plan submitted by Colleges and Sectors to the Central Administration of the University (Exhibit 14-H).

In addition to preparation of institutional effectiveness and assessment plans, all units with responsibility for degree programs on the Lexington Campus will be required to prepare student learning and achievement plans at the time of their periodic review. These plans specify learning objectives, activities, or courses designed to promote the objectives, measures of progress, methods of assessment, frequency of assessment, and the approach to using assessment to strengthen the program (Exhibit 14-I).

All support units of the Lexington Campus are also reviewed on a regular five-year cycle (Exhibit 14-J). The process includes external review teams. In the past, support units were not reviewed in a regularly recurrent way as academic units have been. Regular reviews of all support units are a recent innovation, although some had been involved in management by objectives for many years.

Medical Center Planning and Assessment

During development of the *Strategic Plan*, particulars of Plan development were discussed monthly in the meetings of the Medical Center deans from whom interim reactions were communicated to the central group of planners. The draft *Strategic Plan* was likewise discussed by the Medical Center deans as well as by a group of outstanding Medical Center faculty who

were recipients of the Faculty Merit Awards. Their reactions were also communicated to the central planning group.

Following the approval of the *Strategic Plan* by the President's Cabinet and the Board of Trustees, the colleges of the Medical Center developed college-level strategic plans within the framework of the University Plan. Specific approaches to plan development in the colleges varied, but the approach of the College of Medicine is presented as an illustration. Between 1988 and 1989, the 21 Chairs of the College attended a series of retreats that focused on identifying updated objectives of the teaching, research, and clinical care programs. With the promulgation of the *Strategic Plan*, the College objectives were reviewed for relevance to the University Plan. Those objectives that were relevant were appropriately organized along with the related strategies for achieving them. Individuals responsible for pursuing them were identified. This document became the Strategic Plan of the College of Medicine, and it was distributed to all faculty (Exhibit 14-K). All chairs were directed to report in writing in the annual report of the department and at the annual budget conference between Dean and departmental leaders about progress in attaining the major goals of the unit.

During fall 1990, all personnel of the College of Medicine, faculty and staff alike, participated in "nominal group processes" within each department in order to define current priorities for action within the College. This exercise invited every person to state objectives which were subsequently entered into a departmental list, and, later, placed on a College-wide list. The complete list was shortened by collapsing related items, which were finally put into categories consistent with the goals of the University Plan. The College Chairs set priorities for the listed items and spent a two-day retreat devising strategies for achieving each priority goal. These priorities were then added to the existing Strategic Plan of the College of Medicine. This product was sent forward to the Medical Center Sector for processing into the revised *Strategic Plan* in 1991 (Exhibit 14-L).

In January, 1991, the Chancellor of the Medical Center held a retreat that included deans and their key staff to discuss the updating of the Sector's Strategic Plan. Each College presented its goals and priorities, and all engaged in discussion of them. These deliberations led to the preparation of "white papers" by the Chancellor's staff on the roughly 50 goals identified at the retreat (Exhibit 14-M). These papers provided background as the Medical Center Deans met in May and June, 1991, to select and set priorities for submission as budget requests to the Central Administration of the University.

During spring 1991, all Medical Center academic units prepared Effectiveness Plans that included statements of their major program objectives and measures of goal attainment. Although the formats of the Colleges' effectiveness plans are variable, they all contain the basic elements of workable effectiveness documents, namely, statement of goals and objectives, strategies, individuals responsible, and measures of goal achievement (Exhibit 14-N).

Research and Graduate Studies (RGS) Planning and Assessment

At the time the central planning group was preparing the *Strategic Plan*, units of RGS used some of the same approaches to develop their own goals and objectives. For example, each of the units identified internal strengths and weaknesses, and facilitative and hindering forces, and on the basis of those, specified unit level goals and strategies. RGS and several RGS units adopted University-level goals and objectives as their own; others did not. Specific unit-level strategies were arrayed within the framework provided by the goals of the University and RGS Strategic

Plans, thus exemplifying graphically the meshing of planning at the central, sector, and unit levels. By the end of the 1988-1989 academic year, all RGS units had plans in place which included at least the unit's goals, objectives, strategies, and progress measures. During 1990-1991, unit strategic plans were further developed by adding assessment plans in which approaches to measuring and tracking progress on the unit objectives were specified. During spring 1991, RGS units revised their strategic plans by considering changes in internal and external environments and changes within the individual programs. These changes in the unit plans influenced the RGS plans and, subsequently, the *Strategic Plan*. By the end of summer 1991, every RGS unit had a revised unit-level plan which includes a component on assessment, and information describing how assessment data will be used in subsequent planning, priority setting, and goal revision (Exhibit 14-O).

Research and Graduate Studies has also established mechanisms to track common activities areawide and to assess the relative fulfillment of RGS-wide objectives. These techniques include discussion of RGS priorities with unit directors and the annual collection and assessment of data from them as a complement to unit-level assessment activities.

Information Systems Planning and Assessment

Information Systems was organized in July, 1987. Its first strategic plan was developed with the major goal of implementing the Single System Image. This concept stresses the need for a pervasive approach to open-access computing and unified comprehensive communications infrastructure. A faculty computing advisory center was also envisioned. The Library System was added to Information Systems in 1988. This action prompted plan revision which encompassed an integrated information systems environment featuring the Library Systems as the University's chief information resource. Other areas within Information Systems provide information delivery systems and information management, transfer, and retrieval facilities.

After the President convened the group to prepare the University's Strategic Plan, Information Systems revised its strategic plan to be integrated with the University's plan and now updates it accordingly. During the most recent round of planning (late winter 1991), Information Systems directors were asked to take existing or revised unit planning documents and meld them with the University's Strategic Plan. Although the process involved staff at all levels in some units, most of the principal discussions focused at the manager or unit head levels. Directors then met with the Vice President for Information Systems to discuss their plans so that an integrated and refined document could be produced.

As a service organization, the planning activities of Information Systems took into consideration the resource and service needs of its immediate users (students, faculty, and staff). In addition, the Sector's planning activities address the present and future needs of the University and Commonwealth as a whole as outlined in the University's Strategic Plan. Planning evolves from the needs of all constituencies. The current version of the sector's plan demonstrates the influence of statewide needs; for example, the objective of creating a statewide network for interactive video is a direct result of a demand to make graduate courses more widely available (Exhibit 14-P).

Tied closely to the planning effort in the Information Systems are sector assessment activities. Assessment coordinators represent four major areas in the sector—communications, computing, libraries, and printing—and work with an overall sector coordinator and staff to coordinate activities. Expected outcomes of sector and units have been identified, assessment

plans have been created, and measurement mechanisms have been designed and utilized to gather assessment information in several areas (Exhibit 14-Q). Now that assessment is a permanent and ongoing function, it is expected that these activities will directly influence sector planning.

Central Administration Planning and Assessment

With the development of the *Strategic Plan*, each unit within Central Administration was asked to develop a statement of mission, goals, and objectives to respond to the *Strategic Plan* objective "ensuring that its organizational structure and management processes support the realization of University goals" and the enabling strategies included within that goal statement. During 1989-90, the Vice President for Administration worked closely with each unit head in the development of these mission and goal statements. It proved to be a time-consuming but productive activity. An annual workplan was also developed by each unit in concert with the Vice President. Successful progress toward completion of this workplan became the basis for the annual evaluation of the unit and unit administrator. In addition, each unit was asked to develop appropriate assessment procedures for their unit and to explain how those assessments could be used for improvement.

In early 1991, Central Administration was reorganized with the establishment of two new vice presidencies and the transfer of certain university-wide activities into Central Administration. Consistent with the planning goals and objectives, the President's objective in proposing those administrative changes to the Board was the creation of a more effective administrative structure to deal with the multitude of complex policy and operational issues facing the University. The primary means of accomplishing that objective were to bring the University-wide business and personnel support units into Central Administration; to separate planning, budgeting, property development and organizational evaluation from finance and administration; and to broaden the function of University Relations to include the University's public safety program.

EVALUATION OF INSTITUTIONAL EFFECTIVENESS

There are a variety of mechanisms by which effectiveness of individuals and units are evaluated. Periodic unit reviews (every four to six years) are required by University regulations. Effectiveness of unit administration, instruction, research, and service performance are examined by a review committee appointed by the responsible higher administrator (Exhibit 14-R). Outside consultants are occasionally asked to provide opinions of the units' effectiveness. Copies of these review reports are available in the respective deans' offices.

Many colleges, departments, and programs also must undergo reaffirmation reviews by national bodies. These reviews entail elaborate self-studies and site visits for the purpose of judging unit effectiveness (Exhibit 14-C). Copies of these accreditation reports are available in the respective deans' offices.

Faculty and staff performance evaluation is required by University regulations annually or biennially. These reviews assess all aspects of faculty and staff effectiveness (Exhibit 14-S). Faculty effectiveness is reviewed in great detail at the unit, college, and sector levels at times of appointment, promotion, and the granting of tenure (Exhibit 14-T). All courses and instructors are evaluated by enrolled students; departmental chairs are obliged to review these assessment tools and to discuss them with faculty as appropriate (Exhibit 14-U). Several Colleges conduct periodic

evaluations of unit administrators by faculty, with face-to-face discussions between dean and chairs regarding the findings.

In addition to these broad-based, continuous effectiveness evaluations, there are more focused and subtle peer evaluations that units and individuals undergo fairly regularly: internal competition for certain resources, such as seed grants for research and educational projects, graduate fellowships, and assistantships regularly hold individuals and units up for close scrutiny by internal evaluation committees. In a similar way, every departmental submission for a curricular change stimulates review of aspects of departmental performance by committees at various levels of the organization. In so far as every one of these evaluation modalities has significant consequences for the units and individuals involved, they all capture the attention of faculty, staff, and administrators, stimulate group and individual planning, and generate enhanced efforts for achievement. These have been the primary mechanisms through which the University has pursued self-improvement.

In addition to these traditional approaches to effectiveness evaluation, the University is now involved in effectiveness monitoring tied closely to the strategic planning process. As described in greater detail in Section II above, every unit has provided a unit-level effectiveness plan that requires the statement of unit goals and objectives, strategies for reaching goals, indicators by which progress toward goal attainment can be measured, and schedules on which indicators are reviewed (Exhibits 14-H, I, N, O, and Q). This administrative requirement is relatively new, having been initiated in 1990-1991, and it is built on the *Strategic Plan* that was first promulgated in fall 1989. It is not yet possible to predict what the longer term success of this innovation will be. At the moment, the administration has set up a structure for unit level planning and assessment (i.e., the institutional effectiveness coordinators group). This structure has the clear support of administrators at all levels of the institution.

Although faculty and staff participation in this new approach to unit planning and effectiveness assessment has been encouraging, skepticism remains. Some faculty, for example, voiced concern about the additional time that will be needed for meetings related to the development and updating of the unit strategic plan and approaches to measurement of progress. They perceive that, in the past, goal setting, strategy development, and assessment of success have occurred naturally and as a matter of course, without the need for additional meetings and paperwork now being required by the new process. Some faculty are not yet convinced that this additional administrative effort will lead to better teaching, research, and service—some fear that it will detract from these missions. Some faculty have criticized the potential channeling of scarce resources into the administrative support for elaborate institutional effectiveness monitoring efforts when it could be put directly into the support of teaching, research, and service. Some faculty have complained that expending additional effort in an elaborate planning process is pointless when there are no resources to implement the plans identified. Despite these objections, faculty and staff participation in unit-level planning has generally been active and thoughtful. Administrators, from chairs and directors up, have taken on the new effectiveness procedures carefully and supportively. With continued support from the higher administration of the University, it is anticipated that these planning and assessment procedures will become fully institutionalized and their value demonstrated to all participants.

PLANNING AND EVALUATION PROCEDURES

The University has a long history of institutional planning. As mentioned above, prior to 1989 the institution prepared comprehensive five-year plans that were updated every two years. In this approach, all units developed goals for the ensuing five-year period and sent them up to the next level. Each level selected priority goals and passed them to the next level. Eventually, the highest level listed the priority goals for the coming five-year period and used the priority list to prepare the biennial budget request sent to the legislature in their biennial sessions. Planning was an important part of the way budgets were prepared and moved from the bottom to the top of the institution.

The change to the strategic planning method that occurred in 1988-1989 was fundamental and continues currently. Although the first plan of the University was outlined by the committee of 11 administrators and two faculty representing various segments of the institution, it was quickly addressed and used by lower units as a framework on which to develop and array their own particular goals and objectives. The first revision of the *Strategic Plan* occurred in 1991. The group of institutional effectiveness coordinators, mentioned in Section II, has developed and implemented procedures by which every unit of the University is required to develop a strategic plan with coordinated implementation and assessment components. Nearly every unit now has such a plan on file. Although the effectiveness coordinators agreed on the essential components of these plans, the formats used in the writing of the plans were permitted to differ from area to area of the University. The effectiveness coordinators have also not attempted to make uniform the ways in which the uses of the units' plans are monitored by higher administration. One college (Medicine) requires that the annual reports of academic units list the goals of the year and describe progress made. The Lexington Campus will provide the unit strategic and implementation plans to the committees doing periodic unit reviews. Research and Graduate Studies requires unit-level annual reports and does area-wide data collection and assessment as well. It appears that procedures for ensuring appropriate use of unit plans are still evolving. Hence, judgments regarding the long term success of these procedures for enhancing institutional effectiveness will not be possible for some time to come.

The Self-Study Survey provides some information on the perceptions of faculty and staff regarding adequacy of planning functions in their units. (See Section P, 1c-3b, of Faculty Survey results.) Faculty are roughly evenly split on whether they were made aware of unit goals at hiring, and on whether unit goals are influenced by the Strategic Plan. Nearly half of the faculty report that unit goals are set by all members of the unit, while a quarter say that only the administrator or a select group from the unit do the goal setting. Nearly 70 percent of the faculty report satisfaction with their present level of involvement in the goal-setting process. In most instances, sector affiliation and rank make no difference on these responses. However, Medical Center faculty differ from those in other sectors in having goals set more centrally by administrators or selected personnel rather than by all members; they are more likely to be dissatisfied with their level of involvement in goal setting than those responding from other sectors. As might be expected, full professors claim the greatest level of satisfaction regarding their level of participation in the goal-setting process. In general, there is considerable variation among faculty in their perceived involvement in the goal-setting process, but the clear majority are satisfied with the perceived state of affairs. One other observation is that a fairly large group of respondents (21 percent) admitted that they did not know enough to answer the question on the integration of unit and Strategic Plan goals (question 3b)—an indication, we believe, that many do not know much about the Strategic Plan.

Related questions were asked of administrative and professional staff. (Section I, 1a-1d, of the Administrative and Professional Survey.) Clear majorities agree that their units examine, set, and revise goals and describe criteria of goal attainment, and that they themselves are satisfied with the extent of their involvement in the goal-setting process. Although far more participants agree that unit goals are influenced by the *Strategic Plan* than do not agree, a very large group does not have the basis for knowing (37 percent)—a situation very similar to that found among faculty respondents. Finally, and quite at odds with faculty perceptions, about half of the administrative and professional staff perceive that goal setting is centralized in either unit administrators or a select group of unit personnel; faculty were much more likely to view goal setting to be done by all unit personnel.

University support staff, i.e., hourly wage earners, responded to the same four questions. (See Section G, 1a-1d, of the Support Staff Survey.) The majority agreed that their units examine, set, and revise unit goals, and that the units describe criteria of goal attainment. Fewer than a majority are satisfied with their level of involvement in the goal-setting process. Again, the link between goal setting and the *Strategic Plan* is unknown to the majority of staff, and among those who do know, the majority perceive that there is a connection between unit goals and the *Strategic Plan*.

Across all three types of personnel, there is similarity in that the majority agree that the units examine, set, and revise unit goals. There is also similarity in that sizeable numbers in each group do not know enough about the *Strategic Plan* to respond to questions about links between unit goals and the Plan. Otherwise, there are some differences in responses across personnel categories: (1) In regard to the description of goal-attainment criteria, administrative and professional staff are more likely than the other groups to agree that this is done; (2) Support staff respondents are less likely to express satisfaction with their level of involvement in goal setting than the other two groups.

To summarize Survey results: (1) Regardless of job classification, rank, or sector of the University, a plurality of the respondents report the existence of a planning (goal setting) process at the unit level, some effort in identifying criteria for goal-attainment, satisfaction with their level of involvement, and a significant lack of awareness of the content of the *Strategic Plan*; (2) Although the Survey responses do not provide insight into the reasons for the considerable variability in respondent perceptions, the reasons might include lack of available information about planning activities, lack of attentiveness to information that is available relevant to planning activities, bureaucratic arrangements that selectively involve individuals in planning activities, and the like.

Because a sizable minority of faculty and staff continues to be unfamiliar with the nature, purpose, and results of the strategic planning process, and because strategic planning and related institutional effectiveness methodologies are still relatively new at the University, the Committee recommends that:

Recommendation 14-1: University administrators at all levels should better communicate to faculty, staff, and students the nature, purpose, and results of the strategic planning process.

Recommendation 14-2: Faculty, staff, and students as well as administrators should be substantially involved in goal setting, strategy development, and outcome assessment across the University.

Recommendation 14-3: The University should provide leadership and organizational support for units in their planning and assessment activities.

ASSESSMENT OF EDUCATIONAL RESULTS

The strategic and assessment plans on file for all units specify expected results. To the extent that the unit specifies educational objectives expected, educational results are defined. However, at this relatively early stage in the University's development of institutional effectiveness procedures, the effectiveness coordinators are seeking to orient and introduce faculty to the concepts and procedures of educational assessment. Accordingly, in the 1990-1991 efforts at developing unit plans, the coordinators requested that units begin by identifying only a selection of the learning objectives and making their first attempts to link them to measurable progress indicators. As a result, nearly all units with teaching missions have stated both learning objectives and indicators of goal attainment.

In the Lexington Campus, which contains the vast majority of graduate and undergraduate degree programs, units with such programs are required to develop two additional plans: student learning and achievement plan, and student learning and achievement implementation plan (Exhibit 14-I). The first entails enumeration of student learning objectives, description of ways in which the unit currently assesses achievement of these objectives, and the ways in which the unit intends to assess these in the coming two years. The second, the implementation plan, requires that with regard to the top one or two learning objectives, the unit lists relevant learning experiences, indicators of progress toward the learning objective, the method for ascertaining the progress indicator, the schedule for assessing progress, and approach to using the assessment data for program improvement.

Use of assessment results as a guide to program modification and improvement is an essential part of the strategic planning process. Although the University's first attempts at implementation of the strategic planning approach date only to the 1988-89 academic year, there are nonetheless examples of program improvements that have resulted from various assessment activities. In the Lexington Campus Sector, the Graduating Senior Survey yielded results that caused the College of Business and Economics to organize a planning retreat which led to the decision to implement an improved advising system. The same data indicating graduate dissatisfaction with the broader advising system moved the Chancellor of the Lexington to request \$500,000 in the subsequent budget period to improve the advising system. Based on findings from the Undergraduate Alumni and Graduate Student Surveys, additional budget requests were made for decreasing class size and eliminating less experienced teaching assistants from introductory level teaching assignments. Neither of these budget requests succeeded, but the principle of using assessment data for identifying needed program improvements is now becoming more firmly established. This same principle is also demonstrated in changes being made because of the new insights garnered from the Commuter Student Survey. The Commuter Student Office has already made significant changes in student programming, in its advisory board, and in issues related to telephone access to the campus. In addition, the Chancellor immediately distributed a memorandum to all offices which reinforced the requirement that they remain open during the lunch hour to improve access for students.

In regard to assessment of student learning objectives and subsequent modification of program, examples are fewer because the process of identifying learning objectives and assessing

them is still relatively new. One example from the Lexington Campus is the following. In 1988-89, the Dean of Undergraduate Studies funded two consultants to work with undergraduate engineering students on improving writing skills. The results were evaluated so positively by faculty and students that the College's Dean submitted an Innovation and Excellence Grant proposal to make writing consultants a permanent part of Engineering's undergraduate program. That program change was funded.

In the mid-1980's, the College of Agriculture conducted an extensive review and revision of its curriculum for Bachelor's degrees in Agriculture and Food Science. Assessment information on content areas, skills needed, and performance of recent graduates was collected from three sources. It comprised a substantial part of the information used in the review. One source was a survey of all of the College's graduates with known addresses and who had not retired. A second was a mail survey of employers combined with individual, on-site personal interviews with a select group of employers. The third source was information from current students and student groups which was incorporated into the process through the student members of the review committee. As a result of the assessment, the curriculum was changed to include additional requirements in written and oral communication and in computer applications and expertise. It also provided additional course offerings providing a broader perspective in the agricultural disciplines. The revised curriculum became effective during the fall semester of 1986.

The Medical Center provides two additional examples of the role of outcome assessment in program change. Graduates of the BSN program experienced a surprisingly high failure rate on the State Board of Nursing licensure examination and, therefore, could not obtain a license to practice in Kentucky. This assessment precipitated change in the entire BSN curriculum. Nursing students now get more clinical experience, the faculty/student ratio has been improved for clinical courses, and an adult nursing clinical course is provided during the student's last semester in the program. The success rate on the Board Examination has improved markedly. A second illustration of the integration of assessment and program modification is found in the Department of Surgery, College of Medicine. That department instituted a fundamental and far-reaching change in the third-year surgery clerkship. Heavy emphasis on "learning by doing" on the wards, the traditional approach, was supplemented by small group, problem-based learning sessions and by intensified work with current periodical and textbook exercises. Various indicators of goal attainment were reviewed at a faculty retreat after one year of implementation of the clerkship change. Because this assessment yielded very promising results on a range of quality indicators, the faculty decided to continue the innovation and its monitoring.

In the Research and Graduate Studies area, the Office of Sponsored Programs uses faculty focus groups and surveys to discover areas in which service needs improvement. For example, the Grants Deadline publication was reformatted into disciplinary areas because of comments elicited in assessments. Such assessment also indicated the need for training of graduate students in grant preparation; this service was subsequently provided by Research and Graduate Studies. The Office of Sponsored Programs offered employee workshops on grant administration as a result of prior assessment findings, and these workshops are revised in light of participant evaluations.

ASSESSING RESEARCH AND PUBLIC SERVICE

The University's procedures for evaluating effectiveness in the areas of research and public service have emerged directly from the programs and their historical context within the institution. Individual faculty members receive close scrutiny of their research performance,

including the quality and quantity of their productivity. This review occurs on an annual (sometimes biennial) basis within the department and college during the required individual performance evaluation. Assessment of individual contributions to university, community, and professional service, both locally and nationally, is also done in the context of regular performance evaluation. These evaluations become a component of the total performance evaluation upon which merit salary increments are based. Individuals are also evaluated in an extensive process on their research and service accomplishments when they are reviewed for promotion and tenure.

Departments are evaluated formally on their research and service accomplishments at their required periodic reviews (every four to six years). Although specific practices vary, all units submit annual status reports that include enumeration of research and service achievements of the year. Some units are required in the annual report to review research and service accomplishments in juxtaposition to the unit objectives set out at the beginning of the year.

In addition to these efforts at the level of individual and academic units, the Research and Graduate Studies area is administratively responsible for all research activities at the University. Accordingly, it sets goals for research accomplishments and assesses them across the institution. The University Strategic Plan enumerates goals for the succeeding five- and ten-year periods. The current plan lists goals that aim to increase efforts and success in extramural funding, enhance internal support for extramural funding efforts, financial support for research conferences, number of submitted proposals for extramural funding, support for research instrumentation and maintenance, and state support for research assistants. These goals are operationalized in specific terms and assessed with data collected from every unit that has a research mission.

In terms of evaluation of the efficacy of public service, the report of Public Service Committee of the Self-Study indicates that every one of the 428 reported service activities listed in their Public Service Inventory executed some type of evaluation of the activity. As that chapter explains, they included evaluations of inputs, activities, people affected, change in knowledge and practice, and social, economic, and environmental consequences.

INSTITUTIONAL RESEARCH AT UK

This overview of institutional research at the University emphasizes description of currently functioning institutional research activities. But first, it is important to understand that institutional research activities have long been carried out at the University, albeit distributed broadly across the organization. For example, some institutional research activities were occurring in the Offices of Admissions and the Registrar. Most of these studies focused on student issues: for example, studies of retention and graduation rates of UK students as well as of those entering UK from community colleges, of veterans, of nonwhite students, and of other special groups (Exhibit 14-V). Other early institutional research efforts were occurring in the Graduate School, the Office of Sponsored Projects Administration, other support service offices, and departments and colleges around the University; studies were also being conducted by the University Senate and by ad hoc committees interested in special issues (Exhibit 14-W). These efforts were typically one-time studies that took great effort to accomplish, and were usually not re-examined longitudinally.

Two long-standing focuses of institutional research at the University are the Office of Planning and Budget of the Central Administration, whose activities will be described below, and the Office of Institutional Research of the Lexington Campus. The latter was established in 1984 when a director was appointed. This office developed reports on a variety of issues: analyses of faculty work load, student retention, faculty research productivity, benchmark salaries by discipline, impact of selective admissions, space and physical facilities, and others. Several student surveys were also accomplished: for example, surveys of nonreturning students in conjunction with the College of Arts and Sciences; freshman and senior student surveys examining why students succeed and measuring differences in their approaches to being a student, to levels of involvement with faculty, campus activities, and the like (Exhibit 14-X). When the Director of Institutional Research resigned in 1987, the position remained vacant until 1989, at least in part because of the impending retirement of the Chancellor of the Lexington Campus.

Generally four types of institutional research activities may be identified as currently present to a greater or lesser extent within the University.

Institutional Research for Decision-Making

In this aspect of institutional research, data are collected and analyzed in order to "provide information which supports institutional planning, policy formation, and decision making" (Saupe, 1990). This institutional research function at the University has been provided by the Office of the Associate Vice President for Planning and Budget. This office supports the Office of the President in several ways, including the compilation and quality assurance of data on human resources, finance, students, facilities, and programs, as well as information on peer institutions for comparison. The Office of Planning and Budget also monitors the socioeconomic, political, and educational environments to identify trends or changes which impact the higher education environment. These data have provided a basis for institutional planning and policy making. Major responsibilities of this office have included preparation of reports and data for several external agencies, e.g., the Kentucky Council on Higher Education and legislature, the Finance and Administration Cabinet, the Federal Government, and other institutions of higher education; the Office also responds to various surveys such as the Integrated Postsecondary Education Data System, the Oklahoma Survey, the Arkansas Administrative Survey, and the SUG-25. An annual, concise Fact Book is prepared by the Office of Planning and Budget, as are ad hoc studies requested by the Office of the President. A major ongoing responsibility is involvement in institutional databases (student, personnel, financial, facilities), including data definition, data integrity, and development of new systems.

In addition to the institutional research functions provided by the Office of Planning and Budget, institutional research support for University administration is provided by other units as well. For example, various financial and personnel reports are provided by the Controller's Office, Office of Financial Aid, the Human Resources Services, and the Office of Sponsored Projects Administration. Studies of admission processes are done by the Office of Admissions and the Office of the Dean of the Graduate School; the Registrar's office does various studies, such as the recent report to the NCAA on the academic status of student athletes, and the High School Feedback Report. The offices of the chancellors and the vice presidents provide data and analyses to the Office of President for incorporation into Kentucky Council on Higher Education, Southern Association of Colleges and Schools, and other externally requested reports.

Institutional Research to Increase Institutional Self-Knowledge

In this aspect of institutional research, support is provided to parties who present questions about University functioning that can be answered by addressing institutional databases or collecting original data in methodologically rigorous ways. The institutional research questions addressed might have relevance beyond issues of planning, policy formation, and decision making at the level of the whole institution. This aspect of institutional research also serves units, programs, and committees that have needs for information on institutional functioning that might lead to enhanced self-understanding at all levels of the institution. In the ideal, such an institutional research service would provide technical help to those who have institutional research questions; it would also have the professional discretion and expertise to pursue its own institutional studies that would increase understanding of the nature and function of the institution.

Presently, the amount of ongoing self-study through careful and systematic examination of institutional data is fairly limited. There are few individuals with institutional research expertise whose primary responsibility is to explore institutional data continuously and to provide insights that would improve institutional performance. There is also some dissatisfaction with the quality of institution-wide databases. Currently, individuals and committees that wish to explore an institutional research question must start from scratch, searching for data, obtaining authorization to use it, and convincing workers who are already overextended to help address the data set. In some instances, these efforts encounter such severe obstacles that the resultant conclusions are questionable. Full-time institutional research professionals would open the way to increased self-knowledge at all levels of the institution. The Committee believes that the principal reason for the dearth of institutional research services of this type is their high cost along with the prevailing institutional belief that, though valuable, they are not essential for the functioning of the institution.

Institutional Research for Assessment

In this aspect of institutional research, support is provided for the assessment efforts that are a part of the institutional effectiveness plans of every unit. Assessment of goal attainment requires data collection and analysis. The latter may be simple and routine, and it can be accomplished by examination of routine, internally available information (for example, student evaluations of departmental courses). However, assessment of some objectives may require collection and analysis of complex data; for example, longitudinal surveys of behavior, knowledge, and attitudes of program graduates. In the latter case, it is clear that most units need the assistance of an expert institutional research service.

Illustrations of this sort of institutional research activity are found in the efforts of the Lexington Campus to provide support for the institutional effectiveness activities of units in that sector. They include four types of efforts: (1) Student outcome surveys of entering and graduating undergraduates and finishing graduate students. Short- and long-term followups of alumni are at various stages, and longitudinal studies of entering freshmen have begun. Surveys by Student Services (residence halls and quality of life) and surveys of non-completing students are planned. (2) Department level data on various aspects of functioning and productivity, as well as student data, will be provided to deans and departmental review committees to facilitate the process of periodic program evaluation. (3) Individual departments will be offered consultation on the kinds of data that would help in their institutional effectiveness efforts. (4) Database quality and

availability are being enhanced, as is ease of database access to administrators and other unit personnel within that sector. At the moment, only the Lexington Campus and the Community College System offer this level of institutional research support for the assessment activities of their units.

Data Administration and Institutional Research

The previous three institutional research functions require the existence of databases on which their analyses may be done. In the ideal, institutional data are incorporated into databases that are accurate, up-to-date, easily accessible, and generally inclusive of all significant characteristics of the institution and its programs. The Institutional Effectiveness Committee learned that there is some dissatisfaction with some aspects of institutional databases at the University.

The University maintains four major databases: a student database (SIS), a financial database (FRS), a human resources database (HRS), and a database on facilities. Each is at a different stage of its development, with the student and financial databases being the most fully developed. The human resources database is in an earlier stage of its development, with considerable effort still needed to bring it closer to the ideal. The facilities database is considered the one farthest from perfection. The University uses the IDMS database management system and the FOCUS system as its reporting software. By most accounts, these products are of good quality and will permit appropriate development of the databases. Database development has benefitted from the advice and experience of committees appointed to guide their development.

The Institutional Effectiveness Committee learned that individuals and groups having attempted to use University databases have encountered major frustrations in their efforts to conduct institutional studies. Many of these problems are due to lack of communication. For instance, the appropriate channels and processes for requesting and retrieving information are not commonly known, especially by faculty, so there is ambiguity regarding who has authority to give permission to query which data. Locating people who are capable of doing the programming necessary to query the data sets and who have time to devote to the inquiries can also be difficult. When data are derived from the database, they are frequently unreliable and inconsistent. This is exacerbated by the fact that University data are complex, and definitions of such apparently simple categories as "faculty" can be confusing. In addition, the data needed for the particular analysis are sometimes not available in the database.

The Committee concludes that institutional research efforts at the University will not reach their full potential until the database problems identified above are solved. The University's objective should be construction and maintenance of accurate databases that are easily accessible to all parties who have reasonable questions about the University. The Committee expressed approval of several approaches to reaching this objective. First, institutional research personnel should be available to consult with individuals who wish to pose institutional research questions and to direct them to the appropriate databases and methods of access and analysis. Second, institutional databases must be made ever more accessible to individuals without extensive training in computer programming; as long as this approach remains infeasible, training in database access must be readily available. Third, custodians of the databases should interact with user advisory committees to ensure that the databases are meeting the needs of the users and to ensure that the users are aware of the contents, strengths, and limitations of the databases. Fourth, custodians of databases need to re-examine and improve the processes by which data are abstracted and incorporated into the databases.

Institutional Research for Planning and Evaluation

As the preceding overview of institutional research activities at the University indicates, the Office of Planning and Budget and many centralized, sector- and college-based offices are frequently involved in institutional research. These activities take the form of studies that underlie reports required by external agencies or which are needed to support the internal planning and policy making of the institution.

In addition, the institutional effectiveness coordinators are developing another type of institutional research resource, namely, that which supports ongoing assessment activities at the unit level. All of these coordinators consult with their units on approaches to effectiveness assessment, and some collect and provide data for their units and their review committees to assist in evaluating unit effectiveness. However, as described previously, there are aspects of the institutional research operation which could be stronger. The quality of large institutional databases is not uniformly good.

The Self-Study Survey asked a series of questions of faculty and academic administrators (in Section P, questions 4-7), and administrative and professional staff (in Section I, questions 3-6) on the need for and the availability and quality of institutional data and its analysis. In both personnel categories, the clear majority of respondents never need such data. Among those faculty who do, there is general satisfaction with both availability and quality on three types of data: (1) research activity, (2) course enrollment, and (3) departmental information. Other types of institutional data were viewed quite diversely and without clear consensus. Even among those faculty respondents who report having some need for institutional data, there are many who state no opinion about availability or quality of several specific types of data. Among the minority of administrative and professional staff who expressed a need for institutional data, many need only selected types of data. The balance of satisfaction on all data types, in both availability and quality ratings, was in the positive direction. Finally, with regard to the availability of analysis of institutional data, faculty indicated general dissatisfaction, but staff reported satisfaction. In summary, the Survey suggests that institutional research products are not generally used, or perhaps needed, by faculty or administrative staff. Further, when they are used, it is done very selectively. Finally, there is considerable variability in the evaluation of the availability and quality of the data among users.

Continuous Use of Institutional Research

The Office of Planning and Budget and many centralized, sector- and college-based offices are, considered collectively, continuously involved in institutional research activities that analyze the policies, procedures, and programs of the institution. Units at various levels, by virtue of their need to report internally and externally on their performance, are continuously involved in collecting and analyzing data that have impact on policies and procedures. This on-going self-analysis is supplemented by ad hoc studies initiated by internal groups. In recent years, for example, ad hoc committees on the status of women and minorities have done thorough studies that are having major impact on institutional policies. As discussed previously, even this positive picture of ongoing, appropriately used institutional research can be improved. Much of this activity is being done by individuals who are not specifically trained in the methods of institutional research and who are doing the research as an "add on" to jobs that have many nonresearch aspects. Moreover, as described above, the sources of data for these studies are typically not easily accessible and are less than perfectly accurate. For example, the Committee heard on several occasions that the committees which studied the status of women and minorities

at the University faced extreme difficulty with the completeness, accuracy, and accessibility of pertinent databases.

The recent initiation of the work of the institutional effectiveness coordinators is another area in which institutional research approaches are beginning to support the monitoring of unit performance in ways that will enable improvement. As described above, the unit effectiveness plan specifies indicators of progress toward goal attainment. The institutional effectiveness coordinators are responsible for helping units to identify ways in which assessment can be done within the institutional research resources available to the unit.

Evaluation of Institutional Research

Because of the decentralized nature of institutional research at the University, the evaluation of its institutional research function is different at each level and location and cannot be addressed adequately with a simple generalization. Evaluation of the institutional research function of the Office of Planning and Budget is accomplished in two ways: first, performance evaluations of the Office's workers are done annually; and second, there is an annual reappraisal and agreement on the office goals and outcomes by the Vice President and Associate Vice President. Continued reliance of key decision makers on the information developed by this office is an indicator of effectiveness. To this point, there is no required periodic evaluation of this unit nor any indication that such periodic evaluations are envisioned. Such periodic, external review would be appropriate and is implicit in the review of the planning process which occurs with each planning cycle. The University's Strategic Planning process is scheduled for review next year and will incorporate results of the Self-Study.

The Institutional Research Office of the Lexington Campus has not been formally reviewed but is now scheduled to have its first periodic unit review in 1993-94. However, all employees of support units, including those of the Institutional Research Office, have undergone annual performance evaluations.

Because not all institutional research at the University is done in the Office of Planning and Budget or the Institutional Research Office of the Lexington Campus, it is important to consider the evaluation of the institutional research functions accomplished elsewhere. Institutional research done by ad hoc committees, such as the recent Committee on the Status of Women, is evaluated only by the scrutiny received from all members of the University community—a level of scrutiny, in this instance, that was quite intense. Such reports are evaluated in part by the reactions of the University community and the changes which occur as a result, as they are usually targeted at a specific problem.

Evaluation of institutional research stimulated at the level of the unit by the institutional effectiveness coordinators is accomplished by administrators who periodically examine data collected by the units. This review may occur as part of annual unit reviews, or in the future in some sectors, in conjunction with external reviews examining the performance of the unit every four to six years. The other institutional research that is occurring diffusely in one form or another in nearly every unit of the University is also evaluated as a component of the performance evaluation of workers with such responsibilities.

In sum, the individuals who do institutional research are regularly evaluated for their institutional research work. However, the quality of institutional research, overall, at the University is currently not adequately evaluated on a regular basis. This condition is primarily due

to the great decentralization and diffusion of institutional research across the institution. The existence of the Institutional Research Office of the Lexington Campus and the plan to initiate periodic review of its work is an important step in the direction of adequate evaluation of institutional research at the University. Periodic, external review of the institutional research work of the Office of Planning and Budget and the effectiveness coordination function would also strengthen evaluation of the University's institutional research function. Comprehensive evaluation of the institutional research functions in other areas of the University will remain difficult if those functions remain as broadly distributed as they are presently.

Because institutional research resources are diffusely distributed across the University and are therefore difficult to coordinate and evaluate, the Committee recommends that:

Recommendation 14-4: A centralized office for institutional research should be established in order to coordinate University System-wide institutional research activities and resources. In addition, offices of institutional research should be maintained in major administrative units in order to ensure that all units in the University have ready access to professional institutional research support.

Institutional research specialists are few and are already fully committed to doing the necessary institutional research of the University. Because of this commitment, they are unable to provide additional, desirable studies leading to better institutional self-knowledge. Therefore, The Committee recommends that:

Recommendation 14-5: The University should provide resources to support additional institutional research services in the major administrative units.

Because database maintenance, quality, and usability are considerably less than ideal, the Committee recommends that:

Recommendation 14-6: The processes by which data are abstracted and are incorporated into the databases should be improved.

Recommendation 14-7: Access to the databases should be improved to serve a broader range of users.

Recommendation 14-8: User Advisory Committees should be established to interact with database custodians to ensure that databases meet user needs.