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The Anatomy of an Academic Program Review

Richard L. Harpel
Assistant to the Chancellor and
Director of Planning
University of Colorado, Boulder

The review of academic programs in higher education is a practice which occupies an increasing amount of time, effort, and resources of faculty, administrators, professional staff, governing boards, legislatures, and postsecondary commissions. Campuses which are deeply involved in program review probably have been thrust into this activity by a combination of the many forces which cause institutions to reflect on their place in an uncertain future. In some cases it may even be a matter of survival.

Broadly defined, these forces fit well into a taxonomy described by Olscamp (1978) as the demand for (1) public justification, (2) quantitative accountability, and (3) evaluation and maintenance of quality. Each of these demands conjurs up in our minds such recent encounters as explaining to a concerned parent that our campus ranks "X" out of "Y" peer institutions in National Merit Scholars in our freshman class—or convincing a legislative committee that the cost of a program in Artificial Intelligence is worth their investment in light of future high-tech needs in the state—or discussing with a dean that the current student demand for sociology no longer warrants the same number of faculty in that department as there were ten years ago.

So there are a variety of stimuli that have brought program review into the life of higher education institutions. Harcleroad (1980) reminds us that the review or evaluation of academic programs in higher education has existed in the United States since 1642 when the Board of Overseers of Harvard College journeyed to Cambridge from Boston to preside over the final examination of the first graduating class. Accountability and

self-examination are not new concepts. However, they have evolved in complexity and purpose so that we now find ourselves in an environment that Mortimer and Tierney (1979) describe as the three "R's" of the eighties: reduction, reallocation, and retrenchment.

Program review as practiced today means different things to different people and is undertaken for a variety of purposes. It may be in response to an external demand which prompts a campus to initiate a program review process. Perhaps the most common review process prompted from an outside source is accreditation; the self-study is its core. An increasingly common demand on public institutions is the requirement from state postsecondary agencies or state legislatures for a statewide process of program review. These vary from the requirement that each institution have in place its own unique program review process to a fairly rigid uniform process mandated for all institutions in the state.

Program review is more often associated with a process internal to the institution and motivated by self-imposed interests. It may be a one-time response to a perceived emergency or crisis which requires such a review, or it may be an ongoing process which evaluates all programs over a period of time. Seeley (1981) describes several factors influencing program review. In addition to the general concern for accountability, he points to the need for efficiency, promotion of quality, interest in consumer protection, response to a changing environment, and concern for resource limitations. Any one or a combination of these factors may be the basis for program review in colleges and universities today as we seek to respond to changing student demographics,

retain outstanding faculty, revitalize moribund programs, retain students, or deal with the encroachment of inflation on a static budget.

However, this is not a paper describing the wide spectrum of approaches to program review. Nor is it meant to be a restatement of the conditions which spawn the practice of program review, most of which are all too obvious to the higher education community. Nor is it intended to be a history of program review since the early days of Harvard. The intent here is to describe the elements of an established review process that is beginning its seventh year at the University of Colorado, Boulder. The experience of this institution does not represent the "perfect" model. Indeed, there is no single correct method for performing program review. However, for better or worse, it does represent a particular type of approach which has drawn on principles contained in the literature and that is the product of both the successes and failures of evaluation attempts which preceded it at the University of Colorado. The purpose of this paper is to describe the major elements of the program review process, and their rationale, in sufficient detail to provide the reader with a road map or checklist for implementation on his/her own campus.

The Purpose of Program Review

It is essential that an institution be able to answer for itself the question of why the program review is being conducted. This is true for the institution with a long history of program review as well as for the institution which is just beginning. Is the intention merely to respond to a mandate from the state coordinating board? Or is the purpose to prepare for a visit from an accrediting agency? Is the purpose of the review to improve the quality of programs? Or is the process intended to provide a framework for resource reallocation? The purpose of program review must be clearly defined at the beginning and reaffirmed along the way if the results, both direct and indirect, are to have a positive impact on the institution.

One of the most disheartening aspects of program review occurs when the wrong expectations are created on campus through a process which is begun with a somewhat vague statement of purpose, only to be frustrated by the application (or misapplication) of the results for some other purpose. The purpose of the review will influence the characteristics of the process itself—the methodology and the understanding and interpretations of the findings. Barak (1985) points out that when the review is intended for the use of the unit alone, the process will be more formative, qualitative, and candid; whereas if the orientation is external to the unit, the procedures will be more summative, less candid, more quantitative, and designed to make decisions about retaining or dropping a program. Obviously, the attitudes of the participants will also be affected by these different approaches.

At the University of Colorado, the program review process was developed in the mid-seventies, after the state legislature had made severe cutbacks in funding for faculty positions. The on-campus cuts reflected the judgment of senior academic administrators, working without the benefit of program reviews. The reaction of the campus was predictable, and an immediate attempt was made to perform an omnibus review of all programs within the space of nine months. The effort was massive and the results were disasterous. The process was viewed by faculty with great suspicion, even though the "blue ribbon" panel was made up of senior faculty members. In the end, it was the lack of trust and the uncertainty concerning the purpose of the review which rendered the review useless and soured the campus toward program review for over two years. Too much data had been gathered over too short a period of time on too many programs for what seemed like sinister purposes, and the process ground to a halt.

Two years later, after a period of budgetary stability, the concept of program review resurfaced, this time in the context of the need for program improvement and the continuing need for the redistribution of resources. (As mentioned above, the original cuts had been targets of opportunity and not based upon program strengths or weaknesses.) The unfinished business of regaining balance across programs which had lost faculty remained. As the new process was developed by a faculty committee, the following principles were followed:

1. The primary purpose of program review would be program improvement.
2. Secondarily, program review would be used as a basis for resource reallocation.
3. Program review results would be a major component in the campus planning process.

Barak (1985) points out that as an institution moves along the continuum from no linkage between program review and planning to increased linkage and integration between program review and planning, it "sacrifices" the objectivity with which the review is conducted and moves toward overly positive and less candid evaluations. It is apparent that the University of Colorado has mingled the objectives for program review along this continuum. The faculty clearly desired to develop a process which provided the opportunity for self-renewal of the units under review, but it also recognized the need for structure and information for academic decision makers which program review would provide. It is difficult to imagine how to avoid this mixture of good motives. The resolution of this dilemma seems to rest in the checks and balances between the parties to the review and in the criteria which are used for evaluation.

Procedures for Program Review at the University of Colorado

Munitz (1980) defines program review as "an iterative process that incorporates the observed consequences of prior decisions into the shaping of future directions . . . by changing program objectives, processes, products, or resources." This comes very close to describing the process at the University of Colorado, which was developed to be a comprehensive approach evaluating all academic programs over a seven-year cycle. This means that about eight programs are reviewed each year. In choosing programs for review, an attempt is made, among others, (1) to secure a mix of programs from the humanities, social sciences, and natural sciences each year; (2) to combine program reviews with professional accreditation visits; (3) to consider changes in administrative staff; or (4) to follow up on perceived problems within units. In some cases, several related units have been reviewed together in one year, such as all of the modern foreign languages. The selection of programs is purposefully flexible to allow for unforeseen circumstances which might suggest that the order be changed. Some deans and department heads have

asked that their units be moved ahead or delayed in the cycle, and usually these requests have been accommodated.

Figure 1 illustrates the information flow and the general duration of each phase of the process.
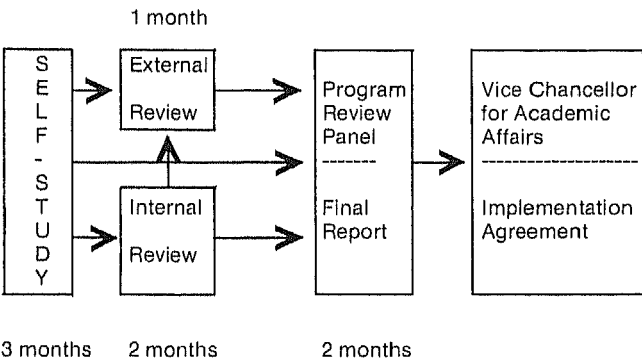

1 month

3 months   2 months   2 months

Figure 1: Information flow and timing of the program review process at the University of Colorado, Boulder.

Oversight Committee. The oversight of the process rests with the Program Review Panel (PRP), made up of senior faculty within the university. The composition of this group, the method of their selection, and their charge have proven to be vital to the success of the process.

The voting membership of the PRP consists of eight faculty, two students (one graduate and one undergraduate), and one administrator. Four of the eight faculty are selected by the Faculty Assembly, and four are selected by the chief academic officer, the vice chancellor for academic affairs. Each of the students is selected by his or her respective governance constituency. Although somewhat unusual, the administrative representive is the vice chancellor for academic affairs, the academic officer to whom the final reports are conveyed and the individual responsible for implementation of the recommendations.

The faculty and deans requested this arrangement in order to allow the vice chancellor to be guided by the entire process of discussion which takes place on the panel during the course of the review, rather than to limit his information to the condensed final report and list of recommendations. It was felt that the value of being part of the give-and-take of the debate, the flavor of which might never find its way into the final report, outweighed concern that the presence of the vice chancellor might unduly influence or inhibit the discussion. Obviously, this arrangement is a function of the history and character of one institution and may not be workable on another campus. The history of faculty governance at the University of Colorado suggests that the faculty would be unlikely to feel intimidated by the academic administrators and that decision making would be enhanced, not inhibited, by the vice chancellor's participation.

Faculty members on the PRP serve two-year staggered terms. For obvious reasons, student members are replaced annually. As will be seen, the time commitment

by faculty members is significant, and they are usually relieved of all other committee assignments during their tenure on the panel. Each faculty member serves as a liaison to a specific program being reviewed and handles all questions and comments about the review of that program throughout what is approximately an eight-month process. This includes conducting an orientation for the department under review and ensuring that the process used by the program is participative, rigorous, and candid. Obviously, much of the credibility of the process depends on the relationship which is developed between the program and the faculty liaison from the PRP.

Elements of the Review. The review of each program comprises three separate stages: (1) the self-study conducted by the unit under review, (2) the internal review conducted by a team of faculty from cognate disciplines within the university, and (3) the external review conducted by a team of faculty members from other institutions and members of the discipline represented by the unit under review.

The Self-Study. The foundation of the program review for each unit is its self-study. Academic units are free to develop the type of organization they desire to guide their self-study; however, units are urged to include both junior and senior faculty, as well as graduate and undergraduate students, in the process. The guidelines for self-studies which are published by the Program Review Panel recognize that there will be times when privacy and confidentiality must prevail when dealing with individual faculty members. In such cases, it might be unwise for students to participate at certain stages of the study, and written reports need to recommend actions in such a way as to prevent identification of individuals.

Self-study reports must include three components: (1) factual and descriptive information, (2) assessment of strengths, weaknesses, and goals, and (3) improvement-related analyses and plans. The focus of the report is to describe the unit as accurately as possible from both an historical and future perspective. What is unique about the program? What are its intellectual roots? Where is it headed? What are its students like? What are its faculty like? Table 1 outlines the material which is requested in the descriptive portion of the study.

Most of the information requested in the descriptive section of the self-study is contained in the management information system files which are maintained by the Office of Academic Planning on the campus. When additional data gathering is required, this office also provides the logistical support necessary to accomplish such an effort.

The assessment of the strengths and weaknesses of the unit follows from and is based upon the information contained in the first section. Where possible, each unit is asked to employ comparative standards that show its performance in relation to other units in the university and/or to comparable units in the same discipline at other universities. If available, the unit is requested to make use of evaluations from visiting representatives of federal funding agencies or evaluating agencies within its own discipline. Comparison of the unit's performance over time is also encouraged.

The component which is the heart of the self-study is

Table 1

Descriptive Information Included in the Self-Study

A. Program Description
   1. History of the discipline
   2. Future of the discipline
   3. Uniqueness of the discipline

B. Student Data
   1. Undergraduate program characteristics
   2. Graduate program characteristics

C. Faculty Data
   1. Faculty demographics
   2. Rank and tenure
   3. Areas of faculty specialty

D. Departmental Activity
   1. Instruction—information on workload, unique types of instruction associated with the discipline, course distributions, service role, match between curriculum and faculty strength, degrees awarded, grading patterns, and faculty teaching ratings
   2. Research and Creative Work—relationship of research and creative work in the department to the scope of the discipline, faculty strengths, and available funds
   3. Public Service—relationship of the department to the profession and needs of the state; service to the university community.

the section on improvement-related analyses and plans. Over the years, when analyzing the self-studies of units under review, the PRP has found that it is the quality of *this* section which makes the difference between a good and a poor study. It is in this section that a unit demonstrates its ability to be honest and candid about itself as well as creative and realistic about its goals for the future. On the basis that this section is lacking in substance, it is not uncommon for a self-study to be returned to the unit for improvement by either the PRP liaison faculty member or the Internal Review Team.

The section of the self-study dealing with improvement-related analyses and plans consists of proposals from the unit to deal with problems it has identified in the course of gathering and assessing factual and descriptive information about its personnel and activities. At this point, the report must go from the general to the specific. While unit averages may be informative with regard to some categories of factual and descriptive information, improvement plans must be specifically focused if they are to be effective. These proposals constitute the payoff from the self-study. Without them it would be of little value.

While this phase of the self-study has the potential for significant payoff, it is also likely to generate the most frustration. This is true if the unit is challenged by the PRP liaison to be more specific. It is also true for units which have done a good job and have made an excellent case for additional resources. Poulton (1981) points to this problem when he explains that "expectations are raised based not only on these better arguments, but also simply on the belief that a good-faith effort deserves a just reward." He goes on to state that "given

the combined problems of limited rewards, frustrated participants, and limited means of communicating with all members of the institution, the credibility of all management and planning systems is continually threatened."

Recognizing this problem, the Program Review Panel emphasized in its guidelines that improvement-related plans should not necessarily be based upon the assumption of acquiring additional resources. The guidelines (University of Colorado, Boulder, 1983) state:

> The Program Review Panel and the University Administration wish to emphasize their commitment to a collaborative effort to follow through with the unit in carrying out its improvement proposals. Granted the limits imposed by the financial constraints under which the University must function, PRP and the Administration are convinced nevertheless that every unit of the University can enhance the quality of its operation. To accomplish this will require the use of new approaches and new tools. The unit is urged to be imaginative and untraditional in this respect. (p. 13)

The guidelines go on to illustrate possible actions that a unit might consider, assuming no (or minimal) additional resources. Some of these suggestions follow:

1. Arrange opportunities for a faculty member whose creative work is handicapped by lack of knowledge of a newly developed technical procedure or type of equipment to acquire such knowledge by providing released time.
2. Adjust rewards and duty allocations among faculty to take some account of variations in contributions to teaching, research, and service.
3. Provide assistance to a faculty member who experiences difficulty with undergraduate instruction.
4. Encourage and facilitate early retirement or partial retirement for a low-achieving faculty member for whom improvement-related plans seem unrealistic.

Improvement-related plans are requested for each area in the life of the academic unit: faculty scholarship, graduate and undergraduate instruction, public service, professional service, university service, student advising, academic support services, and affirmative action.

Internal Review Process. Following the self-study is the internal review carried out by a faculty team drawn from outside the unit and from cognate disciplines. The Program Review Panel selects the members of the Internal Review Team (IRT) from nominations solicited from the unit under review and the faculty and student governance bodies. This team and the PRP liaison member meet with the unit early in the process of its self-study to discuss its procedures and schedule.

The primary purposes of this phase of the program review are to facilitate the self-study process and to verify the content and thoroughness of the self-study. The Internal Review Team relies heavily upon interviews with members of the unit as well as with students in the program, faculty from other units who have frequent contacts with the faculty and students in the unit under review, and academic deans and administrators.

The report of the Internal Review Team is submitted to the Program Review Panel as an independent observation of the unit, drawn from the material in the unit's self-study and using the material gathered from inter-

views and other sources. The IRT report consists of (1) an evaluation of the unit self-study, (2) an appraisal of the unit, and (3) recommendations. The unit receives a copy of the report at the same time it is submitted to the PRP and is given the opportunity to make written comments on any factual errors which it believes are contained in the report.

The value of the internal review process has proven itself numerous times. Not only is the report a reality check of the self-study, but the members' broad knowledge of the campus as a whole and their lack of "self interest" make them a valuable research team in the sense that they can often provide information and perspective which can be gained by no one else in the process.

External Review Process. The final phase of the program review is the visit by an external review team which consists of 2-4 distinguished faculty in the discipline or profession represented by the unit. Once again, the PRP selects the members of this team from nominations received from the unit, the Office of Academic Affairs, and the PRP itself. The External Team is scheduled to spend two days on campus, and members are compensated for their time and effort.

The preparation of the External Review Team is as important as the on-site visit itself. Members of the team are provided with the self-study, the IRT report (including any written challenges from the unit), and written procedures for the external review. At the beginning of their visit, they receive further orientation from the PRP liaison and the chair of the Internal Review Team.

A typical visit includes meetings with the unit, with students, the dean, staff members, members of other units, the Internal Review Team, and others deemed necessary for the preparation of their report. Blocks of time are also segregated to allow members of the External Review Team to interact among themselves, to integrate their findings, and to outline their report.

At the end of their visit, the external team members are invited to meet, if they so desire, with the PRP liaison member, the chair of the Internal Review Team, and the chancellor to give a brief oral report on their general impressions of the unit. A written report is requested within ten days of the visit. When received by the PRP, that report is forwarded to the unit under review, with the understanding that the unit may challenge any factual material contained therein.

The External Review Team is encouraged to focus its report on four main areas:

1. The strengths and weaknesses of the scope or comprehensiveness of the unit
2. The quality of the faculty
3. The quality of the leadership
4. The progress toward unit goals and the goals of the University.

The External Review Team report is the capstone of the program review. Its scope and perspective provide insights which, when combined with the self-study and internal review team report, round out the overall body of information which will be analyzed by the Program Review Panel.

Program Review Recommendations. The assimilation of the three reports by the PRP brings closure to the process begun some six months earlier. During the discussion which leads to their final report, the PRP may retrace some of the findings contained in the written reports or invite deans or members of the unit to meet with them in their deliberations.

The final report contains a summary of findings and a list of recommendations. It is submitted to the vice chancellor for academic affairs, with a copy to the unit. The unit may appeal to the PRP if it believes the conclusions and recommendations are incorrect. Following such an appeal and the response by the PRP, the unit may accept the findings or appeal to the vice chancellor. Upon completion of the appeal process, the report of the Program Review Panel (as modified) becomes a public document and the vice chancellor for academic affairs begins discussions with the unit concerning implementation of the recommendations. A plan of action is developed, and the unit is required to make periodic (normally annual) reports concerning its progress toward the plan.

It is important to note that the reports of the self-study and of the internal and external teams are regarded as working papers and are not made public; only the final report of the Program Review Panel is a public document. Each year, the reports of the units reviewed are summarized for the Board of Regents and forwarded to the Colorado Commission on Higher Education.

Reflection on the Process

The review process at the University of Colorado has changed during each of the seven years as new members have been appointed to the Program Review Panel, new approaches to the self-study have been tried by the units, and the impacts of the results have been absorbed into the ongoing life of the institution. Early in the process, it was clear that the members of the PRP were uneasy with their role and uncertain about the impact of their recommendations. Today, before being appointed to the committee, all or nearly all of the members have taken part in some phase of the process, either as part of a unit that has undergone review itself or as part of an internal review team for some other unit. This broadening experience factor has added to the maturity of the overall process.

Arns and Poland (1980) discovered at their own institutions that the *way* in which review was conducted was as important as *why* it was done. The University of Colorado has experienced the broad range of reactions which program review can produce, from defensiveness to enthusiasm. There are units which would testify that the process brought new life into the department and others which would argue that it was not worth the effort. Nevertheless, the results, though not always dramatic, have produced change on the campus and have guided decision making. Program review has become an integral part of a strategic-planning and budget process and has been the basis for a formal program-enrichment process which has diverted over $2 million per year to units targeted for improvement.

Finally, this institution knows more about itself today than ever before, and this self-awareness has contributed to a general sense of confidence and stability.

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