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ABSTRACT

Academic program approval and review in postsecondary institutions and in state systems are discussed, based on a 1979 survey of postsecondary institutions. Based on responses from 68 percent of 1,082 institutions, it was found that formal program-approval procedures are increasingly utilized (in their order of frequency) in independent four-year liberal-arts colleges, private junior colleges, and proprietary schools. Only a few institutions (mostly small private colleges), have no procedures. Information is provided on major purposes in conducting internal review of proposed new programs, criteria for program approval, persons involved in new program approval, and the academic program development procedure. Additional considerations include: practices and outcomes of system- and state-level approval, changes in program-review activities, reasons for system- and state-level program reviews, basic principles of good program review and the steps for implementing them, and controversial issues surrounding program review. Appended are brief descriptive summaries of program approval in Virginia, Rhode Island, and Washington, and summaries of internal review at the University of Iowa, California Community Colleges, and Broome Community College (New York). (SW)

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 An NCHEMS Executive Overview

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Program Review In Higher Education: Within and Without

Robert J. Barak

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Acknowledgments

Inspiration for this volume grew out of a mutual concern on the part of the author and the staff at the National Center for Higher Education Management Systems (NCHEMS) to identify key trends in academic program evaluation. Generous cooperation came from many quarters, including staff from the Western Interstate Commission for Higher Education (WICHE), who carefully surveyed the evaluating procedures of colleges and universities in the WICHE states; Jane Ryland, formerly of the State Higher Education Executive Officers/National Center for Education Statistics (SHEEO/NCES) Communication Project, who surveyed the efforts of the state systems and agencies; and NCHEMS, which provided valuable financial assistance.

As with any effort of this magnitude, countless others joined in the project. Too numerous to mention specifically, they can be commended as a group wholeheartedly. The faculty, staff, and administrators who completed survey questions and who opened their offices for professional visits during the course of this study deserve special recognition for their willingness to share materials, ideas, and concerns. In addition, appreciation goes to those scholars who thoughtfully reviewed an earlier draft of this report and freely provided suggestions and ideas for improvement. In this regard, a special thanks is extended to

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Introduction

This volume represents the first comprehensive effort to survey academic program approval and review in higher education. Although the evaluation processes themselves are hardly new, perhaps never before have they held such far-reaching consequences. In increasing numbers, legislators, administrators, and even faculty themselves are calling for ways of measuring educational effectiveness.

Historically, student protests of the late sixties, combined with an inflating economy, helped pave an irreversible path to the country's more recent taxpayer revolts. Throughout the seventies, pleas for performance audits and other educational control measures could be heard in both state and federal legislatures. And on campus, where earlier attempts had tried to expand and decentralize administrative procedures, deans and budget officers made an abrupt and dramatic about-face as they sought ways to balance their books and instill confidence in a system that clearly needed holstering. Today, long after student-activist energies have dissipated, demands for accountability in higher education continue.

Although it is now clear that program approval and review are hardly panaceas for all the ills facing colleges and universities, they have most assuredly proved themselves as useful tools.

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Presented here is a picture of the impact and results of academic program evaluation on the individuals most affected—namely, students, faculty, administrators, trustees, and state-level staff who are directly involved in evaluation of academic/occupational programs.

The underlying framework for this study relies on a survey taken in 1979 that involved approximately one-third of the country's postsecondary institutions. A total of 1,082 institutions were approached, of which 68 percent responded. Included among them were public and independent institutions with two-year, four-year, and graduate-level programs. In addition, visits were made to 53 institutions in 1977 and 1980, based on their types of evaluation programs (including both "model" and "typical" cases) as well as their availability for scheduling. Some site visits consisted of little more than evaluation of a single aspect or procedure, whereas others consisted of in-depth interviews with students, faculty, administrators, state-agency staff, board members, legislators, and others.

As might be expected, many of those interviewed tended to view program evaluation from the perspective of how it affected them personally and professionally. For some, program evaluation was seen as a process designed exclusively for program improvement; for others, it provided a means for setting institutional priorities and resource allocations; and for still others, it was simply another euphemism for program curtailment or elimination. Yet time and again, our findings revealed that the picture is far from being either all black or all white. Not everyone fits into the polarized camps. In fact, the majority probably hold mixed views, feelings, and reactions.

Regardless of the views we may hold, present demands for accountability will doubtlessly lend an added importance to program evaluation throughout the coming decade. Obviously some kind of mechanism is becoming increasingly necessary for making sure that budgets get balanced, educational outputs remain productive, and resource allocation decisions are rationally made.

INTRODUCTION

Beyond the cost-saving considerations of academic program evaluation lies a deeper concern for ensuring the inherent quality of our postsecondary institutions. Surely, one of the more gratifying aspects of the present study is to witness the increasing sophistication of evaluation procedures. If our pruning can be done in time, selecting the strengths and weaknesses of academic programs, perhaps we can avoid the disastrous results of making across-the-board cuts later on. Administrators who must allocate and reallocate in times of economic scarcity cannot hope to make their decisions wisely unless those considerations include thorough and systematic program reviews. And similarly, those programs that pass through the most rigorous approval processes will surely be the most apt to survive the inevitable trials of enrollment declines and fiscal austerities further down the road. Our present findings repeatedly indicate that although weak programs may suffer, strong programs are simply made stronger by undergoing evaluation procedures.

Throughout our investigation, material has been gathered that is felt to be of particular value to practitioners in postsecondary education. Generally speaking, examples were selected because they typified the kinds of policies and procedures utilized in a certain context; they are *not* intended to serve either as endorsements or models for others to directly emulate. Individuals wanting to develop or revise an approval or review process are advised to pick and choose elements that best meet their unique requirements. Perhaps it should go without saying that although many processes work effectively within the context where they are being implemented, none is applicable to all situations.

To relate our findings in the most succinct manner, every effort has been made to limit technical terminology to a very few critical concepts; to provide charts, tables, and graphs only where necessary; and to explain by way of example whenever possible.

At this point, the reader who is not thoroughly familiar with the language of program-evaluation procedures is strongly

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encouraged to refer to Appendix I, entitled "Terms and Definitions." Without a complete understanding of the crucial distinctions separating various kinds of review and approval activity, erroneous conclusions can easily be drawn. Also, for those seeking further information on aspects of program evaluation, the selected bibliography at the conclusion of this study is included as a helpful resource.

Approving Programs Internally

In the late 1940s, Professor L. Bailey (an assumed name) decided to unite his vocation with his avocation. As a professor of horticulture at a fairly large land-grant university in the Midwest, Professor Bailey was in an ideal position to expand his fascination with the art of ornamental horticulture into an undergraduate degree program. With just two students, a portion of an existing greenhouse, some donated equipment, and an unused plot of farmland owned by the university, Professor Bailey had, within a month's time, established a program in ornamental horticulture. Major curriculum for the program consisted of courses, texts, and supervised learning experiences, all of which were developed and taught by Professor Bailey with the part-time assistance of a colleague from the Agriculture Department. Degree arrangements were easily finalized by the registrar's office.

Since the 1940s, times have changed drastically. If Professor Bailey were to establish his program in ornamental horticulture today at the same university, he would need first to obtain

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departmental approval for his proposed program; the proposal would then go to a curriculum committee of the College of Agriculture; and then, if approved, it would be forwarded to the universitywide curriculum committee. After this, the proposal would be forwarded to the appropriate university administrator, and then, if endorsed by the administration, it would be sent to the board of trustees for their acceptance. But the process would not end there.

In all likelihood, the program-approval process would continue from the university to the state postsecondary planning committee, which would review the program and make a recommendation to the planning commission. Finally, the commission would either approve or deny the request.

Depending on the availability of financial resources, Professor Bailey's proposal might also need to go to the legislature for funding, where the proposal would undoubtedly require further review. In developing his program proposal today, Professor Bailey would need at least two fairly comprehensive sets of documents (one for internal use and one for external use) providing extensive data on projected enrollments, equipment needs, staffing needs, and funding. Industry and manpower projections would be required both to confirm program needs and to demonstrate clearly that his proposed program did not unnecessarily duplicate efforts at other state institutions. Furthermore, he might also be required to have outside consultants (usually out-of-state peer consultants) review his program at one or more levels. Unlike the month that it took Professor Bailey to establish his program in the 1940s, it would take about a year and a half *at a minimum* for his proposal to obtain final approval today.

Professor Bailey's hypothetical experience can be viewed as symbolizing the complexities of modern-day higher education. Also, it demonstrates a typical series of procedures necessary for obtaining program approval. Unlike the "golden era of expansion," which influenced higher education as recently as the

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1960s, increasingly demanding efforts are now required to obtain increasingly dwindling resources. At nearly every public college or university in the country, a series of formal internal processes and procedures is required for obtaining approval of proposed programs. In addition, at least one external group of procedures is called for at the final approval stage. In all but about five states, a postsecondary-education commission reviews and approves programs. Although state agency reviews typically affect only the public institutions, independent colleges and universities that depend on public aid increasingly find themselves subject to similar regulations. Without detailing the conditions leading up to present circumstances, suffice it to say that program approval is the child of a labyrinthian educational system, a system that expanded speedily in the latter part of this century.

Focus in this chapter centers on program approval within colleges or universities; in the next chapter, focus is on system- and state-level review process. Indeed, because of the abundance of state-level postsecondary agencies, program approval is typically a continuous process running from the proposal development stage at the department or faculty level through final program approval at the state level (see figure 1).

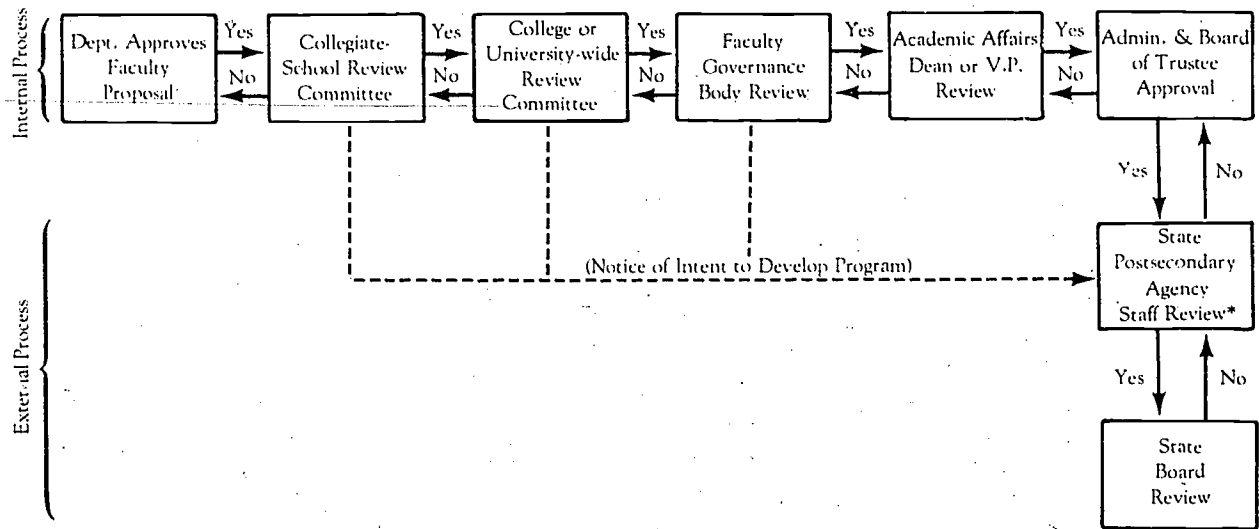
Internal program-approval procedures are found today in virtually all public institutions, as well as in most large independent colleges and universities. According to our survey, formal procedures are increasingly utilized (in their order of frequency) in independent four-year liberal-arts colleges, private junior colleges, and proprietary schools. Only a few institutions—mostly small private colleges—have no procedures whatsoever.

The Reasons

Almost all internal program-approval processes seek in one way or another to improve institutional administration. Dif-

FIGURE 1

Typical Program Approval Process for Four-year Colleges and Universities



*Insert system review here if institution proposing the program is a part of a system of institutions (that is, a multicampus institution).

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ferences exist only in detail. Basically, they try to provide a systematic means for controlling expenditures while simultaneously meeting the needs of quality assessment. Unlike business or industry, however, higher education typically operates without a strongly centralized management structure. Although this process no doubt contributes to a more democratic form of decisionmaking, it is very time consuming. With few exceptions, most colleges and universities utilize some form of quasi-centralized or collegial administration in matters relating to program approval. And interestingly, the exceptions are usually found only in two-year colleges, bible colleges, and proprietary institutions, which are usually closer in management style to private business than to typical colleges and universities.

Reasons cited for conducting internal program approval are fairly similar in most institutions under the Carnegie classification system (see figures 2 and 3). Heading the list is a desire "to determine if documented needs justify the program," such as student interest, employment opportunities, and so on. In order of frequency, the second and third most popular reasons are: a need "to determine if resources (are) sufficient to support a quality program," and a desire "to determine if the program is consistent with institutional role and mission."

In addition to the above-stated reasons, yet another reason for formal internal program approval surfaced frequently in in-depth interviews. Perhaps this purpose can best be stated in the words of a university program-approval report, which forthrightly explains that programs that have been carefully scrutinized on the campus act "as a control against inclination at the state level to select programs for funding in a more political way."

Public colleges and universities in particular indicate a belief that by doing their internal program-approval homework they may best be able to forestall politically motivated external approval activity. In this sense, "political" refers to unwarranted intrusion into the areas of institutional autonomy and academic freedom, as well as to the distribution of resources and programs

FIGURE 2

**Major Purposes in Conducting Internal Reviews of
Proposed New Programs (Percentage) By Type of Institution**

	1.0 (P)	1.0 (I)	2.0 (P)	2.0 (I)	3.0 (P)	3.0 (I)	4.0 (P)	4.0 (I)	5.0 (P)	5.0 (I)
Consistent with role and mission	60	50	83	65	N/A	50	69	69	100	19
Consistent with institution and/or state master plan	50	38	74	50	N/A	25	53	51	67	6
Sufficient resources	67	50	83	59	N/A	44	63	62	100	13
Need justified	70	50	81	59	N/A	50	71	69	100	13
Avoid program duplication	50	38	70	35	N/A	25	58	38	83	6
Potential for accreditation	40	38	72	47	N/A	29	44	46	100	0
Other	13	13	11	3	N/A	4	6	8	17	0

Code: (P) = Public

(I) = Independent

Institutions are classified by Carnegie type as contained in *A Classification of Institutions of Higher Education* (1976)

1.0 = Doctorate-Granting Institutions

2.0 = Comprehensive Universities and Colleges

3.0 = Liberal Arts Colleges

4.0 = Two-year Colleges and Institutions

5.0 = Professional Schools and Other Specialized Institutions

N/A = Insufficient Data

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FIGURE 3

Criteria for Approving New Program Proposals

(% of Total Institutions and
Rank Order of Responses to Each Criteria)

	Rank Order	%
I. Need for the Program		
a. Student Interest	2	83
b. Justification of Need	1	93
c. Job Opportunities	3	80
d. Duplication of Other Programs	4	78
e. Centrality to Other Campus Programs	6	69
f. Value to Society	5	70
II. Cost and Benefits of the Program		
a. Number of Graduates	12	16
b. Projected Graduates	4	68
c. Present Enrollment	11	27
d. Projected Enrollment	1	80
e. Program Cost	8	50
f. Student Credit Hours	7	55
g. Economics from Elimination or Consolidation	10	28
h. Faculty Workload and Productivity	6	59
i. Faculty Quality	5	61
j. Sources of Funding	3	70
k. Physical Facilities Needs	2	78
l. Adequacy of Student Financial Aid	9	38
III. Objectives of the Program		
a. Consistency of Role with Mission	N/A	77
IV. Accrediting Requirements		
	N/A	71
V. Other		
	N/A	2

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to the various state institutions. Although the evidence fails to indicate conclusively whether or not internal approval processes actually curb or limit external reviews, there can be little doubt that most external reviewers appreciate the fact that internal approval procedures can help lighten their loads.

Aside from positive aspects, however, comprehensive internal reviews can have negative implications as well. In one instance, the state agency failed to differentiate between institutions with thorough internal review procedures and those with poor or even no internal approval procedures. In this case, the latter category of institution had an obvious advantage since a greater percentage of their programs were passed along to the state agency. In a related situation, the state agency kept score of how many programs it approved and disapproved for each institution. Under this system, no matter how good a job an institution did in internal review, some of its proposed programs still were turned down, simply to make it appear that the institution was receiving fair treatment. A problem emerged with another such scoring practices in a state where all the weaker program proposals were weeded out before proposals were sent to the state higher-education agency. In this state, because only a few programs were ever turned down, a key legislative committee not only determined that the state agency wasn't doing its job but even went so far as to try to establish a legislative program-approval process. Obviously, in all these instances, qualitative dimensions were obscured by a preoccupation with program rejection rates.

The Participants

Participants in the program-review process tend to hold widely differing views. For example, program faculty may be either critical or positive about a particular proposal, depending on their ability to influence the results. As financial resources have

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dwindled, it's become more and more likely that if one group of faculty gets a program, another group will have to do without. In some locations, the state postsecondary-education commission actually requires trade-offs, where one program must be dropped for every new program added. Not surprisingly, some campuses visited during the course of this study reported vicious conflicts over program approval and resource distribution, a situation that is particularly apt to occur on campuses that are heavily politicized by rival faculty unions or factions.

On another level, nonprogram faculty who sit on review committees have an awesome responsibility to maintain impartial views on program proposals. While most faculty committees we met with undertook thorough reviews, some exhibited a tendency to pass on difficult recommendations to the campus administration, only to turn around later and criticize the administration's decisions. As program faculty become more adept at proposal development, it becomes that much more difficult to select among competing proposals. In response to such perplexing alternatives, one faculty committee even went so far as to reject an attempt to introduce consistent criteria to their review process. Instead, they opted to send all proposals on to the administration to "let them make the choices." Although the extent of the problem is difficult to assess, we found several instances in the course of this study.

In many cases, the task of approving or disapproving new programs ultimately falls to the dean, the provost, or the vice-president for academic affairs. According to our survey, this person's role is increasing on many campuses for the above-noted reasons, as well as due to a more general trend toward greater administrative control. But if this trend is relatively new at larger public institutions, it's long been the policy at many community colleges, bible colleges, and proprietary institutions. At these institutions, the dean has always been the person primarily responsible for program approval, and frequently he or she is even the developer of the initial proposal. As a case in point, we

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found one bible college in the course of this study that did not even have a faculty curriculum committee. All curriculum decisions were made by the administration.

Besides faculty and chief academic officers, a number of others, such as trustees and students, take part in the program-approval process (figure 4). Generally speaking, as far as trustees are concerned, the larger the institution the smaller their role. Yet trustee attitudes, combined with those of the chief executive officers, often determine how vigorously program proposals are internally reviewed. Student roles, on the other hand, tend to vary widely in all types of institutions. Although many institutions try to include students in the approval process, actual student impact depends greatly on the opportunity of students to participate in the process. Among those institutions with student involvement, three primary student activities are identifiable: membership on an institutionwide committee (with or without vote), involvement in program development at the departmental

FIGURE 4

Persons Involved in New Program Approval

(Percent of Responses and Rank Order)

<u>Persons Involved</u>	<u>%</u>	<u>Rank</u>
Faculty Proposing Program	97	1
College Dean	88	2
Department Chairman/Head	86	3
Academic Vice President	67	4
Other Faculty (same institution)	65	5
Consultants (program related)	59	6
Trustees	39	7
Students	34	8
State Agency	27	9
Consultants (general)	24	10
System Staff	20	11

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level, and participation in surveys. Of the three, membership on institutionwide committees held the most influence and, interestingly, both faculty and administrators at institutions using this approach seemed generally positive about the results.

The Procedures

On some campuses, program-approval procedures are formally written out and widely distributed. On others, the procedures are less formal, with the specifics for each proposed program determined individually. Based on our findings, the larger the institution, the more formal the procedures. But particularly at large research universities, these formal procedures tend to maintain a high degree of flexibility. For example, the University of Minnesota procedures state that "the University does not prescribe the form in which the proposal document must be cast." Instead, they offer a basic outline "organized on the contours of past proposals which have been communicated efficiently and with fidelity. . . ." By way of contrast, other types of institutions with such formalized procedures tend to be much more prescriptive. In fact, as a time-saving measure, they sometimes merely incorporate or supplement the procedures of state coordinating boards. Nonetheless, this method may work if strictly institutional concerns are not slighted by state officials.

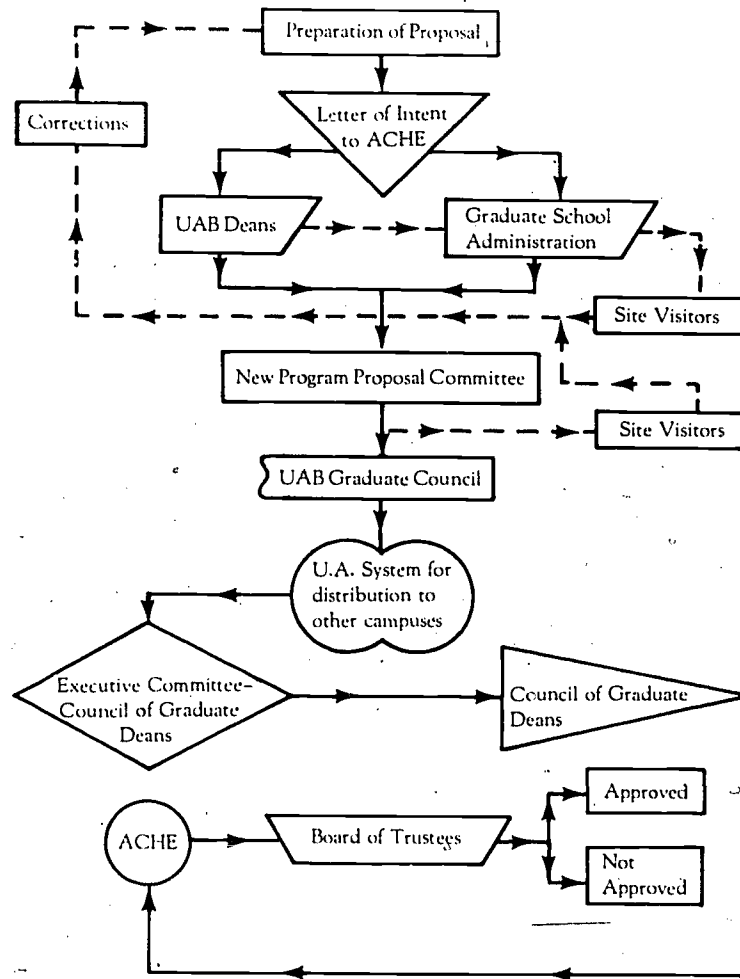
At this point, to help the reader better understand some of these methods, we might look briefly at a specific program-approval process such as those indicated in the flowchart from the University of Alabama (figure 5). At the Birmingham campus, the graduate program-approval process involves deans, the Graduate School of Administration, various committees, the system-level office, the board of trustees, and the Alabama Commission on Higher Education (ACHE).

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FIGURE 5

**University of Alabama Graduate School
Submission of a New Program Proposal**

FLOW CHART



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Community Colleges

Up to this point, discussion about internal program approval has centered primarily on four-year public colleges and universities and large private institutions. Community colleges exhibit a number of interesting variations worth investigating. Perhaps foremost among these distinctions is their relatively heavy reliance on manpower studies for program initiation. Unlike four-year colleges and universities, which often propose programs with vaguely defined potential job markets, most community colleges emphasize strong employment prospects. In fact, sometimes graduates are virtually guaranteed specific jobs.

To illustrate the extent of such efforts, one might note the process at Gateway Technical Institute in Wisconsin. At G.T.I., a proposed program must meet the qualifications of something called "Manpower Demands," which examines present and future job possibilities. One aspect of "Manpower Demands" focuses on specific "job outlook" levels necessary for degree completion, including detailed job descriptions; diploma-level jobs; job-placement locations (such as the size, scope, and location of labor-market demands); and eventual promotion levels.

Unless requested to do so by an external agency, few four-year institutions document manpower needs in this detail. But requirements are changing. Many four-year institutions are starting to ask for and get better job-prospect documentation. In some cases, this trend is a natural response to criticism about graduates not finding jobs. Yet, because manpower projections seem to be more reliable in the vocational areas than in other kinds of educational programs, our respondents in four-year institutions often expressed skepticism about utilizing marketing-type procedures for program development and approval. Figure 6 indicates a hypothetical approach that makes use of a weighted system for determining program marketability.

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Another distinguishing feature in community-college procedures is their tendency to defer program decisions to administrators rather than faculty, a finding often noted by others studying community-college administrative styles (McCord 1974; Richardson and others 1972). To illustrate the point, let us look briefly at Broome Community College in New York. At Broome, program proposals originate in campus-offices, such as those of academic personnel, continuing education, placement, office, or the curriculum dean. They are then reviewed by the curriculum dean and sent on to the appropriate line administrator. Copies of the proposal are also forwarded to the director of planning and development, as well as to the college senate and the Curriculum Committee. Finally—after a successful feasibility study—the curriculum dean and the vice-president for academic affairs send the proposal on to the president. Assuming approval at each stage, the President's Council will review the proposal and make a recommendation. If the president gives the go-ahead, the proposal is sent first to the trustees, then to State University of New York Central, and then on to the New York State Education Department.

Although specifics may vary from college to college, Broome's program-approval process is fairly typical of the strong administrative influence at most two-year institutions. Moreover, the degree of administrative involvement in the approval process is consistent with the generally heavy role of community-college administrators in virtually all other aspects of community-college operations (Thornton 1966; Blocker and others 1965).

Another typical aspect of Broome's approval process is its reliance on a support unit, in this case the director of planning and development. Community colleges, much more than their four-year counterparts, utilize staff units. Although at Broome the director of planning and development merely coordinates the feasibility assessment, in other community colleges support units may actually perform the feasibility studies themselves. Services of these support units range from simple coordination

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and basic research to taking full responsibility for proposal development and even playing a key role in final approval. Similar units may be found in most four-year institutions, but their actual program-approval role is generally more limited.

In four-year colleges or universities most (if not all) program proposals are faculty-initiated, but at two-year institutions faculty are just one of many such sources. For example, the Community College of Philadelphia notes the following new program sources:

1. Personal observations on the characteristics of the local and regional labor markets
2. Manpower-studies data
3. Requests from industry
4. Requests and suggestions from students, faculty, administration, and board
5. Recommendations of college advisory committees
6. Offerings at other schools

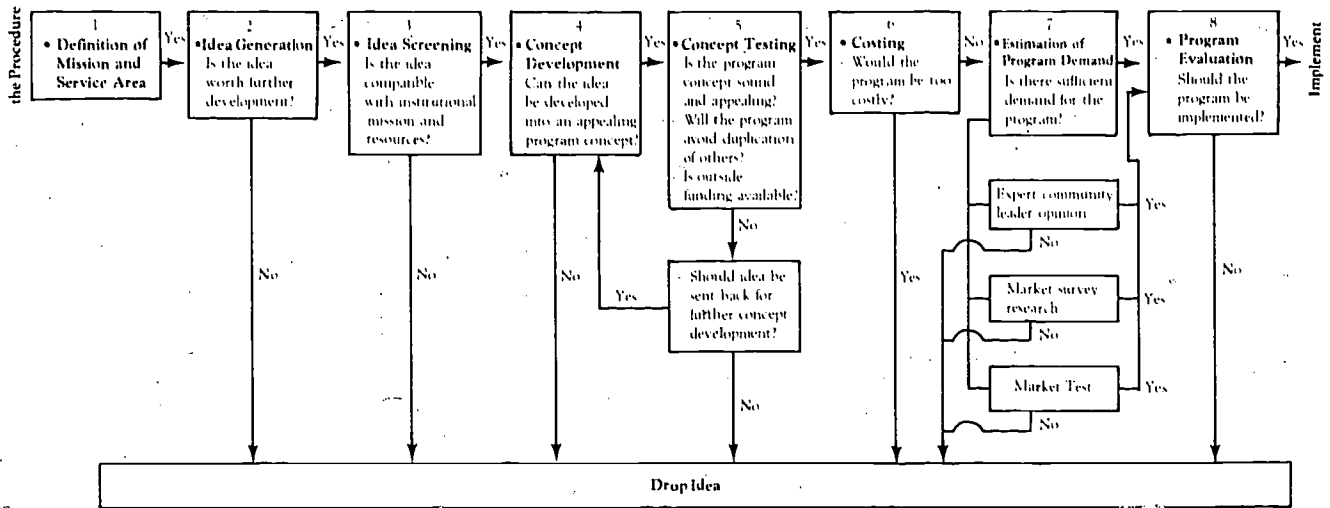
In another instance, a policy at Williamsport Area Community College in Pennsylvania states that the college seeks "suggestions for new curriculum(s) from its broad constituency of students, faculty, staff, sponsors, trustees, business and industry, trade and professional groups, government, and the larger community of citizens."

Because of the nature of these sources, administrators are apt to play a more central role in program initiation than faculty. Consequently, the internal approval process in the community colleges tends to be considerably shorter than at four-year institutions, simply because administrators have a hand in both ends of the process—initiation as well as approval.

Another interesting difference from four-year institutions is the role local citizens often play at community colleges in initiating, approving, and even terminating programs. Citizens increasingly help gear program designs more directly to community and business needs by serving on advisory councils and

FIGURE 6

Summary of The Academic Program Development Procedure



(SOURCE: Wayne A. Lee and Joseph E. Gilmour, Jr. "A Procedure for the Development of New Programs in Postsecondary Education." *Journal of Higher Education*, Vol. XLVIII, No. 3, May/June 1977, p. 307.)

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committees. An appropriate example can be found at Housatonic Community College in Bridgeport, Connecticut, where advisory-committee members are selected in accordance with standards similar to those found in fair-employment practices. Once appointed, these citizen participants not only assist in program planning and evaluation but also help maintain regular contact with the occupational community. Often, they are called in when program needs first arise, and more and more they stay on to help actively with program needs. Although many four-year colleges and universities now make use of advisory groups, they usually play considerably reduced roles.

In addition to the above-mentioned aspects, two-year colleges distinguish themselves from four-year institutions by means of the very quantity of new programs they propose, especially in the occupational area (see Cosand 1979). Partly, this reflects the short-term, manpower orientation of community colleges and partly it reflects the dramatic recent growth of community colleges. By 1978-1979, 36.4 percent of postsecondary students were enrolled in two-year institutions, according to the National Center for Education Statistics.

To return briefly to the case of Professor Bailey, it's difficult to say whether or not his ornamental horticulture program would find a niche today in one of the country's community colleges. But at least in terms of the red tape involved, he would probably receive his answer much faster there than at most four-year colleges and universities.

Approving Programs at System and State Levels

System-Level Program Approval

Program approvals typically continue well past the level of internal approval. The next step for an increasing number of institutions, and particularly for community colleges, is the system-level review. To date, however, a common complaint of system-level review has been its failure to see beyond its own immediate horizons. For example, in states where postsecondary education is divided into subgroups (such as community colleges, four-year colleges, and research universities), the system perspective is often no wider than the segment it represents. As a result, program duplication occurs easily.

All of the system offices we visited conducted some kind of program approval, and many system (and district-level) offices are actively upgrading their effectiveness. In most cases, system-level reviews are conducted by interinstitutional committees

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comprised of academic officers from constituent institutions and system-level staff. Less frequently, reviews are entirely conducted by staff. But whatever the case, these groups usually make recommendations to the district or system board for either approval or nonapproval.

As a specific example, we might look at the Minnesota state university system, which illustrates the role of a multicampus board in approving undergraduate programs. By utilizing an interinstitutional committee and external consultants, the Minnesota state university system provides a fairly typical example of a university system-level office. According to the Minnesota procedures, university-approved program proposals must be sent to the vice-chancellor for academic affairs, who in turn sends copies to pertinent agencies, such as the Department of Education or the Higher Education Coordinating Board. The vice-chancellor's office then prepares a proposal summary for the state university board's Educational Policies Committee.

At this time, the university president and others may appear before the committee to react to the summary or to elaborate further upon the proposal. Even if a program proposal has been denied by one of the consulting agencies, the Educational Policies Committee retains authority to override the decision and permit the university to implement the program.

Although it's the responsibility of the vice-chancellor for academic affairs to keep the chief academic officer of the university informed about the status of the proposed program at each level of consideration, it's the job of the chancellor to actually approve certain new programs when the impacts of such changes fall within certain prescribed guidelines. If the chancellor has questions about any of the proposals that fall within his or her jurisdiction, or feels that a program should be further discussed because of its implications for educational policy, then the proposal can be deferred to the committee. In like manner, if the university president disagrees with the chancellor's decision, the matter can be arbitrated by the

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committee. With slight variations, entailing the use of outside consultants, a similar procedure is devised for graduate-level program proposals in Minnesota. At this point, because details of system-level reviews are remarkably similar to state-level operations (Smith 1980), our attention will now focus on the specific workings of state-level approval.

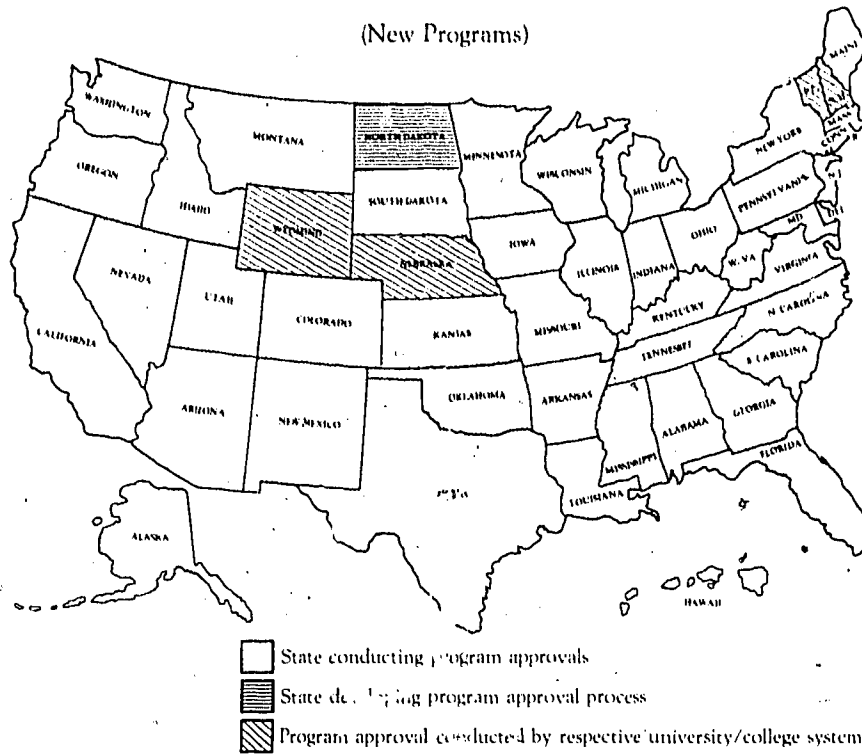
State-Level Program Approval

Generally speaking, state-level program-approval responsibilities have evolved hand-in-hand with the agencies themselves. Many agencies began as voluntary coordinating boards and gradually acquired broad discretionary powers either as regulatory boards or, in some instances, even as statewide coordinating boards. Today, program-approval responsibilities of these agencies are still growing, as evidenced by recent statutory changes in several states (figure 7).

By 1981, state agencies or university systems in all but 7 states conducted at least some new program approval for public institutions. And out of the states represented, 9 also conducted new program approval for private/independent institutions. In terms of their actual responsibilities, 33 had authority to approve programs in the public sector, and 10 could review and make recommendations. Interestingly, only 5 agencies had authority to actually approve in the independent sector, but 4 could make recommendations and conduct reviews (figure 8).

By contrast, a 1978 study by Barak and Berdahl found that agencies at that time were still very much in the developmental stage. In that study, 21 states reviewed new program proposals; today, 47 states exercise that responsibility. Similarly, a number of agencies that previously only had authority to make recommendations now have increased regulatory responsibility. Many of the agencies that formerly had relatively weak statutory responsibility now have added clout by virtue of their expanded budgetary responsibilities. Clearly, the final determination for

FIGURE 7
Status of State-Level Higher Education Agency Program Reviews
(New Programs)



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(SOURCE: Robert J. Barak, *State-Level Higher Education Program Review Update: 1979*. SHEEO/NCES Communications Network, 1979.)

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new program proposals has shifted out of the hands of the institutions and into the state-level postsecondary agencies.

In the Barak and Berdahl study, considerable concern was expressed about *which* new programs should be reviewed at the state level and how they should be defined, but this no longer appears to be an issue. A program now is largely viewed as "a set of courses or offerings leading to a degree or certificate," with the exact definition varying from state to state.

FIGURE 8

**Authority to Approve at Least Some New Programs
By Governance Type and Sector**

	Public Sector				Independent Sector			
	No Authority	Review Recommended	Approve	Total	No Authority	Review Recommended	Approve	Total
Governing Boards (19)			19	19	19			19
Regulatory Coordinating Boards (22)	1	7*	14*	22*	16	1	5	22
Advisory Coordinating Boards (4)	1	3		4	1	3		4
No Coordinating or Governing Board (5)	5			5	5			5
Total	7	10	33	50	40	4	5	50

*Two agencies had varied authority depending on the type of institution involved and their relationship to the agency.
(R.J. Barak, 1981)

As might be expected, the scope of programs under review has clearly broadened. While some states formerly reviewed only certain specified programs, such as upper-level graduate programs,

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most state agencies now review all new programs, and many approve program majors as well as minors. In a similar vein, additional service and outreach programs have joined the list of programs that come under review.

An analysis of this evolution seems to show an increase in state-level agency involvement following a proportionate decrease in institutional credibility in the eyes of many state legislators and executives (Geiogoue 1980). Although credibility loss, in some instances, is unrelated to academic programmatic issues—as through an athletic scandal or student unrest—added restrictions are often seen as a way government officials can increase institutional accountability (see Gentile 1980). Admittedly, state officials are sometimes plainly frustrated by the seemingly never-ending demands for more funds. Whatever the case, state agency powers are increasingly used as a means for keeping better tabs on resource allocation.

Although actual review criteria such as needs, costs, and quality control have not changed significantly at the state level, agency sophistication in applying these criteria has. No longer are single measures or indicators used in applying review criteria. Today, agencies use multiple criteria, ask more difficult questions, and demand more exact responses. Several states now ask for program-performance measures to check up on programs after the initial approval.

Partly in response to criticism, the state-level approval process has recently become more open to institutional participation in decisionmaking. Also, some state agencies are now defining their territory more clearly to encourage certain kinds of institutional program development while implicitly or explicitly discouraging others. For example, the Department of Higher Education in New Jersey encourages the development of new academic programs in industrial, technological, governmental, and human-service-manpower concerns. Also, they encourage community-college initiatives “in such high technology programs as machine tool technology, aviation maintenance technology, and energy

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technology...." Other programs, of course, are implicitly discouraged.

Several state agencies now require (either formally or informally) some form of a "start one-stop one" approach to new program approval. In those states, institutions are expected to terminate a program each time a new program is proposed.

Some Typical State-Agency Procedures

Two basic approaches are employed for state-level program approval: (1) planning and/or budgeting, and (2) incremental. States using the planning approach usually request explicitly that new program proposals be coordinated with an overall planning effort, generally as a part of the state's master-planning process. In New York, for example, new program proposals must first meet the requirements of the state's master plan and only later are they referred for specific program approval. Incremental approval, or the one-at-a-time method, is no doubt more common today. In these cases (except in states where all proposals must be turned in at a particular time) program proposals are submitted at the convenience of the proposing institution. In other words, the relationship to the planning process is considerably less explicit in states using this approach.

Advantages and disadvantages are found in both approaches. Where some institutions have criticized the planning approach as being too lengthy and inflexible, many state agencies feel delays are justified when proposals can then be coordinated with master-planning and budget needs. In fact, even states using the incremental approach often do so within the general context of a master plan, while retaining program approval and planning as separate processes. Moreover, many states using the planning approach provide additional flexibility by allowing institutions to modify the planning process in special circumstances. To get a better idea of the actual implementation of these approaches,

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profiles of selected program-approval processes are included in Appendix II.

In conclusion, it should be noted that two-year community colleges and vocational-technical schools often have parallel and, unfortunately, sometimes redundant state-level approval procedures. Some states offer both a state-level postsecondary coordinating/governing commission, as well as a separate state-level board for community-college and vocational-technical education. Understandably, where this dual structure occurs, many agencies try to combine their respective approvals into a single effort.

Reviewing Programs Internally

Current Trends

Perhaps one way program review can be distinguished from program approval is by the amount of controversy that surrounds it. When resources must be reallocated, courses canceled, or programs and faculty terminated, the review process often becomes a topic of fervid debate. Newly proposed programs, on the other hand, frequently do not have faculty, students, or resources already committed, so their nonapproval tends to be markedly less controversial.

Despite the recent disputes, the topic of internal program review is hardly new. Many postsecondary institutions—in one form or another—have been reviewing their programs for years. While early surveys of program-review activities are notably scarce (Mortimer and Tierney 1979), this doesn't necessarily mean that reviews didn't exist. Daniel Stufflebean (1980) refers to an unpublished survey that shows limited review activities at several universities in the early sixties. Our survey results substantiate this finding. Approximately 12 percent of the responding institutions indicated their program-review policies

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and procedures began prior to 1965 (see figure 9). What is new, however, is the dramatic increase in program-review activity since the mid to early seventies.

In 1975, the Carnegie Council speculated that institutional administrators would be relying much more heavily on program and course review in the future (Glenny and others 1976). Their predictions were overwhelmingly accurate. Approximately 76 percent of the institutions we surveyed initiated their present policies after 1970, and more than half of these (43 percent) said their reviews were developed after 1975. Today, the trend is still growing. More and more colleges and universities are undertaking internal program reviews or are planning to do so in the near future (Glenny and others 1976).

FIGURE 9

**Date Present Policies and Procedures Initiated (%)
In Colleges and Universities**

Before 1965 12%	1965-69 12%	1970-75 33%	Since 1975 43%
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Out of all of the colleges and universities surveyed, 882 (82 percent) said that they employed some form of "formal review," which, in limited cases, might be taken to mean an annual budget review or even a regional accreditation review. Interestingly, many of these institutions reported that they had internalized their state's review procedures as their own. A few institutions, 22 (2 percent), responded that while they did not have a formal system of internal program review, they did have an informal process. And finally, about 178 (16 percent) of the responding institutions indicated that they conducted no internal program reviews whatsoever (see figure 10).

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FIGURE 10

Colleges and Universities, by Type of
Program Review Activity

	Number	Percent
Have Formal Program-Review Process	882	82*
Have Informal Program-Review Process	22	2
Did Not Conduct Internal Program Review	178	16
TOTALS	1082	100%

(R. J. Barak 1980)

NOTE: Because the survey respondents were not all responding to the same definition of "program review," varied institutional processes (such as an annual budget review and a regional accreditation review) were sometimes included. Accordingly, the actual number of institutions with systematic evaluations of all academic programs is presumably less than the 82 percent indicated.

Our survey responses clearly indicated that large research universities are most apt to conduct internal reviews. And perhaps coincidentally, universities that rank high in the various peer ratings are likely to show a similarly high usage of internal program reviews. In some cases, however, the reviews are strictly limited to graduate programs.

Unless the four-year type of public institutions or community colleges are members of systems or districts that either encourage or require reviews, they are less inclined to conduct such evaluations on their own. Nonetheless, a noteworthy exception to this survey result was found in community colleges that conduct

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program evaluations in order to receive grants under the 1976 Vocational Education Act. Other types of institutions in our survey, such as predominantly black colleges and universities, bible colleges, small independent colleges, and proprietary schools, basically adhere to a pattern of either limited or no internal program-review activity.

In those institutions that did have internal reviews, we found definite signs of expansion. In some cases, concern about the quality of the undergraduate programs has encouraged deans, faculty, and academic officers to expand graduate reviews to lower-level programs. A few institutions, such as the University of Iowa, currently include research and service programs in their formal reviews as part of an effort to review all institutional activities. Similarly, many institutions show signs of carrying out their review procedures with an increased rigor. At institutions such as the University of Illinois-Urbana/Champaign, the University of Minnesota, and the University of Iowa, such changes have come in the wake of evaluations done on the review procedures themselves.

Comparisons with processes of a few years ago indicate that reviews are increasingly apt to utilize multiple review indicators, which are often plugged into detailed computer data bases. Typically, institutions report stronger reviews thanks to improved means for gathering program-costing information, as well as use of more sophisticated outcome-type measures such as alumni and employer surveys. Also, consultants are increasingly brought in either from other programs at the same college or university or from similar disciplines at other institutions.

Rewards accruing to this increased rigor are well documented. DiBiasio (1981) has studied in-depth the program-review system adopted at Ohio State University (see also Arns and Poland 1979). In his preliminary findings, he found that improved methods provided a better overall perception of the program, which, in turn, helped promote fiscal and governance changes as well as better communication with other programs. Also, faculty,

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curriculum, and equipment resources were all put to more productive use. DiBiasio further discovered a number of so-called "secondary consequences." Among them was an increased faculty communication both with one another and with administrators. In some cases, DiBiasio found that the review process brought out a particular faculty member's administrative potential in a way that had previously gone untapped.

Perhaps the most significant impact of recent reviews is their growing role in institutional decisionmaking. Originally, program reviews primarily served as information reports, which faculty tended to use or discard as they saw fit. Although many of these reviews seemingly did result in substantive improvements in individual departments, few outside individuals ever saw them. Today, not only administrators but many faculty ask for wider review distribution. As one faculty report put it, "The review documents constitute, when properly done, . . . the single most valuable and comprehensive source of information available to the colleges, the Graduate School and central administration in planning for the future of this university."

Examples of such expanded distribution can be found at the University of Vermont and Ohio State University, where program reviews provide a critical link between planning and budgeting. Through a mechanism known as the "Memorandum of Understanding . . . the annual budget becomes less an unspecified grant and involves performance expectations and explicit objectives as well as dollars" (Arns and Poland 1979, p. 13).

In like manner, the University of Louisville circulates program reviews among all of the vice-presidents and to a planning staff including people in the planning office, budget office, and office of institutional research. The University of Louisville has recognized that the review process cannot be separated from overall planning. According to a university document, "Neither is meaningful without the other. A plan to achieve stated objectives is not complete until alternatives are considered and their respective resource requirements are compared." The following

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list includes a few of the many objectives of the university's "programmatic planning reviews":

- To involve units in an assessment of their current objectives and activities in relation to institutionwide goals
- To begin the process of collecting output information appropriate to each unit
- To begin the process of identifying, for each unit, the resources used (facilities, finances, and personnel)
- To provide a basis for recommendations regarding (1) internal allocations in the preparation of annual operating budgets and (2) reallocations (in the form of budget adjustments) during the operating year
- To serve as a building block in an evolving planning process that will make planning and resource allocation increasingly rational processes

At other institutions faced with conditions of financial exigency, program review is increasingly used as an eleventh-hour device for setting program priorities (Dougherty 1979). Various processes are now available for linking program review with resource allocation decisions. Based on their hands-on experience, Shirley and Volkwein (1978, p. 25) suggest using reviews at times of financial exigency to "extract programs not meeting (program) priorities . . . [and to] preserve the vitality of those at the heart of the intellectual enterprise." They further believe that "these decisions are best made at the campus level within the context of an overall academic planning process which involves faculty, students, and administrators."

Most ideally, planning, priority setting, and review processes are well established prior to the onset of financial exigency. To those ends, a number of colleges and universities are actively implementing planning processes that use program review to set priorities among institutional programs. To gain insight into the actual application of internal review procedures, the reader is referred to the examples provided in Appendix III.

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Basics of Program Review

Purposes

When asked why they decided to involve themselves in internal program reviews, the surveyed institutions mainly indicated that they wanted to improve their academic programs. Many pointed out that without knowing a program's strengths and weaknesses, such improvements were virtually impossible. Institutional literature tends to substantiate this point. For example, a report by the Committee on Internal Program Review of the Council of Graduate Schools states simply that "the purpose of a well conducted review process is to help the program improve" (Gentile 1980, p. 7). Although such statements are no doubt accurate in their own right, a common difficulty arises if faculty take "improvement" to mean that resources will be added later on when, in fact, they will not.

Perhaps not so surprisingly, the second most commonly cited reason for conducting internal program reviews is to redistribute resources and reduce programs. Understandably, this second reason was most frequently cited by institutions undergoing severe enrollment declines and retrenchment.

Participants

Because of the need to draw on widely ranging perspectives and expertise, the role played by review participants is crucial. In each instance, it must be decided who will be involved and to what extent they will have responsibility.

Program Faculty. As might be expected, program faculty are key figures in the review process. Although in limited cases departmental faculty conduct all aspects of the review themselves, we found that generally faculty concentrate on data gathering and the self-study aspects of the review.

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Consultants. To obtain objectivity, most institutions try to involve faculty from outside the department under review. Outside consultants with general backgrounds, as opposed to disciplinary backgrounds, are rarely used except to consult on the review process itself. No matter where their home territory is—on campus or off campus—these consultants usually have influential roles to play either as members of review teams or as participants on institutionwide committees. More than a quarter (26 percent) of our survey respondents remarked that campuswide committees are the final arbiters in reviewing campus programs.

By and large, outside peer faculty are hired as consultants, with salaries ranging from gratis to upward of \$250 a day plus expenses. Often, when a lower rate of pay is provided, they receive an additional stipend for writing the report, an activity that is usually estimated to take anywhere from one to four months to complete. Although the time consultants spend on campus may vary from one day to about five days, these visits typically include interviews with the program faculty, students, and administrators, plus appointments at related facilities such as laboratories or libraries. Scheduling formalities vary tremendously, but most consultants are free to browse and investigate as they wish. In a few instances, however, consultants are not permitted to socialize with program faculty, particularly when internal evaluations are done in conjunction with external reviews.

According to at least some estimates, three is the ideal number of peer consultants. As one respondent put it, "The use of three consultants enables you to balance the team [ideological differences within a discipline], allow for a swing vote, and provide more breadth and depth into the particular discipline or field." Although only 5 percent of the respondents indicated that the use of consultants was mandatory, roughly half of the institutions conducting reviews chose to use them. This no doubt reflects a relatively high rate of satisfaction.

Of those respondents indicating that they made use of outside

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peer consultants, 17 percent said that they were "extremely satisfied," about 75 percent indicated that they were "somewhat satisfied," 7 percent were "somewhat dissatisfied," and only 1 percent reported they were not satisfied at all. Those who were dissatisfied complained that the consultants either "didn't understand the local situation" and seemed "biased for or against the department under review," or that they were "too costly." But those who championed the consultants countered that consultants seemed to be "the only way to bring objectivity to the review" and that they were "needed to assess the quality dimensions of the program."

Others. Other key participants in the review process include deans (usually a school or institutional academic dean or a graduate dean), the vice-president for academic affairs, and students. Of these groups, the dean usually selects the consultants and outside faculty and also organizes and schedules the review. Although the academic vice-president may assist in some of these activities, he or she is more likely to be the one who decides whether or not to integrate the review into the planning and budgeting process. Also, if a final decision is to be made on the program review, the academic vice-president is the one 56 percent of the respondents noted as making it.

When it comes to student involvement in program review, the level of participation depends greatly on the amount of time students are willing and able to devote to the process. Generally, students indicated only mild interest in the reviews except where controversy had piqued interest in some particular aspect. Some students, however, are now starting to serve on institutionwide review committees, where they either may or may not have voting privileges. The significance of student participation depends largely on the internal characteristics of the particular institution. Exceptions apart, the most frequent role of current students, graduates, and former students is as participants in surveys.

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In cases where the president and trustees become involved in the reviews, their roles are often limited but nonetheless critical. As one graduate-school committee on internal review put it, "Without a clear-cut mandate from the President to conduct a program review, administrators at all levels are placed in a difficult position. If the President does not see the value and pertinence of program review, the process will quickly become a useless appendage . . ." (Genile 1980, p. 4). Obviously, most reviews depend to one degree or another on the support of the president and trustees, even when their actual participation is minimal.

Costs

Not counting the time contributed by faculty, staff, and administrators, the average cost per program for conducting an internal program review is around \$4,000 to \$6,000, of which the largest portion goes for hiring outside peer consultants. Since the expenditures are generally borne by the institution itself, it is not surprising to find that opinions vary considerably as to whether or not the bill is worth it. Although some consider the costs necessary to ensure program quality and efficiency, others view such expenses as justification for either not reviewing programs or limiting the scope and frequency of the reviews.

Selecting the Program

Typically programs are reviewed when their turn comes up on a review cycle for all departments. Others, however, are flagged either by a monitoring process, an audit, or a screening method. For some institutions this flagging may be done by the state agency for higher education, which is most often concerned about whether the program in question has attracted and graduated enough students over a specified time period. In these cases, program productivity—measured in terms of enrollment

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and number of graduates—ranked first of the criteria used for flagging programs, followed by program costs, job scarcity for graduates, and general funding limits.

Even many of the institutions that rely on the cyclical pattern employ these criteria to begin their cycles. Some institutions also indicated that unusual circumstances such as an enrollment drop, a negative accreditation report, or a change in administrative staff is considered just cause for triggering an off-cycle review. To illustrate the last point, the University of Michigan ordinarily reviews an entire college whenever a new dean is appointed. This review not only gives the new dean a better overall perspective but also provides viable information for reevaluating the strengths and weaknesses of all programs in the college. When it comes to the bottom line, our survey indicates that when programs are selected for review considerable flexibility is employed by administrators at most colleges and universities. Unusual circumstances in a department, such as the sabbatical leave of a key faculty member or a pending professional accreditation visit, can easily alter review dates.

Almost three-fourths of the institutions surveyed try to combine their internal reviews with professional accreditation visits; in an attempt to conserve energy and improve reviews. Some program evaluators, however, think reviews are not improved, saying that the two evaluations are at cross-purposes. In their view, program evaluation can generally be more objective in terms of resource allocation when it's separated from professional accreditation visits. As one academic vice-president put it, "Hardly an accreditation visit goes by that doesn't recommend additional travel funds, more or better equipment, higher salaries, lower workloads, et cetera." To avoid possible conflicts of interest, some accrediting agencies forbid joint reviews.

Selecting the Review Criteria

The single most difficult and time-consuming aspect of pro-

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gram review apparently is selecting appropriate review criteria. Although such choices are difficult in any setting, the problem is compounded at the college or universitywide level simply because of the variety of programs and program levels, such as undergraduate, professional, master's, doctoral, and so on. Sparks (1980) suggests that master's programs alone can be further divided into four major categories: (1) traditional academic programs, (2) traditional professional programs, (3) specialized training programs, and (4) nontraditional programs.

Of the criteria used for program review, "quality" is certainly the most elusive, as well as the most controversial. As Blackburn and Lingenfelter (1973) explained almost a decade ago:

A desire for highest quality seemingly needs no defense, irrespective of the product or craft involved. Yet, the consideration of "quality" in any setting seems to provoke controversy. Whenever evaluative judgments are made and a rank order is established, someone is offended. Hence, the evaluator, sometimes correctly, sometimes in error, is likely to be charged with elitism, bias, racism, or a host of other unsavory traits.

No doubt much of the controversy about quality relates to ambiguities within the concept itself. After all, as Cartter noted, "In an operational sense, quality is someone's subjective assessment, for there is no way of objectively measuring what is in essence an attribute of value" (1973, p. ii). Nonetheless, most reviewers finally agree on some approach to reward quality assessment, as well as quantity. Figure 11 shows the criteria used in reviewing programs, broken down according to the stated needs for the program, the costs and benefits, and other related objectives.

FIGURE 11
Criteria for Review of Existing Programs

A. Need for the Program												
Rank	Student Interest	Justification of Need	Job Opportunities	Duplication of Other Programs	Centrality of Other Campus Programs	Value to Society						
	(1)	(2)	(3)	(5)	(5)	(4)						
B. Cost and Benefits of the Program												
Rank	Graduated in Past	Projected Graduates	Present Enrollment	Projected Enrollment	Program Cost	Student Credit Hrs.	Economics from Elimination or Consolidation	Faculty Workload & Productivity	Faculty Quality	Sources of Funding	Physical Facilities Needed	Adequacy of Student Financial Aid
	(4)	(10)	(1)	(9)	(2)	(6)	(8)	(3)	(5)	(8)	(7)	(11)
C. Criteria for Review of Existing Program												
Objectives of the Program Consistency with Role and Mission. Appropriate to Revised Role and Mission.				Accrediting Requirements				Other				
(1)				(3)				(2)				

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Benefits

Although most survey respondents seemed satisfied with their present review efforts, a fairly large number of institutions (35 percent) indicated that further refinements were needed. The most frequently mentioned target areas included program data collection and integration of review reports into budgeting and planning procedures.

Despite such obvious needs, however, the list of benefits derived from program review is long and varied. For the most part the benefits are consistent with those noted by Sparks (1980, p. 8), who mentions the following:

- An increased attention to our responsibilities to our students
- Increased consideration of alternative ways to develop and deliver . . . programs
- A more certain basis for interinstitutional, as well as inter-departmental, comparisons of content and quality
- Improved capacity for planning and for decisions on the allocation of resources
- Earlier warning of impending difficulties in a particular program

Results and Recommendations

When the reviews are completed, an internal draft report is usually circulated, summarizing the strengths as well as weaknesses of the particular program. At that time, program faculty may respond to negative or positive commentaries. Often, a negotiation process then takes place involving academic administrators as mediators between the reviewers and those reviewed.

By and large, the vast majority of the recommendations coming out of institutional reviews focus on program improvement.

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Mostly, they address concerns about program faculty and suggest ways to improve the program's operation. Although some recommendations may indicate a need for added resources (such as equipment, faculty, facilities, salaries, travel to professional meetings, and so on); such recommendations are less likely when the review's primary focus is larger than the immediate program. Then recommendations may suggest resource reduction or even program termination.

Some evidence, however, indicates that resource reallocation can positively affect an institution. Guardo (1980, p. 8), for example, reported that at one institution the reallocation process resulted in "heightened morale as a consequence of the success of curricular initiatives and optimism about the ability to respond to changing conditions in the future."

If closure happens to be the review outcome, discretion is of the utmost necessity. For obvious reasons, program closure can be traumatic. At least one writer has likened the situation to the circumstances surrounding death, suggesting that aspects of the grieving process, such as denial, anger, bargaining, and depression, should be addressed by administrators to help faculty and students cope with the impending termination (Davis 1980). When the evidence has been objectively gathered and fairly presented, a few cases exist where a program faculty has actually recommended its own termination.

Reviewing Programs at System and State Levels

System-Level Reviews

In many ways, program reviews at the system level are not that different from either institutional or state-level reviews (Rudnick 1976; Smith 1980). In fact, they generally combine elements of both. As one might expect, with a smaller system or district the review will probably resemble an institutional review, and the larger the system the greater the likelihood that it will resemble a state-level process. In other words, smaller systems tend to be more formative and larger systems more summative.

Approximately half of the system-level offices for both four-year institutions and community colleges undertake some level of program review. Although some system offices limit their

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reviews to simply monitoring either state-level or institutional reviews, more comprehensive system-level reviews appear to be rapidly increasing. Tighter economic conditions, declining enrollments, and demands for more efficient resource management have combined to bring system-level operations to the front lines of reviewing efforts. In California, for example, where the California Commission on Postsecondary Education limits its role to monitoring the quality of the system-level review efforts, the reviews have become second only to those performed by the institutions.

Along with this growth, however, have come frequent confrontations and jurisdictional disputes when system offices find themselves caught between the institutions and the state agencies. Some of the system offices visited felt uneasy about their ambiguous role. This was particularly so in cases where the system offices felt ignored or bypassed in the review process. For example, one system office staff that played a large budgetary role complained that it didn't even get courtesy copies of the institutions' program reviews from the state coordinating board. In another system, the central office staff explained that they were forced to set up their own review processes after being ignored by the state coordinating board. As a result, that state now has three separate reviews and review processes serving the constituent institutions. The role-conflict problem is even further exacerbated when the system-level office assumes a major responsibility for resource allocation. Then attempts at meaningful use of the review for resource allocation are frequently either not possible or thwarted by jurisdictional disputes with the state coordinating agency.

To date, there doesn't appear to be any direct correlation between the level of program-review activity and the size of the system. We found that several large systems had no role—or no meaningful role—while some small systems were heavily involved in program review. Generally speaking, the presence or absence of reviews from the state coordinating board bore little

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relationship to the level of system-review activity. In some states, both the coordinating board and the system office reviewed programs, whereas in other states, the system office avoided conducting separate reviews altogether.

Because of the similarity in actual content between system and state-level reviews, we will now move our discussion to the latter category, but before doing so, there is one final point to make regarding the general influence of system-level reviews. In some instances, actions are directly taken by the system board or its staff. In others, the reviews are used more as a means of pressuring the institutions to take corrective action. The exact approach used by a system seemingly depends more on tradition than on legal authority. Exceptions apart, systems that primarily employ decentralized decisionmaking tend to leave the end results up to the institution, whereas those with a more centralized tradition are apt to exert a stronger influence. (See Smith 1980 and Craven 1980 for further discussion of system reviews.)

State-Level Reviews

Just as system-level offices have come to assume larger responsibility for program review, so too have the state agencies. In fact, program review has consistently ranked in the top ten "Major Issues of Concern to State Higher Education Agencies" (Millard 1977; 1978; 1979; 1980; Berve 1981). Explanation for such considerable interest is found in the words of former Indiana governor Otis R. Bowen, who noted that higher education's growth came without adequate preparation and without adequate questioning. As Bowen explained the situation in his home state in 1979, "We have nearly 3,000 degree programs in Indiana and only two staff people to monitor them. This means institutions must do the major job of program review. Yet institutional administrators have been the least willing to make such hard decisions. Statewide boards must put into place processes which demand and support institutional attention to this area."

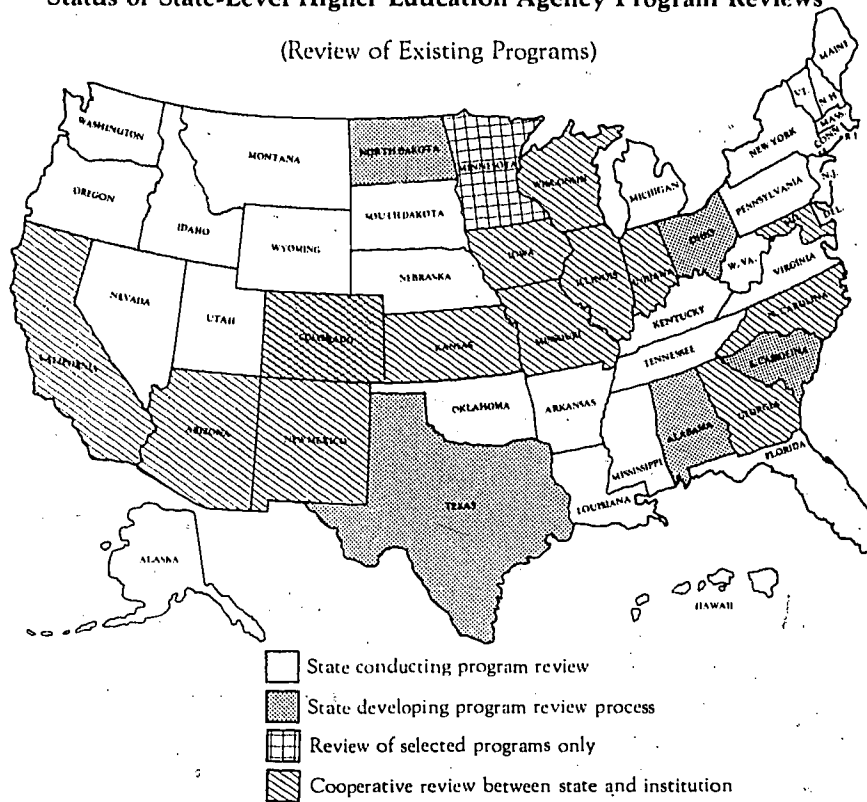
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By latest count, all 50 states have some sort of reviewing process, although specific responsibilities vary greatly from state to state (see figure 12). According to our survey, 23 of the SHEEO boards conducting program reviews are governing-board types. Out of these, 11 are comprehensive boards (governing most or all of the public postsecondary institutions), and 12 govern only the senior public institutions. Besides these, 20 states offer coordinating boards and 41 states have planning commissions.

FIGURE 12

Status of State-Level Higher Education Agency Program Reviews

(Review of Existing Programs)



(SOURCE: Robert J. Barak. *State-Level Higher Education Program Review Update: 1979*. SHEEO/NCES Communications Network, 1979.)

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Figure 13 further explains the various review responsibilities by indicating the state-level agencies in terms of their authority. Similar findings can be found in Melchiori (1980), Education Commission of the States (1980), Skubal (1979), and Wilson (1980).

FIGURE 13

Authority to Review at Least Some Existing Programs by Governance Type

	No Authority		Review And/Or Recommend		Discontinue		Total
	P ¹	I ⁴	P	I	P	I	
Governing Boards (23)	—	20	2	1	21	2	23
Regulatory Coordinating Boards (20)	3	19	11	1	7	1	20
Advisory Coordinating Boards (10)	4	5	5	4	—	—	9 ¹
Total	7	44	18	6	28	3	53 ²

(R.J. Barak, 1981)

¹New Hampshire, which has an advisory coordinating board, did not return the survey so the data reflect the responses of only nine agencies of this type.

²Includes responses for states (Florida/Vermont) in which more than one agency authority was listed.

P¹ = Public

I⁴ = Independent

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Tabulations such as these are useful, however, only to a certain point. Beyond them, additional interpretation is required. For example, some states exercise authority above and beyond what their statutory or constitutional authority would suggest, and others, of course, exercise less. Some agencies may, in fact, represent only the public sector (or even just a portion of the public sector), and others may have authority only for undergraduate or graduate programs.

All told, 21 of the 23 governing boards have authority to discontinue programs, while just 2 have authority only to review and recommend. Seven of the regulatory coordinating boards can discontinue programs, but, admittedly, this authority is sometimes limited to just one institutional segment. Eleven of these boards, however, can review and recommend. As far as the advisory coordinating boards are concerned, none has authority to discontinue programs, 5 can review and recommend, and 5 others have absolutely no review authority. However, some boards with authority for program review hardly exercise it, and at least 1 agency—presumed to be without authority—has successfully reviewed and achieved terminations of some graduate programs. Such discrepancies usually relate directly to political environments, traditions, and agency capabilities. (For a comprehensive background on the state boards, see Millard 1976.)

Reasons for conducting reviews may vary from a desire to improve quality or modernize programs to efforts to encourage better institutional planning and establish consistency with institutional and state missions. Furthermore, a recent study (Barak and Engdahl 1980, p. 128) of state-level program review in the Western Interstate Commission for Higher Education states revealed the following additional purposes:

- Maintenance of articulation and coordination among parts of a complex system of postsecondary education
- Facilitation of planning for postsecondary education in the state

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- Elimination of unnecessary spending caused by program duplication
- Assurance that available resources are adequate for quality education
- Identification of programs that do not meet minimum criteria as a basis for deciding whether to eliminate or strengthen them

State-Level Approaches

Basically, state-level reviews are conducted according to two general approaches. First, state agencies can share the responsibility for review with their constituent institutions by providing encouragement, perspective, and monitoring. And second, state agencies may assume the major responsibility for reviewing existing academic programs.

Agencies That Share Responsibilities

About a dozen state-level agencies share review responsibilities with colleges and universities. While the exact form may vary, and despite the fact that the specific program for review may be selected by the state agency, review responsibility rests largely with the particular institution. For its part, the state agency generally provides special or lateral review of the same discipline or clusters of disciplines across all institutions. Stated agency reasons for taking this approach vary from practical considerations such as having a lack either of authority or of agency resources, to a belief that educational institutions themselves are best suited for judging their programs and that institutional autonomy must be protected. Some states that use this general approach include Illinois, Idaho, New Mexico, California, Oregon, and Ohio.

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Illinois offers an interesting example of the sharing approach, if for no other reason because it came to adopt this philosophy only after the publication of a new master plan in 1976, which clearly identified a role for the Illinois Board of Higher Education (IBHE). Prior to this, despite a fairly explicit mandate in the agency's authorizing statute, IBHE demonstrated little interest in program review.

Today, Illinois utilizes two different processes for reviewing public university programs: institutional reviews and statewide lateral or generic reviews. At the institutional level, approximately one-fifth of the programs within each institution are reviewed yearly thanks to a five-year schedule developed at each public university and community college. And in turn, these reviews are complemented at the statewide level when all degree programs within a discipline or set of similar disciplines are reviewed within a given year. Statewide reviews focus primarily upon programmatic policy and planning issues within the program area as opposed to more individualized treatment at the institutional level.

The way the individual treatment works is that each year the Illinois institutions provide IBHE with two-page recommendation summaries plus a rationale for each program reviewed during the preceding year. The IBHE staff then consults with system and campus representatives in developing recommendations about economic and educational justifications for the programs reviewed. This process culminates in an annual report to IBHE on each institution-level review.

Then, when the statewide reviews are done, IBHE frequently expands the scope to include participation by the private sector as well. Roderick T. Groves, who serves as deputy director of academic affairs of the Illinois Board of Regents has made the following comments about the Illinois approach:

Such a division of labor offers a number of advantages. First, the system if properly developed will provide for the regular

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review of academic programs in a fashion that is consistent with different institutional needs and is relatively conserving of time and effort because of flexibility and reliance on decentralized initiative. Second, it holds a potential for strengthening the efficacy of the existing administrative structure of Illinois higher education because it will work in a manner consistent with that structure rather than at cross-purposes. Finally, and most important, by pulling the existing university and governing board structures of program review under a statewide umbrella, it can considerably increase the legitimacy of those efforts.

Regardless of internal perceptions and biases, higher education is generally viewed from the outside as a single sector of statewide activity. In all probability external respect for a support of higher education's efforts at program review will be even more important in the future than at present, so legitimacy is an important consideration. (Groves 1979, p. 20)

Other states that share reviewing responsibility range from California (where, as previously mentioned, the Postsecondary Education Commission limits its role exclusively to encouragement and review at the system level) to states at the opposite end of the spectrum. For example, in Oklahoma the State Board of Regents utilizes a process that ties program planning and fiscal budgeting together in such a way that no new educational program is approved without money first being placed in the budget for its implementation. Since no new program is initiated until all existing programs have been funded at the 100 percent level, institutions are provided considerable incentive for deleting old programs in favor of new ones.

The issue of institutional involvement is obviously a complex one, regardless of whether it's done in a joint review or exclusively by the state agency. In any case, a critical credibility factor relates to the degree and meaningfulness of institutional involvement in the process (Barak and Berdahl 1978). In this regard, a

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study by Richard F. Wilson notes four possible alternatives for institutional participation in state-level program-review activities, each of which provides a unique access to decisionmaking: (1) reactive, (2) advisory, (3) formative, and (4) voting (Wilson 1980). Figure 14, taken from Wilson's study, briefly defines these four approaches.

FIGURE 14

Institutional Participation in State-Level Program Reviews

Approach	Characteristic Methods	Access to Decisionmaking	
		Extent	Usual Program Review Stages
1. Reactive	Ad Hoc-Consultative	Limited	Design, Recommendation
2. Advisory	Standing-Consultative	Moderate	Design, Interpretation, Recommendation
3. Formative	Ad Hoc-Substantive	Extensive	Design, Implementation, Interpretation, Recommendation
4. Voting	Standing-Substantive	Moderate to Extensive	Design, Action

(SOURCE: Wilson, 1980)

According to Wilson, each of the strategies provides institutions with a "different access to decisionmaking and has direct implications for the credibility of review results" (p. 20). From an institutional perspective, formative participation is especially attractive because it affords possible involvement in virtually all of the review stages. Like other aspects of the review process, however, the specific institutional role is largely determined by a variety of factors, including politics and personalities, statutory authority, and tradition.

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Agencies That Assume Major Responsibility

In some 30 states, state agencies assume the major responsibility themselves for program review at public institutions. And in 9 of these states, they conduct at least some reviews of private colleges and universities as well. Many in the latter category are included on a voluntary basis. To one degree or another, most state agencies that perform comprehensive program reviews rely on a combination of outside consultants and agency staff. To better understand the consultant-based approach, we'll first look at the procedures as applied in Louisiana.

Consultant-based Approach. Confronted with concerns about doctoral-program duplication, the Louisiana Board of Regents undertook a series of reviews in 1975 modeled after a similar application in New York. The reviews originally began by examining the doctoral programs thought to be duplications, and later expanded to other program areas.

Today, Louisiana's review process begins with self-studies, which are designed to acquire data on aspects such as curriculum, finances, library resources, and so on. Outside peer consultants are then selected from lists prepared by the institution and from recommendations from learned societies. Upon completion of one-day visits and an analysis of the self-studies, the consultants prepare qualitative evaluations. Following public hearings on those evaluations, the regent staff then makes recommendations to the board. Using this procedure, 76 separate programs had been reviewed by 1978. Of these, 20 programs were terminated, 48 programs were identified to be maintained and strengthened, and 8 programs were awarded commendations of excellence.

In reviewing doctoral programs, the Louisiana Board of Regents has adopted a set of considerations that, among other points, encourages institutions to regularly review their Ph.D. programs while reviewing "all the state's doctoral programs as constituting an interrelated system for doctoral education."

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Agency Staff Approach. A second general approach to state-level reviews relies almost exclusively on agency staff rather than consultants. Generally speaking, states using this approach depend heavily on data provided by the institutions and/or the agency.

The Council for Postsecondary Education (CPE) in the state of Washington conducts reviews of its doctoral programs in this manner. The CPE reviews have taken place in different phases. The first phase, known as GPA-I, screened out programs that indicated chronic signs of low productivity.

Phase two, called GPA-II, focused on program duplication in either the same field or degree level at public institutions. In undertaking the second phase, graduate deans were consulted regarding concerns they had about the mechanics of the audit and review process, as well as any additional problems relating to data collection. Further program information was then acquired via questionnaires, which were designed by both the deans and the staff. When this procedure was first begun, the quantitative data was converted to machine-readable form and a computer analysis was made. But when it soon became apparent that many subtleties were being lost, this approach was dropped in favor of one using only manual calculations.

In any case, when no additional information is required for the CPE reviews, preliminary staff reports are presented to the council as well as to the faculty of adversely affected programs. The CPE staff then visits each institution to meet with faculty, administrators, and students to present recommendations, hear defenses, and discuss alternatives. Final staff recommendations are then made to the CPE.

Presenting the Evidence

At one point or another, the findings of the program reviews must be made public. But when, where, and how this is handled

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varies greatly from state to state: In New York, consultant reports are regarded as strictly advisory; they are not made public except at the request of the particular institution. Before any official announcement is made, a rating team consolidates the individual consultant reports from all of the programs in a particular discipline. And these reports, while still not public, are read by a doctoral council, at which time all institutions under review are represented. The final decision on the reviews is made by the commissioner according to the rating-committee report and recommendations. The decision is made independently of the New York Board of Regents.

In Louisiana, on the other hand, the staff bases its recommendations on consultant reports, which are then presented at public hearings before a subcommittee of the board of regents. Because the hearings focus on public issues and report content, public institutions must respond to any weakness noted in the report, whereas the private institutions are merely invited to respond. Following the hearings, the board of regents makes its final decisions on the program review.

Both of these examples show approaches used in developing and making public the program-review reports. While the procedures and practices vary among the states, the meeting at which the state agency publicly discusses its findings can be highly emotional, particularly if negative results are reported or program termination is recommended. In fact, some agencies refuse to make final decisions until one meeting later just to reduce the impact of the turmoil.

Beyond the agency findings, further controversy may arise from concern about public disclosure of the actual numbers of programs terminated. Some agencies try to play down the figures, whereas others distribute the results nationally. Whatever the approach, specific tallies of terminated programs tend to bear little relationship to agency effectiveness. For example, one state carefully monitored resource allocation over the years and thereby prevented most weak programs from developing. In a

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nearby state, program proliferation and duplication were rampant. Consequently, the initial reviews showed only modest program terminations in the first state while the nearby state terminated literally hundreds of programs.

Whether or not controversy arises, when the review process is completed a decision must be made regarding the actual steps necessary for the program to undertake. Roughly half of the reviewing agencies only make recommendations, either to the institution's governing board, to the system office, or to the governor or legislature. The other half actually initiates formal action. According to an exhaustive study of state-level program discontinuance (Melchiori 1980), the range of options utilized by agencies with formal power may include decisions to continue, modify, merge, or terminate programs.

Approximately 14 state agencies in our present study indicated that programs had been discontinued as a consequence of their review activities. Similar findings were reported by Skubal (1979), where 12 agencies, or 71 percent of the agencies reporting, indicated that programs had been discontinued since 1970.

According to Melchiori (1980), four levels of program termination can be identified: (1) the elimination of "paper programs" that are often maintained by academic departments for flexibility; (2) the elimination of programs with no adverse consequences for students and no release of tenured faculty; (3) the elimination of programs with serious consequences where tenured faculty and students are adversely affected; and (4) the elimination of entire units, departments, or colleges. If we apply these standards to our present study, we find the following percentage breakdowns:

<i>Level of Action</i>	<i>Percent</i>
Level One	30
Level Two	61
Level Three	8
Level Four	1
	<hr/>
	100%

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More than anything else, these tabulations indicate a shift in recent years from Level One to Level Two-type actions. This is especially evident in states with longer histories of program-review activity. Recent reviews appear to be conducted under greater pressures for accountability and consequently require more thorough resource and personnel adjustments. Although two-thirds of the program discontinuance to date has occurred with respect to graduate-level programs (mostly master's and specialist degrees), many state reviews on the undergraduate levels appear to be just now getting underway.

Evaluation of State-Level Reviews

So far, few attempts have been made to evaluate the evaluators. Among the exceptions are Alabama and South Carolina, where program-review activity has been analyzed as part of a comprehensive evaluation of the state agencies. In Alabama, an evaluation of the Alabama Commission on Higher Education by an external team resulted in a recommendation for expanded responsibilities (Alabama Commission on Higher Education, March 1979). Similar recommendations were made in South Carolina as a result of a legislative audit (South Carolina G.A., 1978).

Although official reviews have been scarce, unofficial reviews—by members of state legislatures as well as colleges and universities—have become relatively common. Some suggestions from the latter group include focusing reviews more closely on academic departments (instead of on programs and degree majors, which may be only loosely connected with the administrative structure) and zeroing in on ways to maintain efficiency and excellence (instead of randomly searching for an institution's weakest programs). Some critics even stress that the work may have been largely completed in eliminating weak programs and that it's now time to dwell on more supportive aspects of review.

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Bogue (1980, pp. 81-83), for example, has described a program evaluation as a "Renewal Instrument" that can be employed in a variety of ways. Some of the renewal functions include clarifying program goals, expanding understanding of quality, and strengthening community and personnel development.

The present study has added to this list the following benefits suggested by individuals involved in state-level reviews:

1. Improves resource allocation
2. Helps in making difficult program decisions on a statewide basis
3. Makes termination of programs less hectic at institutional levels since some external body is blamed, even though the institution's administration concurs (at least privately) with the decision
4. Tightens admission standards
5. Clarifies institutional missions
6. Encourages interinstitutional cooperation
7. Promotes better institutional management
8. Provides an acceptable rationale for pruning the system on a statewide basis

While both criticisms and benefits tend to reflect strongly on the respondent's individual circumstances, the combined observations are highly indicative of the various opinions currently influencing program review.

Program Review Systems: Making Them Work

Who has the best program-review system and how can we implement it? For evaluators, this becomes a familiar question but one with no easy answers. On the basis of this study, and the author's experience as to what works and what doesn't, there doesn't appear to be any best system. There are just components of existing systems that may or may not work well for a given institution or agency.

Attempts to plug in an existing system without modifying it to the local environment are generally unsuccessful. As Mims (1978, p. 4) has written, it's better to "adapt" than to "adopt" the external model. And in a similar vein, Sudweeks and Diamond (1980, p. 1A) note that "no two evaluation designs will be the same. In each instance the evaluation must be structured to serve the information needs of those involved in the decision-making process." Above all, participants must be meaningfully involved in the review process, and, accordingly, the reviews themselves

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must adapt to local circumstances.

The following principles and procedures are provided to help with the adapting process. Although program-review development is a highly complex and individualized matter, the universality of the key components helps make them applicable to virtually all institutions, system offices, and state-level agencies.

General Principles of Good Review Practice

Fairness

Unless procedures and policies are perceived as fair by both reviewers and reviewees, credibility will be drastically undermined (Gentile 1980 and Sparks 1980). Because of this, care must be taken to build a review system that treats all programs and institutions in a just manner including, of course, due-process procedures to resolve disagreements (Berdahl 1975). Objections regarding either review development or implementation should be provided fair hearing.

Comprehensiveness

Ideally, a program-review system should be comprehensive. Not only should it include all relevant programs, but also, to the extent possible, the individual reviews should include all factors relating to any particular program. For example, if a program has a cooperative education component, that component should be evaluated. Too often quality is compromised by haste. Opinions of consumers, faculty, peers, and alumni should be collected.

Closely integrated programs and programs that share mutual concerns should be reviewed together. Similarly, consideration should be given to a review of related curricular areas, such as liberal-arts programs that make up a core curriculum.

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Use of Multi-Criteria

To be effective, programs should be measured against more than just one criterion (Lawrence and Green 1980; Clark 1977; 1979). For example, factors such as cost, quality, need, and centrality to state or institutional mission should be evaluated along with several indicators of each of these criteria.

Both the criteria and their indicators should then be generated and assessed by multiple sources, such as students, faculty, alumni, and peers. This not only ensures a balanced qualitative review but also helps to identify problem areas from a variety of perspectives.

Cyclical and Timely Reviews

Reviews provided on a regular basis (such as five- or six-year cycles) are generally more effective than one-shot procedures. In fact, even reviews done every ten years in conjunction with regional accreditation visits are usually found to be lacking. Particularly in times of economic uncertainty, faculty, resources, and other program aspects change too rapidly to risk reviewing them just once a decade. Some institutions and states now do supplemental monitoring or auditing on a yearly basis to identify possible problem areas ahead of time. As one graduate school report notes, "Through repetitive review, the results of earlier actions taken to improve programs can also be assessed, an extremely important input to academic management" (Gentile 1980, p. 4).

Good Communications

Because last minute surprises often cause confusion and affect the overall review quality, good communication is essential at all levels. Frequently referred to as the "climate component," viable

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communications should address the "development and maintenance of information dissemination to provide as clear a picture as possible of the goals, objectives, and major purposes of the review and evaluation" (University of North Carolina 1977, Report 2, pp. 6-7).

A direct correlation emerges between effective communication and the development of positive attitudes on the part of the individuals whose programs are being reviewed. The more open the interaction between the reviewers, the reviewees, and the decision-makers, the better the chances of a fair, impartial, and effective review.

Positive Emphasis

Without avoiding negative aspects—such as possible resource loss or program termination—emphasis should be placed on positive review aspects. Somehow a balance needs to be struck. Overly pessimistic communications can cause morale problems, while overly optimistic communications may foster false hopes. In short, be positive but realistic. Remember, negative implications can be offset by approaches that reward excellence as well. Either conceivable resource reallocation or special commendations can help provide incentive to those being reviewed.

Proper Implementation

Nothing is more frustrating to faculty than to go through an extensive review process and only later to find out that the review is not being used for effective decisionmaking. Thus, serious efforts should be made to incorporate reviews into the appropriate decisionmaking and budgeting processes. Whenever possible, results should be used for program improvement. Although some institutions try to get by with making only passing reference to review results in official policies, implementation

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should go beyond just words. As Petrie (1980, p. 1) has noted, program reviews "ought to interrelate to other segments or systems."

Objectivity

Objectivity relates directly to the rigor of the review process. For example, if the review purpose is strictly internal then faculty self-assessment is probably sufficient. On the other hand, if the review's purposes include reallocation of resources or possible program termination, then steps need to be taken to introduce an equivalent degree of objectivity.

Our survey results indicate that the degree of objectivity relates directly to the credibility of the reviews, especially from the perspective of external constituencies. Reviews lacking objectivity often result in self-serving reports that contribute neither to improved quality nor to effective decisionmaking.

How to Develop a Program-Review System

Certain basic steps have been identified in this study for developing or revising a program-review system. Generally speaking, they apply at the institutional level as well as system and state levels. A flowchart identifying these steps is found in figure 15.

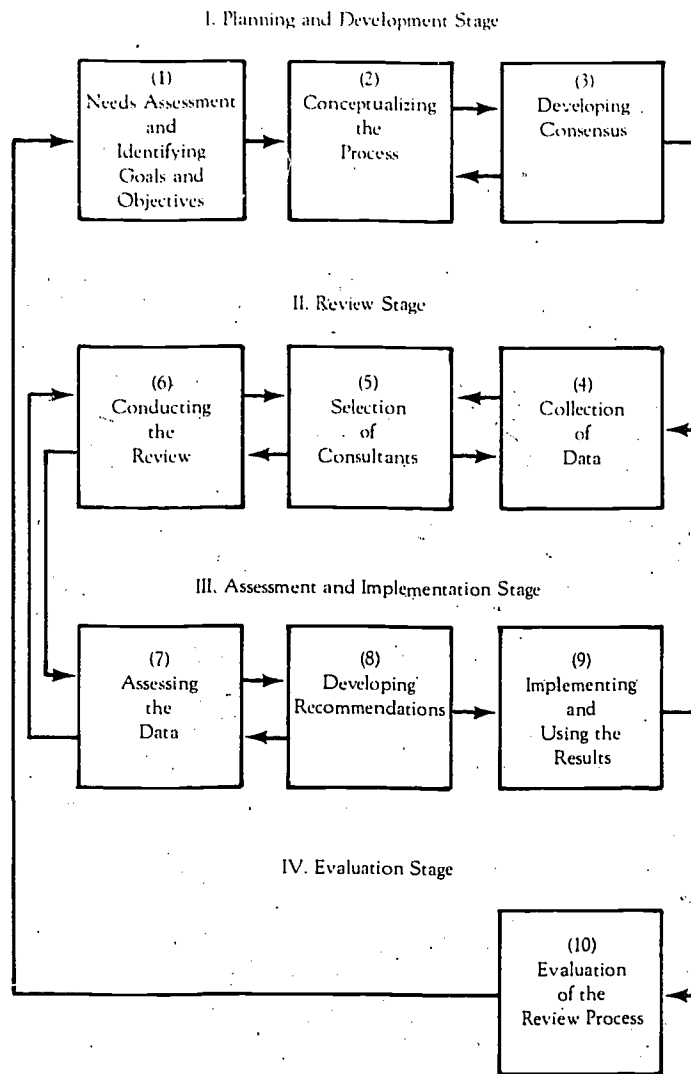
Because the approach taken here largely resembles a goal-based evaluation, factors that are irrelevant for a particular institution or agency should be disregarded.

Other approaches that may be useful include judgmental models (which emphasize extrinsic criteria) and decision-facilitation models. A general overview of these models can be found in Popham (1975), and a more detailed description is con-

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FIGURE 15

**Suggested Stages and Steps in Developing
a Program Review System**



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tained in Worthen and Sanders (1973). Although most alternative models have not been widely used in higher education, interest has been generated at other educational levels.¹

To reiterate, program review can be overdone. In fact, as we saw more than once in this study, it may even stir up other problems, resulting not only in a poor review but in the total disruption of the institution. Hopefully, the following steps are developed in such a way that they may be related to both the review purposes and the users' needs in a functional and harmonious manner.

Step One—Identifying Purposes and Objectives

Often called a "needs assessment," this step helps identify the purposes and objectives of the review. Why is the review being undertaken? Is it the result of an enrollment decline or retrenchment? Or does it represent an attempt to improve academic quality? Is the review self-imposed or externally imposed? These and other questions need to be explored to identify purposes and objectives of the review.

Heydinger (1978) suggests that a needs assessment can help determine whether or not a program review is even justified. If a review is needed, Mims (1978) suggests several groups (administrators, faculty, consultants) who may prove helpful in establishing and designing a program-review system. Also, Mims

¹Of further interest to readers interested in additional evaluation models are two documents prepared by consultants to the Ohio Board of Regents (Education and Economic Systems, Inc. 1979; Academy for Educational Development 1979). These present a much broader view than simply that of Ohio institutions. Similarly, Guba and Lincoln (1981) and Anderson and Ball (1975) provide valuable perspectives in their writings on evaluation models and procedures. In addition, a host of individual program-review development models are available in Petrie (1980), Cranton and Legge (1978), and Heydinger (1977). Useful guidelines for selecting an evaluation model and formulating evaluation questions are found in Wood and Davis (1978) and Craven (1980). Baderston (1974) provides a set of guidelines that are especially useful for reviewing under retrenchment conditions (also see Brown, 1970). And, as a final resource note, Heydinger (1978) poses the question of whether or not a particular institution actually needs program review. His arguments may help some institutions in deciding if and when they want to undertake reviews.

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elaborates on the essential characteristics of the design process as a whole.

These various models and approaches can help the reader gain an overview of available options. Since most successful evaluation models are eclectic, however, Mims (1978) makes the important point that the chances of setting up an auspicious review process are improved if it is user-oriented from the beginning.

Step Two—Conceptualizing the Process

Assuming that the purpose has been identified either by mandate or as the result of a needs assessment, the second step is to conceptualize the program-review process. At this point, key components must be identified by deciding *what* will be reviewed, *when* the review will take place, *who* will conduct the review, and *how* it will be done. All of these issues need to be considered within the organizational context in which they will be implemented (Patton 1978).

Similarly, responses to these elements should be uniquely related to the review purposes and objectives as identified in step one. For example, the reader may wish to review the model developed by Martorana and Kuhns (1977) if the purpose of the review is to identify program duplication in state institutions. In another vein, Wilson (1980) suggests that by setting up a needs-assessment study team it's possible to avoid setting up a dysfunctional program-evaluation system. The reader may turn to Mims (1978) for discussions on designing a program-review system or even take the time to explore several models such as those of Arns and Poland (1979) and Russo and others (1977). A further recourse may be found in the services of program review and evaluation specialists. Before a contract is signed, however, care should be taken to engage the services of individuals who can apply their theories to real life situations.

Find out exactly *what* aspects will most desirably fall under the review prerogatives. Will all academic programs at the institu-

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tion, system, or state level be reviewed or will the reviews be limited to just certain kinds of programs? Is it possible to cluster reviews by discipline or field of study? And how will the reviews begin? Will they start with pilot tests or will they be phased in gradually? Moreover, what definition of program will be used? Will program be taken to mean a department, a degree program, or perhaps some other category altogether?

After identification of what programs will be reviewed, some determination needs to be made as to *when* the programs will be reviewed. Will programs be identified by a program audit or an ongoing monitoring system, or will they be reviewed on a cyclical basis?

The question of *who* will do the review relates directly to the general purposes of the review. Mims (1978) identifies three distinct approaches: self-review, external review, and multiple or mixed reviews. Most importantly, however, when the review extends beyond internal program improvement, consideration should be given to introducing greater degrees of objectivity by adding outside persons. In some cases, several different kinds of reviews may be put into operation with different levels of responsibility for each. For example, in several states some institutions handle parts of the review process and the state-level board takes care of other aspects. At whatever level the review takes place, certain critical questions should be asked. Will the reviews be conducted by the program faculty, an interinstitutional committee, state-level staff, outside consultants, or perhaps a combination? What role will students play in the evaluation (see Smock and Bradenberg 1978)? And who will have primary responsibility: the college dean, a graduate dean, or the academic vice-president? Moreover, can this person play a meaningful role in planning and budgeting? And, ultimately, how can all the individuals and processes involved best work together? Who should serve on the review committees? How long should they serve, and what responsibilities will they have?

Responsibility needs to be defined for each aspect of the review.

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system, with careful consideration given to existing organizational relationships and review goals. In this regard, program-review criteria should relate directly to review purposes (Sparkš 1980). For example, if program reduction is a major goal, consider including specific criteria to address issues such as those noted by Davis (1981). While the task of identifying major criteria (cost, quality, need/demand, centrality to mission) for reviewing programs nationally may be fairly easy, finding adequate, accurate, and agreed-upon indicators for each criterion is more difficult.² Remember, entirely different indicators may be appropriate for different disciplines, and moreover, they should address adequacy as well as frequency and volume (see Lawrence and Green 1980).

Determination of *how* programs will be reviewed is, of course, intimately related to previous considerations. If peer consultants are to be brought in, keep in mind that they're unlikely to have an in-depth understanding of the local situation. Mechanisms need to be added that will provide immediate perspective, such as the appointment of a local committee or other staff involvement.

Each step in the proposed review process needs to be identified and the contents of each step determined. The resulting procedures will help determine the success of the review. By surveying various alternative approaches in use in other institutions, systems, and agencies, added perspectives may also be gained. Examples found earlier in this volume may further help in developing appropriate procedures to fit local circumstances.

Step Three—Developing Consensus

To obtain consensus among those being reviewed, it's essential to establish a viable mode of communication regarding the parti-

²In regard to "quality," the work of Mary Jo Clark (1974a; 1974b; 1977; 1979) is especially useful.

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cular review processes and procedures. Conceivably, this communication can range from simply distributing the proposal and asking informally for comments and suggestions, to setting up a committee for reviewing and making appropriate changes or recommendations. Whatever method is chosen, it should relate to the local political and cultural circumstances as well as to the degree of consensus sought. In addition to involving those who are subject to the proposed review, it may be advisable to share the procedures with other groups, such as administrators, trustees, and legislators.

If so desired, steps two and three may be combined into one step or even reversed in order. For example, an institution or state agency may want to appoint a committee (step three) to develop the conceptual approach to review (step two) rather than present an already developed process to a committee or group of responders. Alternatively, the process and procedures developed in step two may be used as straw men for generating discussion leading toward a final product. Although these steps may be repeated several times, care should be taken to make sure participants don't feel railroaded into using a particular review system.

Since it is unlikely that everyone involved will agree on all details, a point comes when those ultimately responsible for the reviews must conclude the consensus-making. If dissenting groups try to stall the process, they can sometimes be appeased by advising them that the entire process will be evaluated following the first round of interviews, or at a later stage.

Step Four—Collecting Data

Opinions vary about the best ways to collect, compile, and verify data. Centralized data collection is preferred by some, since it can increase the likelihood of acquiring comparable data across all programs and may reduce staff reporting burdens. Others, however, contend that such units may actually end up

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proliferating unnecessary data and, in the process, even incur qualitative losses. Whether data is collected by a centralized unit or by program faculty, careful verification is essential. Centralized data should be shared with individual departments, and conversely, data collected by program faculty should be checked for discrepancies that may arise when tabulation is done by different persons with differing viewpoints. When data development is first begun, it should be emphasized that no data instrument is perfect: the goal is simply to develop evidence that meets the major review needs.

Almost uniformly, survey respondents complained that, unless otherwise restricted, too much data was collected. As a result, reviewers tend to end up with costly information overloads. According to Petrie (1978, p. 12), one solution to this is to "balance the amount of information collected with the kind and level of judgments to be made." And Poulton (1978, p. 6) adds to this by noting that "much of the information collected is not necessarily new. The primary value lies in the assembly of diverse information at one point, in one place, reviewed by parties in different locations in the institution, and subjected to a series of well-structured questions. . . ."

Some assistance in this regard can be gained by making use of various standardized survey instruments such as those provided by ACT and ETS. Many institutions and agencies using standardized surveys either modify or add their own questions to allow for open-ended responses, a process that is especially helpful in providing faculty with greater personal involvement. Such involvement need not detract from the usefulness of the standardized instruments and may even make their use and results more acceptable locally. Usually administrators insist on a common core of data from all departments for administrative use, which, for obvious reasons, frequently involves some give and take between both parties.

One way to effectively classify and analyze data for decision-making is to use the NCHEMS *Outcome Structure: An Overview*

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and Procedures for Applying It in Postsecondary Education Institutions (Lenning 1977). This structure has been used by a number of institutions in developing outcome-oriented program-review data. Also, the Program Quality Assessment Measures project developed by the Council of Graduate Schools and ETS has produced results that indicate that "individual student or faculty ratings can be averaged to obtain mean ratings that make useful distinctions between departments..." (Council of Graduate Schools 1979, p. 2). Although their application to other levels has not yet been determined, these results seemingly indicate that such ratings can be effectively used as a major component for graduate review.

Of additional benefit to those conducting graduate-program reviews is the "Graduate Program Self-Assessment Service" offered by the Graduate Record Exam Board and the Council of Graduate Schools. Based on the results of the above-noted research concerning quality dimensions in doctoral education, this service uses confidential questionnaires to obtain judgments about doctoral programs from faculty, students, and alumni. Data summaries sent to participating departments or other designated units include tabulations of individual items and scale scores that represent judgments about departmental activities in a dozen areas. A useful handbook for the development of program review has been prepared to complement this service (Clark 1980).

Step Five—Selecting Consultants

For a variety of reasons, external consultants must be carefully selected for the review process. No doubt there is more than a little truth to the common opinion that some consultants are willing to tell you whatever you want to hear. The following guidelines for consultant selection are based on the experience of our survey respondents:

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- Use "outside" persons for final consultant selection, but involve faculty in ways such as asking for names of possible consultants.
- Try to get a balanced team representing the various schools of thought within the discipline or field.
- Search widely for consultants. Check references carefully, making sure consultants are qualified at the necessary program level.
- Inform consultants at the outset regarding nature of the evaluation, salaries, and dates when reports are due.
- Brief consultants about the local environment and the specific outputs expected, without unduly influencing their decisions.
- Insist that consultants spend an appropriate amount of time on campus and in the department under review.
- Allow consultants sufficient time, support, and resources to carry out their tasks in a meaningful way, while centrally coordinating the visits.

Step Six—Conducting the Reviews

At this time the actual reviewing takes place. Consultants (when required) make their site visits and the data is analyzed. Once verified, the data should be reviewed for preliminary conclusions, and any additional data that may be needed should be requested. Because data interpretation can be difficult—except in cases of extremely good or extremely negative reports—statisticians or consultants may prove helpful in explaining details.

Step Seven—Assessing the Data

At this critical step the preliminary conclusions and recommendations are reached and shared in draft form with program

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faculty. Usually, however, this is done for errors of fact and omission only.

The preliminary review draft plus the exit interviews (if site visits are conducted) provide program faculty and administrators with an early indication of the major findings and conclusions. By discovering errors and omissions in time, the report's final credibility may be preserved.

Step Eight—Developing Recommendations

Actions stemming from internal and external reviews can range from program expansions to program terminations. Because of this, recommendations stemming from the review process need to be carefully drafted, with due-process provisions included at all levels for those who may feel dissatisfied with the outcomes. If the recommendations have not been shared with those under review in the previous step, this should now be done. Ample opportunity should be provided for rejoinders and explanations whenever possible. External reviews, for example, may sometimes provide an opportunity for the institution under review to voluntarily terminate a program. In such cases, opportunities for cooperative programs and consortia can be explored (see State University System of Florida 1979).

During the appeal process, the credibility of the entire review is frequently given a close examination. But if the process has been well developed and fairly executed, there should be nothing to fear from this close examination. At all review levels, provisions for due process should naturally be made available. Within an institution, this can take the form of an appeal to a higher administrative level or to the board of trustees; at the state level, the appeal might go to either the commission, the board, or the executive director. In some instances, the appeal process at the state level may even include the unofficial step of appealing to the public or seeking legislative action.

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Step Nine—Implementing and Using the Results

According to Petrie (1980, p. 1), "If program evaluation is to do anything, it must somehow interact with the other segments and systems . . . such as planning, budgeting, etc." Planning and budgeting processes obviously help set program priorities; some programs may be strengthened while others are reduced. In this way, recommendations stemming from reviews can help instigate institutional improvements.

In this regard, Shirley and Volkwein (1978) have described the processes and criteria that enhance decisionmaking on academic program priorities, including external and internal inputs to decisions or priorities. And, in a similar vein, Lawless, Levi, and Wright (1977) suggest procedures for linking academic priorities to resource decisions, as do Micek (1980) and Munitz and Wright (1980).

Step Ten—Evaluating the Review Process

Unfortunately, the last step in developing program-review systems is the step most frequently ignored. Whether it's done by those conducting the reviews or outside consultants, the review process itself should be periodically reviewed to make sure that it's meeting the original objectives and adjusting to changing needs. Mims (1978, p. 2) remarks that "provisions must be made for amending the process based on unfolding needs and on experience with implementation." Guidelines noted earlier in this chapter may also be of some assistance.

In a helpful handbook for evaluating aspects of program reviews, Braskamp (1960, p. 11) suggests that "utility" is a critical criterion for judging the worth and value of the review. According to Braskamp, "The information presented must also be understood, credible, and coherent to the intended audiences and the evaluation must be a guide for politically feasible actions. . . . If a two-way communication channel between the

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evaluators and users is established, provisions for trust and mutual problem solving are more likely."

Of the dozen or so evaluations reviewed in this study, all recommended continuance of the review process, with some improvements or refinements. Obviously, developing an effective review process is not easy and some will never be satisfied, but with periodic evaluations of the process itself, it's possible at least to minimize objections while maximizing advantages.

Issues and Observations

During the course of this study, I happened to visit a large public university where no less than half a dozen professional accreditations were under way. System and state-level program reviews were in progress, a regional accreditation visit had just been completed, and a self-study that had begun a year and a half before was in its final stages. Not surprisingly, the university president had recently informed the faculty that he wanted to initiate a more systematic means for conducting internal reviews. Because of all of this activity, the provost was worried that the campus might become overevaluated. In his words, there needed to be “some kind of rhyme or reason for all this program review activity.” Somehow, “two or more of these evaluation efforts ought to be combined or eliminated.” The provost was not opposed to evaluations as such—in fact he viewed them quite favorably—but he wondered if the evaluations actually saved that much money in terms of the amount of faculty time and resources being spent on all of the duplicate activities.

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Furthermore, he was openly concerned about the lack of participation by private institutions in state-level program reviews. While his institution and the other public institutions were seemingly being reviewed constantly, the private institutions (many of which received state aid) were apparently completely free of review. "Why," he asked, "shouldn't the privates also be accountable?"

The provost's comments are indicative of four key issues brought up by this study, namely: (1) the apparently unnecessary duplication of evaluation efforts; (2) state/institution friction about the ways program reviews are conducted; (3) the involvement of private/independent institutions in statewide reviews; and (4) whether or not program reviews do, in fact, save money.

Duplication of Evaluation Efforts

Understandably, the issue of duplicative evaluation is heard discussed most frequently at the institutional level, where it hits hardest. Although duplicate evaluations in and of themselves may not be a problem, when they complement each other to the extent that they are unnecessarily duplicative, complaints of counterproductivity bear thorough consideration. Several solutions to the issue of unnecessarily duplicative reviews were suggested at the institution/state, institutional/ accreditation, and state/accreditation levels.

Most often, respondents suggested combining several evaluation efforts into one. This solution sounds good enough, assuming that all of the various program-evaluation efforts are mutually compatible. However, both theoretical and practical evidence says that they usually are not (see figure 16). On a theoretical level, an important distinction emerges between formative and summative evaluations. Where institutional program reviews are usually formative in the sense that they seek program improvement, system-level (and especially state-level

FIGURE 16
Comparison of Review Purposes, Measures, and Evaluators

	Institutional Reviews (Dept., School, College)	Accreditation Reviews (Professional & Regional)	State Coordinating Agency Reviews	Performance Reviews & Audits
<i>Purpose</i>	<i>Primary</i> To develop programs, analyze their direction and content, assess their quality.	<i>Primary</i> To assess whether program or institution meets minimum standards.	<i>Primary</i> To evaluate the accountability and efficient use of state resources of an institution, program, or segment of postsecondary education vis-a-vis its peers.	<i>Primary</i> To evaluate the accountability and efficiency of a state program vis-a-vis other state programs. Concerns only global judgments about programs, not necessarily improvement or analysis of program.
	<i>Secondary</i> Resource allocation.			
<i>Measures</i>	<i>Primary</i> Indicators of quality deemed appropriate by institutional/ departmental personnel.	<i>Primary</i> Minimum approved standards of the discipline, state, or region (usually qualitative.)	<i>Primary</i> Input and outcome measures based on need, cost, productivity, and quality.	<i>Primary</i> Outcome measures based on program goals and objectives.
<i>Evaluators</i>	<i>Primary</i> Departmental or institutional personnel.	<i>Primary</i> Peer reviewers.	<i>Primary</i> Ranges from institutional self-reviewers to outside peers to extra-institutional reviewers on agency staff, depending on state.	<i>Primary</i> Legislative or executive agency staffs.
	<i>Secondary</i> Peer consultants: advisory groups representing business, industry or profession; current students and graduates.	<i>Secondary</i> Departmental or institutional personnel via self-study.	<i>Secondary</i> Program graduates, business or industry raters.	<i>Secondary</i> Program graduates, industry or profession raters.

New Directions for Institutional Research, 16, Winter 1977.

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reviews) are generally summative, since they have the potential of leading to program termination. On a practical level of implementation, other distinctions arise. Because institutional reviews are almost always aimed at voluntary self-improvement, they tend to skip over the very questions that external evaluators are most keenly interested in.

To give an example, at the institutional level "need" is frequently defined in terms of student and/or faculty needs, while at the state level, "need" is more likely to be defined as either a societal or manpower need. Similarly, "efficiency" at the institutional level has very different connotations than at the state level, where it most likely will concern cost comparisons between institutions, as well as unnecessary duplication. To resolve these differences, some advise setting up a system for independent institutional evaluation by "trained neutrals" (Harclerod and Dickey 1975, p. 3) and Harclerod (1976). Alternatively, some suggest expanding the triad concept of institutional licensure, evaluation, and accreditation to include mechanisms for program review (Kaplin 1976).

Despite a recent trend by some state agencies to include or at least recognize institutional review efforts, a strong feeling persists at many institutions that such accommodations are counterproductive. In their views, program accreditation in itself should sufficiently satisfy state-level inquiry. A response to this contention, however, is found in Griffiths (1979), who notes:

In accreditation, the main question is: What is the program trying to do and how well is it doing it? [But] in program review, the question is: Does the program meet or show clear potential for meeting standards of high quality and demonstrated need regardless of what the program wants to do?

Even when such considerations are taken into account and program-review efforts are effectively combined on campus with regional accreditation visits, at the state level the problem is fur-

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ther complicated due to a frequently acknowledged animosity between state agencies and both national and accreditation groups. Partly because of this, some site visitors for accreditation purposes have found it difficult, if not impossible, to serve two masters when state and accrediting efforts are combined.

In more than one state, advice was given by state-level staff to "keep accreditation agencies out of the review." In fact, a few states either have threatened or are threatening to refuse recognition of regional accreditation efforts altogether. At issue here is a head-on conflict between the state and professional accreditation standards, such as those that prescribe how an institution must be organized.

An attempt at reconciling these differences is posed by Tucker and Mautz (1978), who, writing in the *Educational Record*, suggest involving state board staff in regional accreditation visits. Present evidence, in fact, indicates that such an exchange is beginning to take place. For example, more than 80 percent of the evaluation teams surveyed in the Middle States Association region said they now enlist the support of state board representatives (Kelly 1979). And in some states, such as Texas and Maryland, the state coordinating board and the regional accrediting organization are actually combining institutional evaluation efforts. As a part of its policy called "Higher Education Evaluation and Development" (HEED), the Maryland State Board for Higher Education agreed to make cooperative team visits with certain colleges and schools to reduce the "heavy and duplicative burden of self-study and planning activities" (State Board for Higher Education 1979, p. 3).

Another familiar suggestion for reducing unnecessary duplication of state and institutional efforts is simply to drop one or the other evaluation. But for various reasons, this is rarely satisfactory. While it may be true that not every institution, system, and state-level agency should be continuously reviewing all programs, it is hard to figure out where to cut back on these efforts. On one level, most survey respondents indicated that institutional

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reviews were not only necessary but ought to be comprehensive, regularly scheduled, and a part of a comprehensive institutional planning and budgeting system. On another level, state-level reviews are increasingly taking on added significance in light of present political and economic climates. In many areas of the country, external reviews are considered essential to reassure state officials and the public that higher education is accountable (Geigogue 1980). Governance patterns, the number of institutions, and the size of the state all enter into the decision of when to undertake reviews at the extrainstitutional level. All things considered, the results of this study indicate a need for both internal and extrainstitutional reviews in virtually all instances.

State and Institutional Friction over Reviews

Aside from issues surrounding duplicate review efforts, probably the biggest obstacle to cooperation is an attitudinal one. College and university faculty and staff openly resent the increasing state intrusions made into academic autonomy. To ease such tensions, the Carnegie Council, the Education Commission of the States, the Sloan Commission, and others have attempted to make distinctions between legitimate state responsibilities and strictly institutional affairs. The Sloan Commission, for example, recommends that each state arrange for periodic reviews of every program but adds that these reviews should be conducted by peers, not state-agency staff (Sloan 1980).

Despite such efforts, little consensus exists as to where responsibility for program review should ultimately reside. Meanwhile, concern over recent academic scandals, the seemingly endless requests for more funds, and the inappropriateness of at least some university research press state officials to ask for ever-tighter controls and greater accountability. Perhaps understandably, program reviews tend to be increasingly popular with governors, legislators, and the public.

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Perhaps the following editorial concerning reviews conducted by the Louisiana Board of Regents is typical:

Carefully nurturing the flourishing programs and cutting out the obvious losers, as painful as the latter might be, . . . is the way to go for a better, higher education. Just be grateful something is being done here to assure that we're getting a full measure for what we pay. It's certainly a refreshing change (Morning Advocate 1979).

When emotions come into play, program review is viewed as an important tool (for both right and wrong reasons) to make institutions more accountable, to weed out duplicate programs, to reallocate resources, and, in a word, to cut costs.

Participation of the Independent Sector in Program Review

Despite the fact that most state agencies feel participation by private institutions is an absolute must, only a few agencies have authority that actually extends to the private sector. Especially in cases where state aid is provided and reviews are integrated into state planning and budgeting systems, lack of input from the private sector becomes critical. Obviously, without a reciprocal opportunity for state agencies and public colleges to scrutinize private-college offerings, it's virtually impossible to provide truly comprehensive statewide planning perspectives. Although on a voluntary basis some private colleges and universities do occasionally participate in state-level reviews, to date, this participation is limited to only a few states.

By and large, private institutions fear that participation in reviews will infringe on their academic independence. But while these institutions may understandably sacrifice some of their traditional autonomy, one writer has commented that "the benefits outweigh the costs of intense programmatic competition and terrific resource waste" (Wilson 1979, p.20). This conclusion not

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only has been substantiated by the findings of our immediate study but also is consistent with conclusions reached by the Sloan Commission (1980). For a complete analysis of private-sector participation in state-level reviews, see Wilson and Miller (1980).

Do Program Reviews Save Money?

Of all the concerns raised in this study, no issue received more frequent commentary than the issue of whether or not program discontinuance (especially as a result of state-level reviews) results in dollar savings. When the author and Robert Berdahl first wrote on state-level reviews, a common folk wisdom prevailed that program reviews would naturally result in great dollar savings. Later, this was replaced by an equally common bit of lore that you can't save money by eliminating programs (see Berdahl 1975). As in many issues, the truth probably lies somewhere in between. Documented cases for both positions can easily be found (Smith 1975; Fields 1976). Mingle (1978, p. 66), for example, in a study of state-level program review in the South, found that program review is probably not a "cost-cutting measure if [emphasis added] we are considering *immediate* cost savings." According to Mingle, "States which use quantitative measures of degree output often limit their reviews to programs which are already low cost. [But] the most likely place to find savings is in programs with high levels of enrollment and degree production, which quantitative evaluations exclude."

Whether or not savings ultimately accrue depends on a variety of factors. For example, what is the primary purpose of the review? Is it to save money or is it for some other reason? And how extensive is the program being reviewed? In other words, is it simply a paper program or is it a genuine program with large numbers of faculty, students, and equipment?

To date, much of the evidence is not yet in. This is particularly so where resources are reallocated to other programs and may, in

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effect, remain hidden. Furthermore, in some institutions and in most states, the first round of program eliminations has focused on the weakest programs. Those programs with declining enrollments, poor quality, and lack of institutional support were automatically picked first. Some, in fact, were paper programs without either students or full-time faculty. As the reviews expand, as enrollments continue to decline, and as new resources become increasingly scarce, reviews will necessarily select more substantive programs for closure, thus making dollar savings more evident. Nonetheless, reviews themselves can be costly. If done well, they consume large amounts of time, energy, and money. But despite the expense, survey respondents concluded in virtually all cases that the reviews are, indeed, worth doing.

At this point, it's virtually impossible to forecast the future agenda for program review. The facts to date seem to indicate that—with the possible exception of the cost-saving issue—the inherent conflicts will most likely persist. At the institutional level, the conflict will no doubt continue between faculty who would like to utilize review outcomes for program improvement and administrators who wish to use these same results for resource allocation. And similarly, the inherent conflict between institutions and external reviewers at the system and state levels will probably continue to be a further source of friction. Some states have been more successful in maintaining this friction at a healthy level than others, and hopefully their examples may serve as guideposts. Obviously, we are now well past the point of turning back the clock to the relatively more relaxed eras of the fifties and sixties. State planning is very much a part of higher education with little indication of abatement. And accordingly, academic program evaluation—both internal and external—will be much used and discussed throughout the decade of the eighties.

Terms and Definitions

A brief review of evaluation terminology as derived from the literature can help inform the reader about current trends and applications. To start, *evaluation* itself has been called "an elastic word that stretches to cover judgments of many kinds" (Weiss 1972, p. 1). As such, it can be used to describe a host of activities pertaining to the common notion of judging merit. For the purposes of this report, two particular kinds of evaluation are brought into direct focus: *program approval*, which offers a process for evaluating new program proposals, and *program review*, which provides for evaluation of programs that are already in existence. (The reader is referred to Kelly and Johnston [1980] for a more thorough discussion of program review and its relationship to evaluation.) By way of contrast, the type of evaluation known as *accreditation* can be seen as "the process by which a program or institution is recognized as being in conformity with some agreed-upon standard. Most frequently it refers to approval by voluntary associations and accrediting agencies" (Anderson and others 1975, pp. 4-5).

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A more precise understanding of the terms "program approval" and "review" can be gained by looking closely at the context in which they are often used. For example, when these terms are employed by system or state-level agencies, a notion of accountability generally accompanies them. *Accountability* has been variously defined as "responsibility, explicability, and answerability" when used with reference to service in the public interest; in the field of education, accountability "relates mainly to a concern for furthering the educational effectiveness of school systems" (Anderson and others 1975, p. 1).

Two related concepts are *assessment* and *critical judgment*. *Assessment* connotes "a narrower meaning than evaluation, but a broader meaning than measurement." It refers "to the process of gathering the data and fashioning (it) into an interpretable form . . ." (Anderson and others 1975). *Critical judgment*, on the other hand, comes at the final stages of the assessment component, when decisions are made regarding the future of the program being reviewed. These decisions can range from either termination or continuance, to continuance with conditions, to program expansion and further development.

Program in this report generally refers to an academic/occupational course of study leading to a degree or certificate. Certainly program-review activities, however, extend beyond just degree and certificate programs to include research and service programs as well as projects such as the College Outcome Measures Project (COMP) and the Academic Program Evaluation Project (APEP), which evaluate entire undergraduate programs.

Objectives of program review and approval generally focus on program improvement and efficiency. On the institutional level, emphasis is primarily on improvement—with efficiency and effectiveness today becoming relatively more important—whereas at the system and state level, emphasis is more likely to be placed on the efficient use of state resources. Admittedly, qualitative improvement (usually in a broader statewide sense) is also an objective in many state-level reviews. Whatever the case,

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these objectives are met during the review and approval process by the use of *criterion measurement*, which seeks to relate goals and objectives to a set of established criteria (Anderson 1975, pp. 98-100).

A further distinction is that made between formative and summative evaluations (Scriven 1967). Basically, *formative* evaluation produces information that can be used to form a program or help improve it, whereas *summative* evaluation sums up or evaluates the overall program once it is in operation. Summative evaluation, for example, may result in program modification or termination. Generally speaking, reviews done internally by program faculty are formative, whereas reviews done by outside individuals are summative. More specifically, internal reviews conducted exclusively for the use of a given department are located near the formative end of the continuum; reviews conducted at the institutional level are slightly less formative; professional accreditations are somewhere in the middle; and external reviews conducted by system-level or state agencies are near the summative end (Barak 1977).

Examples of State-Level Program Approval

The following examples indicate the various approaches to state-level program approval. Virginia represents the planning-type approach, Rhode Island exemplifies the incremental approach, and Washington combines both. Beyond illustrating the various approaches to the state-level approval process, these three examples indicate the significance presently attached to state-level approval in initiating new programs.

Planning-Type Approach: Virginia

In 1978, the Virginia Council of Higher Education (SCHEV) began asking for (and reviewing) all public institutional curricular plans. In the hopes of developing a continuing and comprehensive plan for the introduction of new academic programs, SCHEV asked that these plans be revised every two years.

Since the council recognized at the outset that starting new programs required either additional funds from the general assembly or else reallocation of funds from programs already in

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operation, all new academic proposals were to be considered in light of projected enrollment figures, operational budgets, and building needs of colleges and universities (Davies 1980). Furthermore, to get approval, each institution's comprehensive six-year curricular plan would necessarily incorporate approval by SCHEV of all specific academic programs contained within it. Only under unusual circumstances could an institution either request permission to alter its curriculum plan or appeal a council decision. Above all, the SCHEV plan was designed to curtail unnecessary budget expense, avoid program duplication, and simultaneously find alternative ways to make essential programs available to the public.

Incremental Approach: Rhode Island

The Rhode Island Board of Governors supervises all state public education. Although proposals may be submitted at any time, the staff of the commissioner of education asks for adequate time for study and analysis. Because of this, proposals must be submitted at least 90 days prior to the intended date of implementation.

A primary consideration of Rhode Island's review process is to find out if program duplication is involved and, if so, whether the duplication increases costs. In other words, to what extent can the proposed activity utilize available resources at other institutions? To adequately respond to such queries, program proposals must include answers to the following: What cooperative arrangements will be made with institutions offering similar programs? Will provisions be made for students in other Rhode Island institutions to transfer into or out of the program? And if the program happens to be in an occupational field, what are the current and projected manpower needs at the national, state, regional, and local levels? In a word, how large is the projected clientele, and to what extent might it conceivably draw students from other existing programs? Specifically, how

EXAMPLES OF STATE-LEVEL PROGRAM APPROVAL

will the the proposed program be administered and how much will it cost?

Upon completion of the review, the commissioner submits a recommendation for action to a special subcommittee for postsecondary education, which in turn presents its recommendations to the board of governors. Approval by the board of governors is predicated on the assumption that an institutional evaluation of the new program will take place on or before the completion of one full program cycle.

Combined Approach: Washington

The Washington Council combines the incremental approach with the planning approach in such a way as to coordinate program approval with the legislative budget cycle. The following flowchart (figure 17) illustrates the normal sequence of events from conception to implementation of a new program. After deciding to plan a new degree program, the institution enters into informal discussions with council staff to determine whether the proposed program will require a preliminary (or category 1) planning statement. This preliminary planning statement is then reviewed by staff and forwarded to the institution.

To coincide with the budget calendar, the main stage of the review must begin on or before July 1 for inclusion in the normal review agenda. Final action by the council must occur on or before December 15. If the council makes favorable recommendations, stipulations are included that the program must undergo institutional evaluations no later than the fifth year of its operation. At that time, new evaluations will be compared with the original projections to examine the overall impact of the program. A final evaluation report is then sent to the council, containing the findings as well as any necessary measures to improve the program.

FIGURE 17

**Washington Council on Postsecondary Education
 Procedure for Review and Recommendation of
 New Degrees or New Degree Programs**

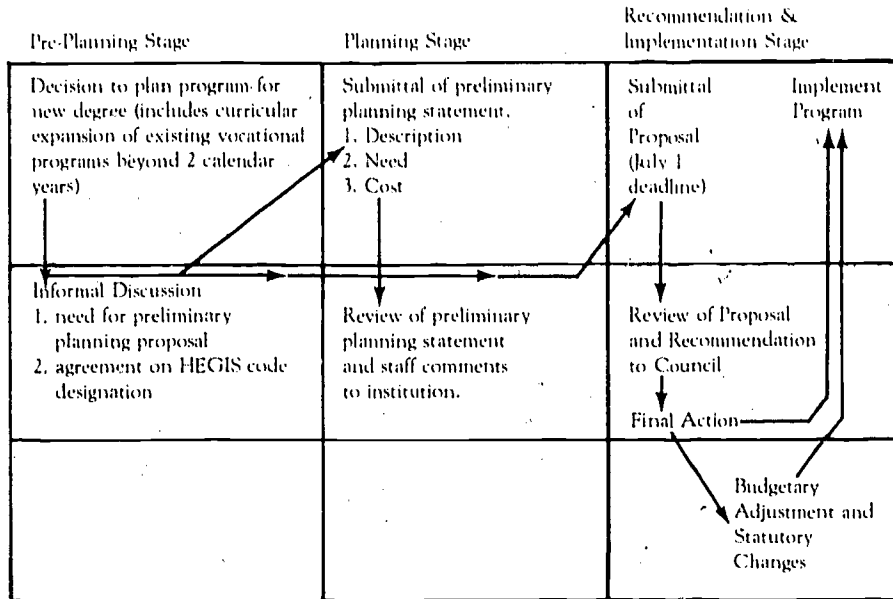
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Public Baccalaureate
 Institutions and the
 State Board for Community
 College Education
 (vocational programs
 requiring more than 2
 calendar years)

Staff
 Council for Postsecondary
 Education

Members
 Executive and
 Legislative
 Branches



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APPENDIX III:

Internal Review Examples

Although no particular approach to internal program review is recommended as perfect, the following examples provide an overview of current procedures. The University of Iowa example indicates how a large research university approaches the subject, the three community colleges illustrate the variety of processes found in smaller institutions, and Harvard University represents a highly unique approach based on the school's history and traditions.

University of Iowa

Although typical of the approaches found in many large research universities, the University of Iowa's internal program-review process is especially noteworthy because of its integration into long-range academic planning. Initiated in 1971, the UI academic review process enables the university to systematically review all programs and levels, including individual support

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units as well as the university as a whole. For example, results of departmental and graduate program reviews are incorporated into the overall collegiate review of priorities and directions, using the guidelines for "collegiate reviews." These collegiate guidelines then serve for review of such nondepartmentalized colleges as law, nursing, and pharmacy. And finally, in conjunction with the North Central Association accreditation visits, a total university review is completed.

Above all, this plan is designed to allow flexibility in meeting individualized program needs and characteristics. To gain a better understanding of the specific applications, we'll turn now to the separate processes involved in departmental reviews, collegiate reviews, and the university review.

Departmental Program Reviews

Basically, UP's departmental reviews aim at gaining quality control while surveying the overall future direction of the academic enterprise. At the heart of UP's departmental review is a self-study that focuses on goal statements, resource requirements for attaining these goals, and comments by the deans on stated needs.

For each departmental review, an ad hoc review committee is appointed to interview students and faculty, enlist reactions from external sources, and evaluate teaching, research, and service functions. Resource persons from outside the university serve with faculty from other university disciplines on the review committees. Among other considerations, the review committee members try to gain an understanding of the relationship of the program or department to other college programs and units; to evaluate faculty contributions; to review program goals in the context of projected needs, as well as existing financial and material support; and to identify strengths and weaknesses in the program.

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Copies of the final review report are submitted to the appropriate deans, who, in turn, submit their recommendations to the vice-president for academic affairs.

Collegiate Reviews

Collegiate review committees are appointed by the vice-president for academic affairs and consist of faculty from other university colleges plus at least one person from outside the university. The actual review makes use of a self-study prepared by the collegiate faculty but focuses primarily on the mission and priorities of the college as a whole with respect to teaching, research, and service programs. In addition, the review evaluates the collegiate organization, administration, and fiscal structure.

After the review committee obtains faculty self-studies, reports from the dean, plus additional information, it then prepares a formal report that is submitted to the vice-president for academic affairs, who then consults with the dean, the president, and an appropriate college faculty committee.

University Review

Begun in the fall of 1976, the university review surveys five general areas:

1. Undergraduate Education. Issues are general education; student advisory services; job-oriented programs; interdisciplinary teaching programs; honors programs; and use of teaching assistants.
2. Preprofessional and Professional Education. Issues are interrelationships of teaching, research, and professional practice; professional education and the University; preprofessional advisory services; and professional accreditation.
3. Graduate Education. Issues are faculty vitality; employment of graduates; new graduate programs; inter-

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disciplinary research; and libraries, computer resources, and other research support services.

4. Continuing Education. Issues are professional growth programs; inservice programs for teachers; relations with area-community colleges; off-campus degree programs; programs for adults; and recreational and cultural programs.
5. Governance, Faculty Matters, Student Affairs. Issues are faculty organizations; student organizations; teaching evaluation; academic reviews; affirmative action; and the role of students in academic affairs.

Evaluation of UI's Academic Review Procedures

Interviews with executive officers of departments and programs at the University of Iowa that were reviewed between 1971 and 1978 revealed that faculty who served on review committees from other departmental units felt that they had gained a broader understanding of the university. They also felt that, despite the significant investment of faculty and administrative time and effort, many positive benefits had been derived for academic program evaluation and development, especially as a result of the self-study process. The interviews further indicated that procedural guidelines for academic reviews needed greater clarification and refinement, and that improved follow-up mechanisms were needed to enhance the overall review process.

The Community Colleges

California Community Colleges

COPES is the familiar acronym for the Community College Occupational Programs Evaluation System, a process that was developed by the chancellor's office of California Community Colleges (Sacramento) and Foothill—De Anza Community

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College District (California) to evaluate occupational education. Between 1976 and 1977, 53 evaluations using COPEs were undertaken in California Community Colleges. According to the findings, although a number of people saw need for further refinement, the overall reaction was favorable. Among the acknowledged benefits reported by institutions using COPEs were: better targeting of fund areas for needed equipment; clearer roles in administration and program operations; and stronger planning, evaluation, and student follow-up.

The way COPEs works is by offering a self-study method that can readily be applied to a variety of situations. First of all, COPEs can be used to appraise a college's total performance in occupational education or it can concentrate on a single program area. Also, it can evaluate specialized programs and services such as those offered for the disadvantaged and the handicapped or cooperative work experience projects. All in all, the COPEs approach involves teachers, counselors, administrators, students, and occupational education advisory committee members. And in some instances, a team of outside experts from other community colleges visits the campus to validate the findings of the self-study. Primarily, the COPEs process offers a tool for use by the requesting college, the results of which are not reported beyond the campus.

Broome Community College (New York)

A second model of program evaluation for two-year colleges is the RBE (Reality-Based Evaluation for Two-Year Occupational Programs) developed by the Cornell Institute for Research and Development in Occupational Education. Since Broome Community College (in Binghamton, New York) uses an adaptation of the RBE model, it serves as an appropriate example. A key asset of this approach is the flexibility it allows in acquiring information for improved decisionmaking in areas such as standards, goals, and expansion or curtailment, while simultaneously de-

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emphasizing individual performance. With the RBE system, program evaluation is done by the department chairperson program coordinator and by faculty who are assisted by the dean of curriculum. As such, it proceeds through three general phases:

Phase I seeks to clarify program objectives and activities. To do this, an evaluative worksheet is developed to look at such aspects as enrollment patterns, instructional techniques, course objectives, and projected program needs. If concerns arise during the evaluation (such as a need for better evaluative strategies or a problem with meeting program expectations), a committee is set up to do an in-depth study. Otherwise, Phase II begins.

Phase II is the data-collection part of the process, which entails gathering information about each objective and/or cluster of activities as well as evidence related to the attainment of the program objectives. At this point, the dean of curriculum and the department coordinator put together a second evaluative worksheet to determine the most appropriate evaluation sources, such as faculty, graduates, students, employers, and so on. To find out which sources are, in fact, most suitable, the following questions are asked: What evidence can best determine attainment of the objectives? Where can it be found? How can it be acquired?

Phase III focuses on the findings and recommendations when the data is collected. Actual interpretation of the findings and recommendations is made by the dean of curriculum after the department chairperson program coordinator has forwarded a summary to the dean. Mainly, this report is concerned with program effectiveness, necessary modifications, findings of merit, and unanswered questions.

Finally, a recommendation report is written up in the following format:

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	College Name Evaluation Report Title
Identification—	College Mission Statement; Department or Program Goal; Program Title
Introduction—	Brief summary including purpose of evaluation and names of those involved in evaluation.
Overview—	Brief description of the process used, including objectives and activities of the program. (A copy of the Phase II worksheet may be sufficient.)
Findings—	A summation of the findings, answering the question, Now that we have evaluated, what have we learned?
Recommendations—	Answers the question, What do we do with what we learned?

Metropolitan Community College District
(Kansas City, Missouri)

The Metropolitan Community College (MCC) District has been selected as the third community-college example to illustrate a vocational curricular evaluation model. This model was originally funded by the Bureau of Occupational and Adult Education of the U.S. Office of Education. The project primarily sought to evaluate the MCC program in six areas: (1) program relationship to the job market; (2) level of community support; (3) program success in meeting vocational aspirations of clientele; (4) program success in terms of student performance; (5) program cost-effectiveness; and (6) program success in reaching the handicapped and disadvantaged. According to its developers, an advantage of this model is that it provides a strategy and a set of procedures for assessing the quality of existing vocational education programs at any postsecondary institution.

For the actual project, each of the above criteria was operationalized in terms of subcriteria evolved from MCC evaluator

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responses to a series of questions. A weighting scheme was then incorporated into the model, reflecting the perceived importance placed on each of the criteria and subcriteria by an advisory committee consisting of 121 state and local legislators, educators, college trustees, and business people. The resulting proportional weights of the subcriteria are shown in figure 18.

Once the evaluation criteria and subcriteria plus their respective weights were established, a means for measuring a program's level of success in attaining the subcriteria was developed. To do this, proficiency levels for each subscription were established that categorized a program's subcriterion attainment as strong, adequate, or weak.

The criterion and subcriterion weights were then combined with attainment ratings on an evaluation score sheet (see figure 19). A final step in the process was the development of evaluation profiles.

FIGURE 18

Paired-Comparison and Proportional Weights

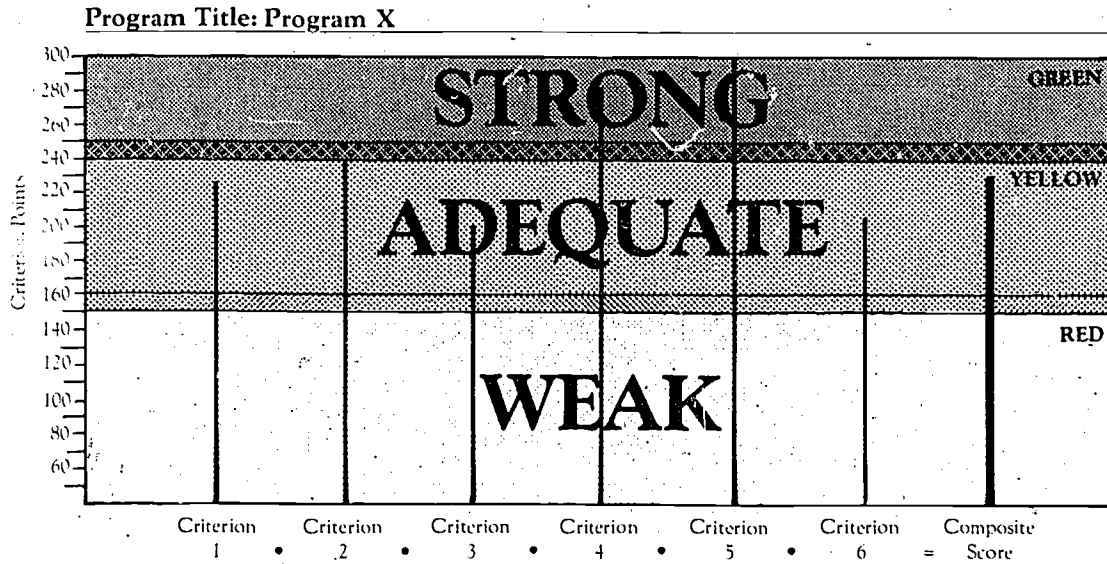
Criteria	Paired-Comparison Weight	Proportional Weight
Program's relationship to job market profile	0.764	$100 (1 + 0.764)/6 = 30$
Program's success in meeting vocational aspirations of clientele	0.548	$100 (1 + 0.548)/6 = 26$
Program's success in terms of student performance	0.462	$100 (1 + 0.462)/6 = 24$
Program's level of community support	-0.515	$100 (1 - 0.515)/6 = 8$
Program's cost-effectiveness	-0.563	$100 (1 - 0.563)/6 = 7$
Program's success in reaching handicapped and disadvantaged	-0.696	$100 (1 - 0.696)/6 = 5$
Total		100

FIGURE 19
 Criterion and Composite Scores of the Ten Field Tested Programs

Program	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6	Composite Score	Attainment rating
Program A	220	259	300	228	300	160 ^a	253	Strong
Program B	211	214	258	218	227	193	224	Adequate
Program C	160	233	290	254	250	169	224	Adequate
Program D	229	259	287	282	273	216	258	Strong
Program E	230	224	266	264	277	165	240	Adequate
Program F	211	224	250	229	150	141	217	Adequate
Program G	232	245	247	239	250	141	236	Adequate
Program H	167	81 ^a	0	90	100	127	92	Weak
Program I	231	245	240	275	300	201	244	Strong
Program J	211	224	219	212	150	181	211	Adequate

^aIndicates highest projections for the three missing current student responses.
 (SOURCE: Ory et al., 1978)

FIGURE 20

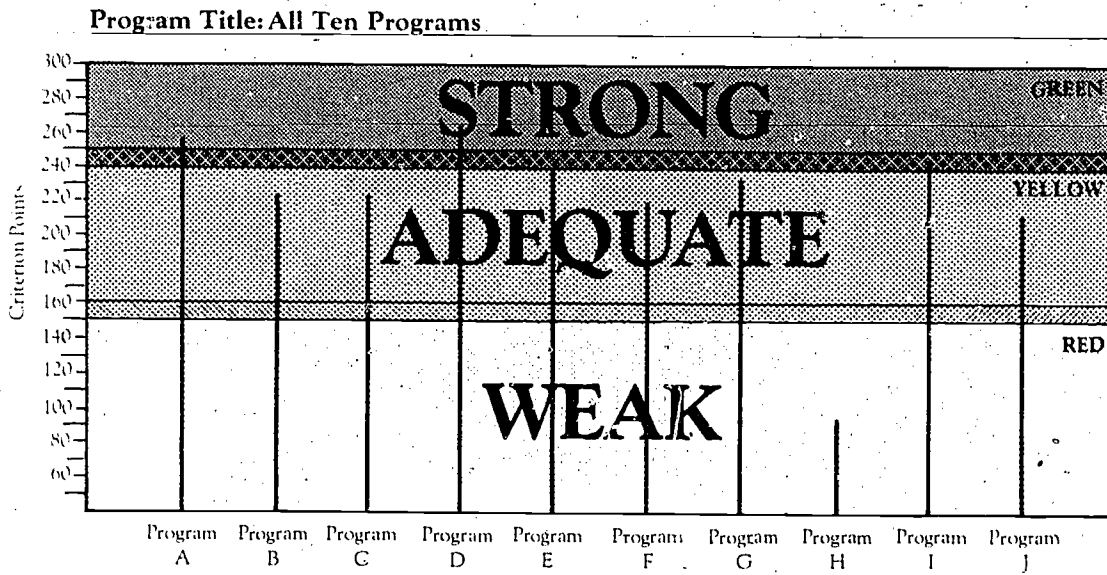


Figures 20 and 21 show the composite and criterion scores. The composite score comparisons indicated to the administrator which specific programs needed revision, whereas the

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critereon score comparisons provided a cross section of the various programs.

FIGURE 21



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Harvard

Harvard University offers one of the oldest and, perhaps, most traditional approaches to program review. Partly due to its historical evolution, the Harvard approach is probably the most difficult for other institutions to adopt. At the heart of Harvard's review system is the Harvard Board of Overseers, which is one of the two central governing boards of the university; the other is the president and fellows, commonly known as the "corporation." The board is comprised of 30 members—all alumni by custom—whose primary duty is "to keep the University true to its character as a place of learning." Although in the very broadest sense the executive management of the university rests in the president and fellows, it is the job of the board of overseers to review and sanction the acts of that body.

With the growth of the university in size and complexity, the overseers have had to seek help both in evaluating effectiveness and in providing support and counsel for the president and fellows. In this regard, they rely heavily on visiting committees, which are primarily headed by overseers. These committees are made up of experts from outside the Harvard faculty or administration who are asked to evaluate a particular department in such a way as to bring fresh ideas to the university, to prevent provincialism, and to "bring the University into direct and active sympathy and communication with the outside world. . . ." By way of explanation, "department" in this sense is broadly interpreted to mean a school, museum, institution, or, of course, a department. One further purpose of the visiting committees is stated in an 1889 committee report that notes that every "really useful" visiting committee must "always remain a continual applicant for means." Members of the visiting committees are therefore encouraged to help raise funds, or if they are able, to contribute directly to the activities of the departments with which they are affiliated.

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Once a review is undertaken, visiting committee chairmen are expected to report orally to one of the following standing committees of the board of overseers: natural and applied sciences, social studies, humanities, and arts, or student life and financial policy. For example, the Committee to Visit the Department of Physics reports to the Standing Committee on Natural and Applied Sciences, and the Committee to Visit the Department of Government reports to the Standing Committee on Social Studies, and so on. The several standing committees, in turn, report to the full board, which then brings matters of particular significance to the attention of the president and the corporation.³

For those who wish further examples of program evaluation in state colleges and universities, information can be found in a publication of the Resource Center for Planned Change of the American Association of State Colleges and Universities (AASCU) entitled *Program Evaluation* (November 1976). Also, a more recent publication by Munitz and Wright (1980) describes the evaluation process used at Michigan State University, the University of Michigan, and the University of Houston (also see Craven 1980).

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