

PROGRAM-LEVEL CURRICULUM PLANNING: An Exploration of Faculty Perspectives on Two Different Campuses

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This study explored faculty views about curriculum planning in academic programs. Using a semistructured format, researchers interviewed 59 faculty members at two very different campuses about their assumptions and the influences upon them as they work with colleagues in planning program curriculum. Although many of the same factors influence course and program planning, we observed that, compared to course planning, program planning is irregular (even infrequent), typically responds to a specific catalyst, and is more dependent upon a supportive institutional climate and leadership. We consider ways that institutional researchers can help provide a supportive climate for responsive and regular planning that will link planning and assessment more closely.

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Faculty plan curriculum for several purposes: to teach specific units of content, to teach particular courses, to devise sequences of courses within a program or department, and to develop curriculum plans for entire colleges. Institutional researchers traditionally have been involved in institution-wide planning; they have interacted less frequently with faculty regarding unit, course, or program planning. As accreditors emphasize planning and assessment activity increases on campuses, however, institutional researchers more often help to collect data relating to curriculum initiatives at the program level. Both data and strategies for their use may be improved by understanding how faculty view their roles as curriculum planners within their programs.

There are few specific studies that will help institutional researchers or academic administrators grasp the dimensions of program planning in academic units. Before the mid-1980s, few researchers had explored the perspectives col-

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lege faculty bring to developing curriculum at any level. Recently, both qualitative and quantitative studies have focused on faculty intentions in planning and teaching courses. Investigators have examined decisions about specific content and skills (Donald, 1983, 1990, 1992), faculty teaching goals (Angelo and Cross, 1993), and influences on faculty when they plan introductory and advanced courses (Stark, Lowther, Ryan, and others, 1988, 1990). In each case, the studies have identified substantial differences among disciplines and/or types of institutions in curriculum planning. All of these researchers have studied the disciplinary differences rather extensively but, because discipline effects have been so strong, they have given little attention to the effect of institutional differences on curriculum planning. In contrast to recent systematic studies of course planning, most literature about program planning is anecdotal, and most (e.g., Seymour, 1988) focuses on innovation or new program development. Few studies have explored the perspectives and motivations faculty bring to regular planning and development activities for existing academic programs and rarely do researchers examine interpersonal dynamics or institutional contexts.

We designed this exploratory study to learn how faculty view and define program curriculum planning and what factors influence their actions. The study builds on our assumption, also implied by others (e.g., Conrad and Pratt, 1983; Halliburton, 1977a, 1977b; Toombs and Tierney, 1991), that curriculum planning is at the heart of academic work. Learning researchers assert that the structure, coherence, and integrity of a student's formal academic program depend substantially on the plans faculty create, how tightly they prescribe what students should study, and how well they communicate their plans to students. Recent criticisms of colleges have emphasized apparent lack of coherence and integrity of the programs of courses students take. They have stressed that faculty should set goals, communicate expectations to students and the public, and assess whether students achieve the goals (National Institute of Education [NIE] Study Group, 1984). Such coherence and goal-setting requires that faculty actively engage in program planning.

In keeping with recent recommendations to examine curricular coherence, curriculum researchers have devised methods of measuring the breadth and depth of the patterns of courses students take (Zemsky, 1989) and of identifying course patterns that seem to predict academic achievement as measured by independent examinations (Ratcliff, 1992). These researchers have developed detailed analysis systems which they recommend that college leaders use to study their local curriculum. The emergence of such studies and the public's view that assessment of outcomes should be related to established objectives imply that systematic planning processes operate in academic programs and can be used to remedy deficiencies. Yet, other researchers who have interviewed many faculty about their collegial activities within departments have expressed doubt that

faculty spend much time in the types of planning that could use these types of information (Massy, Wilger, and Colbeck, 1994).

Curriculum planning also has been of increasing interest to college administrators as they experiment with theories of continuous quality improvement. A number of colleges and universities are attempting to adapt from business the principles of total quality management (Seymour, 1991, 1993). Thus far, they have been more successful in enhancing business activities of university administration than in affecting academic activities such as teaching and learning. Broad interpretation of this new management emphasis on quality control, examination of processes, employee involvement, and continuous scanning of the environment suggest that academic leaders close to the classroom experience may soon begin to use these ideas in curriculum planning, especially in times of rapid social and technological change.

However, many faculty members insist that the most effective academic programs are those that are the least coordinated; some faculty do not believe that curriculum planning is an activity valued by their institution. In part, this is true because curriculum development competes for time with research and other highly rewarded endeavors. In part, it is true because, at the program level where faculty work in groups to plan sequences of courses, curriculum planning can become political, involving compromise among faculty self-interests. Many observers see program planning as an arena where educational and disciplinary ideologies clash, or where competition for scarce resources linked to credit hour production takes place. Despite its potential importance, program planning is seldom seen by observers as a professional activity in which faculty engage in systematic and regular evaluation and change. This purported lack of faculty involvement and concurrent recent demands of college funders for evidence of careful educational planning suggest the importance of understanding more about faculty experiences in academic planning.

PREVIOUS RESEARCH

Since 1986 the senior authors have conducted studies that identified factors influencing faculty decisions in course-level academic planning. In extensive interviews involving 12 types of courses at varying types of colleges, and in a nationally representative survey of 2,311 faculty at 267 institutions, faculty members were able to articulate their primary educational beliefs and discipline views, to estimate the strength of both content and context influences, and to describe how they engaged in course planning. First, we found that as faculty plan courses, they are most strongly influenced by their background, their discipline, and the educational beliefs associated with these. Based on these educational beliefs, most faculty tend to espouse a primary educational goal to help students become effective thinkers, and one or more secondary educational

goals allied with the particular discipline such as encouraging personal development, values clarification, or career development. Further, we found that a set of local circumstances, including the characteristics of students and the goals and resources of the college, modified the faculty members' preferred course planning decisions. We linked these findings in a framework that we called the "contextual filters model of course design" (Stark, Lowther, Bentley, Ryan, and others, 1990; Stark, Lowther, Bentley, and Martens, 1990; Stark and Lattuca, 1997). This model, graphically portrayed in Figure 1, conveys the idea that enduring beliefs about education are modified to a limited extent by local contextual influences. Contextual considerations, including the students and the specific college settings, serve as mediators of the content influences on course planning, rather than primary determiners of educational decisions.

We also learned that, although most faculty in a discipline hold similar educational beliefs, a few view education quite differently from their close colleagues. Along with different views of the disciplines, these epistemological variations within program groups may be especially important when faculty debate possible decisions about curriculum. Since program planning is a group activity, we assumed that such differences would affect planning processes and activities quite strongly. This thinking was reinforced by a set of studies based on the original work of Biglan (Biglan, 1973a, 1973b; Creswell and Roskens, 1981; Drees, 1982; Stoecker, 1993) showing that discipline is related to the

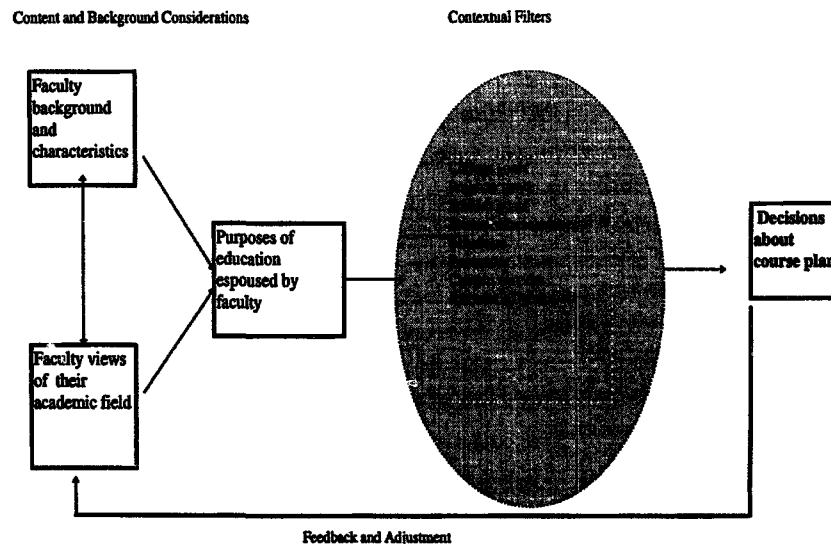


FIG. 1. Contextual filters model of course planning.

leadership style and the degree of coordination faculty groups are willing to accept as they engage in curriculum development. These studies by several researchers have shown that faculty in the sciences, where considerable consensus about curriculum goals exists, are less likely to engage in detailed debate about curriculum and more willing to accept administrative coordination than are those in the social sciences and humanities where consensus in educational beliefs is less common. In a close analysis of idealized program plans developed for several disciplines by task forces at the Association of American Colleges, Lattuca and Stark (1994; Stark and Lattuca, 1993) found that because of this consensus and a hierarchical discipline structure, it was easier for faculty in the sciences to articulate a sense of coherence for their major programs than for faculty in the social sciences and humanities faculty. Faculty in nonscience fields attached less value to consensus and coherence. Rather, they often felt that taking a critical perspective toward the discipline and learning to understand the conflicts between scholars were important outcomes for their students. Understandably, program planning may not proceed as smoothly in the social sciences and humanities as in the sciences.

Most studies of planning in postsecondary education have been concerned with strategic planning at the institutional level (Cope, 1987; Shirley, 1987) or with operational planning at the program level (such as teaching assignments, credit hour production, and scheduling), rather than with the concepts, assumptions, influences and processes that may characterize faculty decisions about what part of their knowledge base to transmit to students and how to do so. As we reviewed the literature on planning in higher education and other enterprises we saw the work of John Friedmann (1967) as potentially useful to capture academic program development. Friedmann discussed four modes of planning for political social systems: (1) adaptive planning, (2) developmental planning, (3) allocative planning, and (4) innovative planning. Both adaptive planning, in which those at lower organizational levels respond under duress to external decisions, and developmental planning, which emphasizes planners' autonomy to set both means and ends, seemed likely to characterize some aspects of faculty planning in programs. Richardson and Gardner (1983) also offered a fourfold typology for planning in higher education: (1) disjointed planning, (2) adaptive planning, (3) comprehensive planning, and (4) strategic planning. As shown in Figure 2, these four categories were defined by two major dimensions: type of motivation (internal or external influence) and degree of complexity. The opposing poles of the influence dimension are internal institutional needs and external pressures. On the complexity dimension, the least complex planning—that which is occasional, routine, informal, and fragmented—is termed “disjointed” as compared to “comprehensive planning,” which is more systematic and encompasses the entire institution or organization.

Some writers have explored curriculum development from a top-down view

More Complex ↑	Internal Institutional Needs	External Requirements
	Adaptive Planning	Comprehensive Planning
Less Complex	Disjointed Planning	Strategic Planning

FIG. 2. Types of institutional planning (from Richardson and Gardner, 1983, p. 182).

as an administrative or state responsibility (Conrad and Wilson, 1985; Seymour, 1988). A few, such as Heydinger (1980), have outlined styles of systematic planning they observed on campuses, for example, responses to new knowledge development, problem-centered initiatives undertaken by curriculum committees, program reviews, and needs assessments. As might be expected these observed "styles" overlap and do not provide distinct categories in which to classify planning activities. Two additional strands of planning literature in higher education deal respectively with special cases such as (1) the diffusion and adaptation of substantial innovations (Lindquist, 1974, 1978), and (2) program closure due to financial retrenchment. Neither radical innovation nor closure characterize the ongoing academic planning we hoped to capture in our inquiry.

After reviewing these and other frameworks we did not adopt any of them to guide our study. We were more interested in the epistemological assumptions faculty bring to their academic plans than in the dimensions of the planning process studied by these other researchers. Since so little was known about academic program planning we felt we should not constrain our study with predetermined categories. Rather, we developed this exploratory study using individual faculty members as informants so that we could listen to how faculty describe their assumptions, influences, and activities as members of a group responsible for decisions about students' educational programs. The questions we included in the interview were based on our expectation that program planning would be an analog of course planning at the next organizational level, involving educational beliefs related to discipline, and influenced by local context. In fact, in an early speculative article, we delineated the anticipated parallel components of course and program planning, assuming that program characteristics, program goals, and discipline-based views would be the analogs of faculty characteristics, course goals, and discipline-based views (Stark and Lowther, 1988). Based on this assumption, we reasoned that program educational objectives, definitions of coherence, and instructional strategies would be evident in group decisions by program faculty in the same way that faculty beliefs are evident in their course decisions, syllabi, and teaching styles.

Although we anticipated that the contextual filters model we had developed through studies of faculty course planning would also hold for program planning, we thought that specific contextual factors might be more influential.

Compared to course planning, which typically is an individual activity, we expected that faculty working together in program planning would report more issues of interpersonal dynamics and organizational politics, as well as a need to resolve differences in disciplinary views and educational beliefs. Additionally, we expected that external factors, such as accreditors, statewide requirements, and limited resources, might affect program planning more strongly than is true for individual courses. Consequently, we anticipated that leadership to help faculty effectively address their epistemological and pedagogical differences and coordination to help them respond to external pressures would emerge as important contextual influences.

STUDY DESCRIPTION

Our purpose in this exploratory study was to understand how faculty viewed and experienced program-level planning and what influenced them in the planning process. Applying procedures some of us had developed in earlier studies of course-level planning, we investigated program planning by interviewing faculty members. For this exploration we chose two very different settings: a small midwestern liberal arts college with a recent history of faculty-administrative strife (Small Private College) and a regional public university in a midwestern state (Large Public University) that had recently mandated state-wide curriculum review and where assessment mandates were on the immediate horizon. In these two settings, we sought to refine our questions, develop a vocabulary to use in discussing program planning with faculty, and develop a more focused set of expectations before extending the study to a wider range of institutions. The settings we chose were convenient ones known to differ with regard to key contextual issues, especially size, control, faculty autonomy, and administrative coordination. Administrators at both colleges were interested in using our interviews as an opportunity to stimulate faculty discussions about planning and change. Therefore, after completing our interviews, we conducted workshops at each institution to share our results with participating faculty and to solicit their reactions to our research.

We began each interview by clarifying the academic program to which the faculty member belonged and on which discussion would focus. We defined an academic program as "a planned sequence of courses or other educational experiences that a group of students is advised or required to pursue." Within our definition, the program may be pursued by a self-selected group of students and lead to a degree specialization (such as a major program in biology) or it may be a defined subset of a broader specialization (such as a concentration in American politics within the political science major). Some colleges have general education "programs" comprised of a deliberately planned sequence of courses and experiences. While varying in type and specificity, such programs may also be required or intended to serve all students and thus span departmen-

tal boundaries. Other examples of boundary-spanning programs include integrative studies, women's studies, honors, and developmental skills. What is common to all of these "programs" is that they are designed (actively or by default) by a group of faculty. Our working definition of program emphasized the responsibility of a group of faculty for developing and implementing a program of studies for students. We ascertained that the interviewee felt himself or herself to be a member of this group of "program planners."

The two senior authors were interviewers on both of the campuses; a third and fourth member of the research team that had planned the study and developed the interview protocol participated on the two campuses, alternately. Interviews were scheduled by the provosts' offices and were tape recorded with faculty permission. At Small Private College, we interviewed the program chairperson and two randomly selected full-time faculty members in all major departments except physical education. At SPC, we talked with 36 faculty members (about half of the faculty) for about 90 minutes each. As we will describe shortly, we found few instances of active program planning at Small Private College. Therefore, at Large Public University, we deliberately changed the procedure and interviewed 23 faculty members chosen from eight departments, four of which were judged by the provost's office to be actively engaged in curriculum development and four of which were judged as much less active. Faculty were selected at random from one active and one less active department from the natural sciences, social sciences, humanities, and professional studies, respectively.

Table 1 provides a summary of the program affiliations of the faculty we interviewed at each institution. Table 2 shows the distribution of these faculty members by gender, rank, tenure status, and length of teaching experience.

The semistructured interviews also varied slightly between our initial visit to Small Private College and our later visit to Large Public University. We discarded questions that were not providing useful information and added new issues that our informants raised. Our understanding of the engagement (or lack of engagement) in program planning by faculty changed as we progressed through the interviews. The following general questions were explored:

1. What beliefs about disciplines, students, and learning influence faculty members' perspectives about course sequences within the program when they join with their colleagues to plan?
2. In the view of faculty members, what constitutes a "coherent" academic plan for the program? Do faculty mention the importance and/or existence of prescribed courses, links with other fields, research opportunities for students, or capstone courses? Do they deliberate about other means of achieving coherence?
3. How is the curriculum rationale communicated to students in the program?

TABLE 1. Faculty Interviewed, by Discipline

Field	Discipline	LPU	SPC
Business	Accounting	3	
	Business		
English & Communication	Communication	3	2
	English		4
Humanities	Art		2
	History	3	2
	Languages		1
	Music		2
	Philosophy/Religion	3	2
Natural Sciences	Biology		2
	Chemistry		2
	Earth Science		2
	Math/Computer Science	3	2
	Physics	2	2
Social Sciences	Economics		2
	Political Science		2
	Psychology	3	2
	Sociology/ Anthropology		1
Education	Special Education	3	
	Teacher Education		2
Total		23	36

What do faculty do to ensure that students understand goals and plans for their education?

4. What steps do groups of faculty members take and what decisions do they make as they create and adjust the curriculum? How active are faculty in this curriculum planning process?
5. How much change or curriculum planning has been going on in the program in the last few years? What factors at work in the college or program cause changes in faculty participation in curriculum development? What are the influences acting upon faculty as they engage in program planning?
6. What provisions are made for assessing curriculum effectiveness? What kind of information is gathered to support planning decisions? Who is responsible for collecting this information? Are assessment results used for programmatic revisions?

DATA ANALYSIS

Upon completion of the interviews, five members of the research team listened to the tapes, reviewed the interviewer protocol sheets, and coded answers

TABLE 2. Characteristics of Faculty Interviewed

	LPU (<i>N</i> = 23)		SPC (<i>N</i> = 36)	
	<i>N</i>	%	<i>N</i>	%
Gender				
Male	15	65.2	31	86.1
Female	8	34.8	5	13.8
Faculty Rank				
Assistant Professor	2	8.7	5	13.9
Associate Professor	6	26.1	9	25.0
Full Professor	15	65.2	22	61.1
Tenured	23	100.0	31	86.1
Department Chair				
Present	5	21.7	3	8.3
Past	4	17.4	2	5.6
Years Teaching				
1-5			3	8.3
6-10	4	17.4	8	22.2
11-15	5	21.7	4	11.1
16-20	2	8.7	6	16.7
20-25	5	21.7	8	22.2
26-30	4	17.4	6	16.7
31-35	2	8.7	1	2.8
36+	1	4.4		
Average Years	20.57		16.92	

to specific questions. They noted central themes mentioned by faculty members and used these preliminary results in further exploring the findings with faculty at the workshops on the two campuses. Later, two researchers who had not been involved in the original research plan or data collection revisited each interview tape, listening for specific support for the themes originally identified and seeking new themes that may have been missed by the interviewers directly involved on the campuses. Finally, we returned to the planning literature to see if we could link what we heard faculty say with any previous work in planning or curriculum development.

RESULTS

Confirmation of the Contextual Filters Model

In formulating the first three broad research questions above we had hoped to understand the faculty beliefs and assumptions that shape the program academic plan and the influences that help to mold it to local settings. As we explored

(with open-ended discussion and a card sort) what strongly influenced them in program planning, faculty mentioned discipline, student characteristics, workload, faculty interests, program goals, budget, college goals, research developments in the discipline, faculty beliefs about student learning, student goals, class size, enrollment concerns, and facilities. Teaching and learning theory, external examinations, faculty pedagogical training, accreditors, textbooks, traditions, campus politics, and secretarial assistance were viewed as more modest influences. These findings were consistent with conceptual and contextual influences we had found in our studies of course planning. The type of influences faculty did not think were important were also consistent: their age, gender, trustees, union contracts, and the advice of campus experts on instructional development were not judged to be important influences. Thus, in its basic form, the contextual filters model of course planning has an analog at the program planning level. The pattern continues to be one of associated disciplinary and educational beliefs providing the long-term structure for program development; contextual factors modify these beliefs.

A key difference between these interviews and those we conducted about course planning was that leadership emerged as an important contextual factor. Leadership influences spanned every context and every level of organizational structure. They were mentioned as important at all stages of developing academic plans and those who were perceived to be in leadership roles included both faculty and administrators. As a result of the persistent mention of leadership, we added it to the program planning model as both an influence on educational assumptions and as a contextual filter.

In general, faculty had difficulty in conceptualizing their academic program as a whole and, consistent with the most pessimistic views in the literature, reported little regular curriculum development in program groups. Consequently, our attempts to understand how they believed a "coherent" program is fashioned fell short. In answer to our questions about program coherence or program goals, faculty members frequently returned to their own course planning and discussed how a course for which they were responsible seemed to them to fit into the program. Few were willing to ascribe goals or purposes to their colleagues; they seemed to feel secure in discussing only their own goals and procedures. As we heard about the individual views of faculty on coherence (as differentiated from a program view), faculty patterns of preference for autonomy and coherence paralleled those we had found in course planning studies. The sciences and professional fields viewed coherence as inherent in their hierarchical subject content and saw stronger coordination as important; the humanities and social sciences focused less on coherence and tended to insist on substantial autonomy, even at the program level.

Another difference we found between course and program planning is that in course planning most faculty consider it important to communicate their goals

to students. They spend considerable time and effort doing so, using the course syllabus and class time to expound upon their goals and expectations. In contrast, few faculty members reported program level effort to communicate overall goals to students (question 3). Of course, research questions 2 and 3 were closely linked; failure to articulate a program view of coherence is precursor to failure to communicate such a view to students.

An Unexpected Result

We formulated research questions 4, 5, and 6 to help us glimpse something of the process of program planning, especially the steps faculty take, the regularity or periodicity of the planning, and, in an age where assessment is under discussion, we were interested in what information faculty gather and use to aid their program planning. An unexpected result of the study, which we view in retrospect as an important finding, was that we were less successful than we had expected in engaging faculty members in discourse about program planning. We had defined program planning as making curriculum decisions and choices among alternatives; this included, but was not necessarily synonymous with, major change. In fact, planning may result in a decision to maintain the current program. In contrast to our view, faculty tended to see planning as something that primarily results in major shifts or innovations and thus takes place very rarely. Since planning was not a term they used to describe their interaction unless they had been involved in a major change effort, almost none were able to describe steps in the "normal" program planning process. This was true on both campuses, although Large Public University had a regular program review system in place and Small Private College had no tradition of regular and periodic reexamination of program plans. Faculty were not able to answer directly our questions about the type and nature of their involvement in program planning.

We believe one major reason for faculty discomfort in discussing program planning is that they have heavy personal investment in course planning, and much less in program planning. A second difference is that the periodicity of the term system almost automatically involves faculty in regular evaluation and improvement of their courses whereas the cycle of student cohorts progressing through the program does not produce a similar pattern of regular fine-tuning. Third, faculty saw program planning as involving many factors, only a few within their control as an individual or as part of the planning group. In course planning, they had substantial autonomy. Fourth, faculty members described few efforts to gather evaluation or assessment information (data) for use in the program planning process. In the few cases where faculty gave a positive response to our questions about data collection, they mentioned infrequent alumni surveys, informal feedback from recent graduates, and information provided by

external consultants. This lack of data is readily contrasted with the continuous feedback a faculty member gets in the classroom.

A New Approach

Clearly, for faculty, program planning is not a faithful group analog of course planning as we had theorized earlier (Stark and Lowther, 1988), but a somewhat different process. It involves less investment, less autonomy, less direct contact, and occurs less regularly. Despite our general findings of these differences between course and program planning, we were dissatisfied with the understanding we gained about program planning. It was not until two new listeners revisited the interview tapes that we developed quite a different notion about faculty involvement in program planning than the one with which we began.

The stimulus for our new notion came partly from re-reading a letter from a thoughtful faculty member at Small Private College who wrote us after our workshop discussion of why faculty kept telling us about their own courses when we asked about the program.

Your general observation was right, I think: faculty members aren't nearly as interested in program planning as they are in course development. I know I'm not, and I've done more program planning than most faculty members. The fundamental reason for the difference in attitude is that course development is what we *do*. Our day-to-day life is made of reading books; planning discussions, lectures and labs; thinking about courses for next semester; ordering books; and writing syllabi. This is exciting and stimulating work, and most of us are proud of what we do. We spend most of our teaching lives planning courses and carrying out plans. We also have substantial *control* over what we do in our courses and are free to be as innovative or traditional as we choose. We can change the content and structure of our courses from semester to semester, if we wish.

On the other hand, substantial changes in program content only come as a result of paradigm shifts. . . . And even those changes usually result merely in the deletion of some courses from the catalog and requirements and the addition of others.

Serious changes in program *form* are also the result of paradigm shift (the process approach to writing, collaborative learning, student-centered learning, etc.). Except for fairly revolutionary revisions, . . . these paradigm shifts have more effect on course planning than on program planning. Paradigm shifts don't happen often, and they don't happen on schedule. In between paradigm shifts, program planning amounts to routine maintenance or tinkering. Routine maintenance is a useful human activity but only a few people enjoy doing it. When one makes tinkering proposals to a department or college faculty, one encounters the reasonable conservative reaction that "if it ain't broke, don't fix it." For these reasons, only a program under considerable strain because of failing paradigms or one buoyed up by excitement over new ones is likely to undergo serious changes.

This faculty informant spoke of two types of "paradigm shifts"—failing ones and exciting new ones—as catalysts for program planning, and consequently

for change. Upon revisiting our interviews we heard many similar statements but “paradigm shifts” were only one of the many reasons for change mentioned. The comments of still another informant crystallized a key concept for us: “Very few of these things just happen on their own . . . without a *catalyst*, nothing happens.” Regardless of the specific type of catalyst, one seemed to be necessary to promote program planning. This caused us to reexamine our interviews to pursue the idea of catalysts that stimulate program planning. We developed a proposition concerning the essential relationship among catalysts, leadership, and climate for program-level curriculum planning. We state this proposition below and develop it further in the succeeding sections through a discussion of our interviews at Small Private College and Large Public University.

THE ROLE OF CATALYSTS FOR PROGRAM PLANNING

Our proposition, a hypothesis we believe worthy of further study, is that systematic program planning takes place only when a catalyst and leadership coexist. In our judgment, the following conditions are necessary for program planning to be active: (1) a catalyst must exist; (2) leadership must exist; and (3) a supportive climate and tradition must exist or be developed. Once catalyzed, the planning effort is productive if facilitators (rather than inhibitors) are operating to create a supportive climate. Leadership and the supportive climate may themselves act as catalysts, but leadership, at the program, school, or college-wide level, is essential either as a catalyst or as a facilitator. When leadership acts *both* as a catalyst and as a facilitator, the program is able to move forward with periodic curriculum planning that is responsive to external influences. When leadership is absent as a catalyst and/or as a facilitator, the program may slide backward into a static state or defensive stance, unable to adapt to internal and external influences. In this situation, we define leadership as our informants did, “the influence of an individual who strives to bring about change.” As will become clear, both forms of leadership—catalyst and facilitator—seemed in evidence at Large Public University and absent at Small Private College.

In Figure 3, we have attempted to portray the occurrence of catalysts (one of which could be leadership) as a stimulus to program planning. As we will discuss below, faculty interaction that may translate college and program goals into program decisions occurs when it is stimulated by a catalyst. The effect of the catalyst is modified by the climate for planning, including the presence of facilitators and inhibitors (one of which could be leadership). In this climate, faculty undertake varying levels of planning activity and make decisions about program plans. This framework can encompass either high or low levels of planning activity; the resulting decisions can range from substantial change to maintaining the status quo.

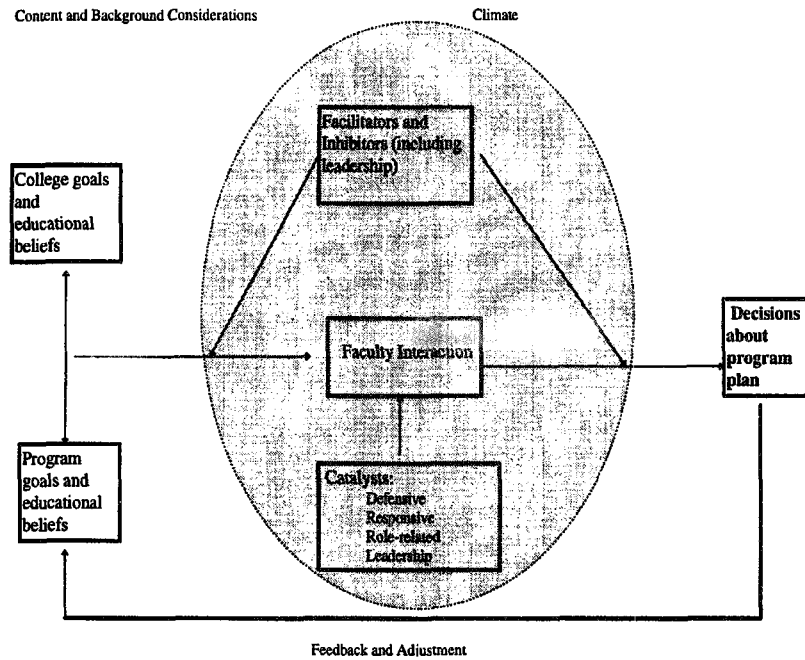


FIG. 3. Tentative catalyst model of program planning.

We intend to portray in Figure 3 the basic parallelism between the contextual filters model of course planning and its program-level analog; both begin with goals and educational beliefs and both contain a contextual dimension that modifies faculty thinking about educational decisions. A major difference, however, may be that the important contextual modifiers in program planning depend far more strongly on external impetus, climate, and leadership while course-level context filters focus on students, facilities, schedules, and resources. Additionally, while faculty members routinely review their courses on a regular cycle, program-level planning is more sporadic and episodic.

Types of Catalysts

Based on faculty examples, we suggest that, in addition to leadership, the catalysts may be of three types: responsive, defensive, and role-related. Responsive catalysts were those that stimulated the program faculty to respond because they perceived a need for improvement. Defensive catalysts were those that stimulated a response because they threatened the program's existence, resources, or status in some way. We judged role-related catalysts as more neu-

tral, involving the arrival or departure of faculty members or administrators, or change in their activity, level of expertise, or expectations. Defensive and responsive catalysts can be either internal or external to the institution. Role-related catalysts typically provide an internal influence. Defensive and responsive catalysts tend to lead to a sustained planning process, while role-related changes are more sporadic or episodic. Table 3 shows the list of catalysts faculty mentioned to us. The list might be expanded in a broader investigation.

We learned that defensive catalysts can bring about curriculum change at the program level rather quickly. This was true at Large Public University where, in the view of some faculty, state mandates for review of curricula set a negative if not hostile context for change. As one faculty member (#17) described the state mandate:

When we restructured we took what they told us we had to do and put it in place . . . and we tried to maintain the integrity of our program. . . . They [the state] solved their problem by restructuring our curriculum.

Responsive catalysts may take longer to produce change—sometimes a year or more for faculty discussion and decisions. For example, changes in the

TABLE 3. Catalysts for Program Planning

Catalysts for Responsive Change	Catalysts for Defensive Change	Catalysts for Role-related Change
Faculty perceive changing student needs	State authorities raise questions about program duplication	A faculty member takes on a new role in program
Faculty perceive change in discipline	College-wide review	New campus administration
Funding increases or grants are received	Funding decreases	
National movement (e.g., women's studies, writing across the curriculum)	Enrollment changes	Faculty in program now viewed as experts or national authorities
Communication changes	Communication changes	New faculty join program
Technology development	National or local criticism	Faculty interests shift
Program pride	An outside review is anticipated	
Graduate school expectations change		
Professional requirements change		

physics curriculum at Large Public University responded to multiple external conditions. The program was changed in response to changes in the discipline and simultaneously adjusted to appeal to students seeking jobs in physics immediately after college, as well as to those planning graduate study.

Changes in the curriculum came from change in the discipline . . . chaos theory and computations physics served as catalyst for development of an experimental course . . . paying attention to what's going on . . . [produced] a ground swell within the department." (#11)

And a business professor at Small Private College described responsive change as necessary while maintaining basic values and mission:

[The] philosophy of a liberal education has not changed. I think the outside factors impacting on the college have impacted dramatically . . . the competitive environment, the values parents and students hold. . . . We can't be insensitive to those changes and demands and survive. (#27)

Sometimes defensive catalysts can be converted into responsive ones. When faced with enrollment concerns, faculty at Small Private College created the Honors Program to retain the best and the brightest students. Some catalysts can be defensive in one setting and responsive in another. The job market operated differently at the two institutions, depending on whether the college mission reinforced or conflicted with external demands. Students' demands for marketable jobs provoked a defensive posture at Small Private College because even faculty teaching business administration and criminal justice preferred to be viewed as teaching the liberal arts. They lamented that outside pressures to prepare students for vocations conflicted with the liberal arts mission. In contrast, at Large Public University, faculty readily responded to calls for job preparation as a positive influence, based on their acceptance of a broad state-wide mission to contribute educated citizens to the labor force. A special education professor stated:

[The state mandate] causes you to self-examine, expand, and grow, and pay attention to the needs of the state and roles and missions you're training students to respond to. (#19)

Contextual Facilitators and Inhibitors

Among the many issues and relationships we identified, a striking finding was the extent to which faculty believed that institutional climate and top-level leadership influence curriculum development—as much as or more than leadership at the program level. Unlike course planning where faculty seem to create their own self-motivating microclimate, faculty participation in program development is strongly related to both faculty feelings of autonomy in curriculum development and their perceptions of the importance college administrators attach to it. Faculty on each campus linked curriculum development with their feelings about academic climate but in very different ways.

At Small Private College most faculty expressed pride in their program's effect on students, strong support for what they viewed as the liberal arts ethos of the college, and a sense that each must do what he or she can to improve one's own courses. However, they believed that the curriculum had long been stagnant; few could identify any formal process of curriculum planning. Faculty members lamented lack of leadership at both program and college levels, frequent administrative turnover, a history of tense faculty-administrative relationships, limited resources as incentives to plan, and few apparent reasons for data collection and use. They repeatedly attempted to refocus the interview on course planning—an endeavor where they seemed to feel more comfort, autonomy and responsibility. “Nevertheless, one must do what he or she can to improve one's own courses” was a characteristic statement. Other characteristic statements opposed coordination, for example, as one faculty member asked, “Why can't we just teach?” (#2).

At Large Public University, faculty also took pride in their work and their success with students. However, faculty perceived the curriculum and its development as strong and vital even in the programs considered least active in planning. They were able to give clear descriptions of their programs, and to cite their program's distinctive character. They described collaborative processes to plan the academic program both in their own departments and in a recent general education revision which some felt had provided a supportive model for systematic planning. They consistently cited strong leadership and support for curriculum planning at both department and college levels. Presidential interest especially stimulated their active concern and participation. Faculty told us that “the University knows its mission and we are working to incorporate it in our program planning activities.” Still, even at LPU, when asked about curriculum coherence, some faculty members believed that, “Each person is able to manage their curriculum as they believe it should be” (#18).

Climate

Faculty reinforced the view that a supportive climate is important for developing academic programs. The expectations previously established for academic planning help to create the climate. At Large Public University a two-year cycle of curriculum review was in place and an elaborate hierarchy of curriculum committees existed to approve courses at multiple levels, yet previous reviews had resulted in positive change. In contrast, at Small Private College regular planning had been neglected due to frequent changes in leadership and other controversies. Many faculty saw planning as futile; they seemed to have “hunkered down,” viewing efforts of recently appointed administrators to promote curriculum change as suspect, even if well intentioned. These two

situations are aptly described by statements of faculty members in both colleges:

The review takes place every two years, every department knows this and [department] seems to think of our own cycle of curriculum development within this two-year flow. This cycle gives individual departments a chance to consider change. (#9, Large Public University)

You say, OK. If you want to change, change now or wait two more years. (#21, Large Public University)

One of the things that I have noticed and lamented is that every once in a while someone in the department indicates that we need to review the curriculum again. (#13, Small Private College)

Discipline Differences

We know that disciplinary differences in educational purpose, ways of sequencing material, and other factors strongly influence faculty members as they plan courses. As we listened to interviews with several faculty members from the same field, we heard views on program planning that echoed those reported in our earlier studies of course planning and program structure. Systematic planning is considered less important by faculty in the humanities and social science fields than by those in the sciences. To illustrate, a theme running through our discussions in history is that this discipline is composed of somewhat autonomous faculty, each of whom is a specialist in a different area. The history department head at Large Public University told us,

Personally, I'm less interested in curriculum than about courses. I'd rather have good people teaching good courses and worry later about how they fit into the program . . . sort of the "chaotic school of curriculum design." We don't ride herd over our instructors in any way; there's no party line for the courses . . . we've always felt the best way to encourage good teaching is to let people go in the direction they want to go. . . . There's an [erroneous] assumption in your question that coherence is good. (#1)

Faculty in the joint program in religion and philosophy at LPU were also quite autonomous in their teaching roles. These faculty cited self-awareness and independence of thought as desired outcomes for students. Beyond that, consensus seemed lacking as each faculty member was given free reign to design his or her course in the particular realm of interest. Yet, in recent years this program had developed a "structural model" they characterized as "the process by which one [the student] moves through courses" (#10). Another said that the idea was to make the courses "a progression and not merely a series" (#6). Although there is a desire in this department to link courses in a more sequential pattern, any integration beyond that is seen as infringing on the domain of individual faculty. One faculty member said,

Never have we tried to define goals because that would tear us apart. One needs to respect one's colleagues and their strengths and perceptions. (#10)

The autonomy of faculty in determining course content can be pronounced, as revealed in an interesting tale we heard of a student who accidentally registered for the same nonscience course he had already taken. The second course was so different that the student didn't realize his error until the registrar refused to give credit twice.

The sciences presented a contrast to unfettered autonomy. In the physics program at Large Public University, the faculty expressed a clear and consistent view of the program while seeing the program design as a structure within which individual faculty members fulfill certain designated roles.

We [expect] students to graduate with a certain basic knowledge of physics. . . . You can't skip over anything [because of the hierarchy of concepts]. (#11)

There's a certain way one thinks of a person as a physicist in terms of the way they think, the way they approach problems, their mode of analysis. (#4)

Clearly programs that have external pressures, such as teacher certification requirements or accreditors' models to follow, also tend to have more systematic planning, a strong mission, and more extensive coordination. We found examples in special education at LPU and in accounting at both institutions. At Large Public University, the sense of mission in special education and concern for students' careers were so strong that one faculty member referred to them as "the tail that wagged the dog." (#15) At SPC, accounting faculty described the need to balance external demands of the accounting profession with the college's liberal arts mission.

We speculate that interdisciplinary and interdepartmental courses may not fit neatly into this progression of slightly decreasing levels of autonomy and slightly increasing coordination as one moves from nonscience to science and career fields. The dynamics, traditions, and external forces may operate differently in major fields than in interdisciplinary programs.

Faculty Dynamics

Faculty dynamics and generational differences often serve as inhibitors to regular planning. We encountered several kinds of these dynamics and differences, including resistance to change from senior faculty steeped in tradition, concerns of junior faculty for meeting promotion and tenure requirements, exclusion of junior faculty from decision making, intense specialization of faculty members, and perceptions of inequity of salaries and workload. A faculty member at Small Private College expressed a strong belief that specialization was the chief culprit by stating: "Faculty are functional specialists, so not likely to care or think about curricular coherence" (#17).

Resources (and lack of them) can be facilitators and inhibitors respectively. At Small Private College, there was little budget flexibility to support change. "Evaluations are useless if you have no funds to implement needed changes," said one workshop participant at the small college. Yet even lack of resources can be a facilitator if other conditions are right. Also at Small Private College, we encountered an instance where faculty deliberately changed their workload expectations in order to avoid the appearance of low enrollments. In the art department, faculty reduced the number of underenrolled courses and added gallery duties to courses to protect their program by establishing a visible service role they hoped would be valued. At Large Public University, funds were also quite short. But one respondent said:

Faculty spent time looking at how to secure resources. . . . We really pulled together [to find the money for change]. (#19)

Hollowed Collegiality

Although collegiality is usually thought of as a positive force in colleges, it may serve as an inhibitor of program-level planning. Especially in disciplines where faculty autonomy is viewed as essential, faculty may be reluctant to engage in planning if it is likely to stimulate disagreement that can be avoided by not planning. Faculty expressed this inhibition in different ways. For example, one said, "We don't want to confront one another [about our different views]" (#1), and another said, "We try to avoid institutional politics" (#9). In particular, with very small departments of one to three faculty members as at Small Private College, personality clashes, or conversely, the effort to avoid them, can bring all communication about program matters to a halt. In one program there, a new department chairperson reported progress toward changing an obsolete program as impossible because a senior faculty member insisted on retaining practices in which he took great pride. According to the senior faculty member who we also interviewed, the younger chairperson "hadn't been around long enough to know how good the program was."

The graciousness of the younger chairperson in dealing with the older faculty member may be an example of "hollowed collegiality," which saves feelings but can allow academic programs to decline. Massy, Wilger, and Colbeck (1994) explored the phenomenon of collegiality and attempted to identify differences between departments that support effective teaching and those that do not. As negative characteristics (parallel to our inhibitors) they identified "civility," too much autonomy, specialization, generational splits, personal politics, competition for funding, time pressures, overemphasis on research, indefensible salary differentials, and superficial assessment of teaching. As positive characteristics (similar to what we have called facilitators), they listed supportive culture, frequent interaction and talk, a high level of faculty participation, toler-

ance of differences, generational equity, workload equity, course rotation, peer evaluation of teaching, serious consideration of student evaluation of teaching, balanced incentives, consensus decision making and effective chairs. These attributes are similar to those we heard when faculty described negative and positive climates for program planning, respectively.

Positive communication, cooperation, and true collegiality are closely linked. It appears that without these three characteristics of program climate, planning will be difficult. But programs possessing these three modalities do not necessarily engage in systematic planning. Surely active planning is not likely to take place where collegiality doesn't exist, although collegiality doesn't ensure planning activity. Sometimes, a strong catalyst can stimulate communication or cooperation. For example, as one informant at SPC told us, "If (our accreditor) came down hard, we'd respond" (#5).

Leadership: Both Catalyst and Contextual Influence

Leadership for curriculum planning occurs at a variety of levels: the program chair, the dean, the vice president for academic affairs, and the president. It seems clear to us that through their concern with striving for improvement, the top-level administrators can initiate this chain and encourage planning by administrators at the lower levels. Possibly the most effective facilitator is a "chain" of leadership with the program chair, the dean, the vice president, and the president all supporting attention to program planning. As faculty members told us:

Faculty call the changes, so success of the program relies on the faculty's ability to stay current, to invest energies . . . but then we have leadership that facilitates implementation of change. . . . They support movement, growth, and change." (#19)

And another remarked:

[What is important is] leadership which is real facilitative. . . . There is a great deal of autonomy . . . to pursue activities that you're likely to be most successful at. (#19)

Administrative opinion or influence is increasingly important, particularly when we have an administrative style where the support follows the goals. (#5)

And another said:

I put administrative opinion here [in the strong influence category] partly because my boss is supportive. And he is . . . a driving force in our curriculum plan. He supports the whole program. He becomes an important element in this planning. (#7)

While obvious that program-level leaders may serve as catalysts as they did in several programs at Large Public University, it is not so clear that they can initiate a chain that will successfully increase the supportive behavior of higher-level administrators. In fact, at the program level in Small Private College, the

faculty encouraged chairpersons to be “nonmanagers” and to forego attempts at coordination.

We observed that faculty at the Large Public University distinguished between leader-initiated change and leader-supported change. To paraphrase an analogy used by one informant, the dean can be thought of as the wind that is necessary to fill the sails of change and the department chair as the helmsman. But ordinary sailors are needed to keep the ship afloat. In short, leadership is an important moderator of the various catalysts but leadership is not the only catalyst. One faculty member described the ideal leadership as “from the bottom up with support from the top.” In citing strong leadership from within, another said, “We were considered a sleeping giant; we have moved so far [now] we might be called hyperactive . . . we’re working collegially” (#19).

What the leader does in relation to other catalysts for change is important. Sometimes the leader is too strong a helmsman, removing faculty initiative. In one department at Large Public University, the dean, who apparently had been a forceful and perhaps authoritarian leader, had left and at least some of the faculty were in limbo.

We need to know just what the goal of the department is. [For the past dean] it was his way or the wrong way . . . [but now] we need to wait until we find out what we have to do and what our goal is. (#3)

Finally, some aspects of otherwise well-intended leadership can become defensive catalysts for planning. Even in Large Public University where vice-presidential and dean-level leadership was affirmed, a faculty member reported that one department head had told all faculty members that their ideas didn’t really matter and wouldn’t work. “So he put together a curricular package himself—and totally squashed any momentum” (#21). Under these circumstances, resistance at the program level thwarted top-level leadership rather than encouraging it and building on it. A new top-level academic administrator at Small Private College caused problems by attempting to introduce new ideas with unusual speed. While some faculty gave him credit for “moving and shaking what had been moribund,” others noted too many ideas, too little time for faculty to develop receptivity or internalize the ideas, and too little transition time, all exacerbated by a heavy workload.

DISCUSSION

After we had listened to faculty informants at these two colleges, we again reviewed the planning literature and found that our data were more similar to other discussions of planning than we had anticipated, despite the fact that most literature focused on institutional rather than program planning. Earlier, we noted that Heydinger described thirteen planning “styles.” Looking again, we noticed that at least six of the styles seemed related to catalysts that program

faculty deal with in a responsive way: knowledge development, entrepreneurial opportunities, curriculum committee initiatives, convincing needs assessments, periodic internal program reviews, and data collection. Other styles seemed to epitomize defensive catalysts we heard about in our interviews. These were the coordinating board mechanisms, administrative reviews (Heydinger called them formal democratic reviews), and problem-focused reviews, where someone had already characterized the program as a trouble spot. We noted further that two of the planning stimuli (or styles) that Heydinger listed, namely economic incentives and enrollment incentives, may engender defensive planning but can be converted to responsive catalysts, as, for example by providing program development funds (e. g., see Davis and Young, 1982).

Richardson and Gardner mapped types of planning in a two by two typology, as we noted earlier, on two dimensions: (1) internal/external influence and (2) extent of complexity. In their study of higher education planning, they asked questions such as: What is the source of motivation for planning? How can it compete with other tasks? What types of interaction do faculty use in planning? They sought factors that would indicate existence of a balance between thoughtful reflective planning and implementation.

Although our questions differed from theirs, Richardson and Gardner's analysis produced results close to our own. Addressing institutional planning as does most literature, they observed that most planning in higher education, especially that undertaken in response to internal influences deals with routine decisions, is "disjointed" and thus does not require an elaborate process. The term *disjointed* as used by these authors describes quite well the nonsystematic, occasional, and localized procedures our informants reported when no catalyst was operating.¹ Richardson and Gardner described strategic planning as less than comprehensive but responsive to external rather than internal influences. We found that the definition of strategic planning they gave seemed especially relevant when a catalyst was evident but, in our observations, it didn't matter whether the catalyst was internal or external.

We suggest that our observed categories of responsive and defensive catalysts resemble the internal and external forces outlined by Richardson and Gardner. Although each type of catalyst may be either internal or external, external catalysts are more likely to serve as catalysts provoking defensive reactions. The relationship between our findings and those of Richardson and Gardner becomes clearer if we reiterate that they were speaking primarily of institution-level planning while we were speaking of program subgroups. In our study, some forces internal to the institution, such as an administrator-led problem-focused review, may be external to the specific program. Surely the context at the two institutions we visited differed in their responses to external and internal planning initiatives. Small Private College, as an independent institution,

was less subject to direct buffeting by external forces. In fact, at Small Private College, each small department seemed somewhat insulated from external environmental forces (such as state mandates) and defensively responsive to administrative initiatives outside the program (such as response to student career interests). At Large Public University, faculty often developed positive responses to external catalysts originally seen as both positive and negative. The difference seemed to us to be the supportive interface created by top administrators between external catalysts and faculty who were responsible for developing specific curricular responses.

Complexity, the second dimension of Richardson and Gardner's typology, also seemed familiar after our interviews. Writers on curriculum planning have recognized its great complexity (Conrad and Pratt, 1983), but many writers on planning, especially those looking down from the administrative top levels, seem to be recommending more and more complexity—advocating attempts to coordinate and systematize planning through the entire institution. Seymour (1988), for example, connects strategic planning to program planning and takes a strong position supporting the advantages of greater complexity and comprehensiveness. The result can be long planning cycles that outlast the tenure of the administrators who create them and plans that are never implemented. This, in part, characterizes the phenomena we encountered at Small Private College where administrative turnover had been high and a current academic vice president once again was attempting to get program change started. Perhaps complex strategies are worse than useless in such settings because, when abandoned or refocused abruptly after faculty have devoted considerable time to them, they build faculty resistance to planning in general. What may be most useful to programs instead are short-term, simple planning activities (somewhat parallel to Angelo and Cross' classroom research techniques, 1993) that provide immediate feedback and cultivate the necessary climate for further planning. Such a cultivated climate reportedly was derived from the successful general education reform at Large Public University just prior to our visit. Consistent with our findings at the program level, Julia (1994) identified communication, leadership, and commitment of institutional resources among the factors that support adoption of institution-wide planning efforts. He also noted the presence of resisting factors, including a complacency component descriptive of Small Private College (pp. 46–47).

Finally, we note that Richardson and Gardner commented, as we did, on the important role of leadership. Although they felt that comprehensive planning seldom takes place without a serious external threat, they noted that, "Committed leadership can move colleges and universities toward the comprehensive end of the planning continuum in the absence of external requirements or an impending crisis."

IMPLICATIONS

Interestingly, most faculty we interviewed thought that program-level curriculum development should have a high priority as a faculty activity. Although they currently did not pursue planning regularly, they felt that they should be reviewing their curriculum more regularly and more systematically. Most recognized the need for information to make better decisions about their programs. We think it is unfortunate that existing literature (and sometimes planning efforts by administrators) links academic program planning so consistently with program review, statewide coordination, and comprehensive institutional budgeting. This emphasis makes planning seem primarily the province of upper-level administration; it does not start where faculty are—closest to the course and program level. While linking positive financial incentives to planning (as in grants) may provide a responsive catalyst, linking negative incentives (such as financial reductions) with planning creates a defensive catalyst. Although one may be seen by top-level planners to be the reverse of the other, the first creates in faculty a sense of optimism and valued autonomy, the second a sense of powerlessness and apathy. A potentially productive new approach would be to develop program-level planning for direct educational improvement.

In order to promote educationally directed regular planning, more attention is needed to the specific conditions that create a positive climate at the program level. To undertake substantial curriculum development, a faculty group seems to require at least a modest level of consensus among faculty (about discipline, about learning theory or educational beliefs, about pluralism), a level of psychological commitment (which can be related to climate), a level of communication or information exchange, a manageable level of unit interdependence (the more units the more complex the planning becomes), and an encouraging level of available resources, supportive leadership, and potential results.

Implications for Institutional Researchers

As institutional researchers are called upon to help faculty collect and use information to make more informed decisions, there are several points they might keep in mind. Institutional researchers should not assume that program planning proceeds in linear or rational steps as they might expect or wish. Logical planning steps such as collecting information, documenting a problem area, examining alternative solutions, projecting results from each solution, making a choice, and collecting more information may never even be initiated if appropriate catalysts, leadership, and climate are missing. To provide useful data and recommendations for curriculum revision, institutional researchers must consider these more elusive factors as well as envisioning improved educational outcomes, program effectiveness, or efficiency. Approval for new ini-

tiatives in planning often must be preceded by changes in campus climate and culture because valued faculty autonomy renders arguments for comprehensive planning less compelling at the program level.

Clearly institutional researchers cannot singlehandedly serve as catalysts, facilitators, leaders, and climate-setters for academic planning and the role they play with respect to academic planning will vary greatly in different colleges and universities. Often, those most knowledgeable about and involved in institution-wide planning are excluded from program-level planning on the assumption that disciplinary knowledge is essential. But our interviews suggest a number of roles central staff can plan and strategies they can use without becoming disciplinary experts or reducing faculty autonomy. For example,

1. Engage faculty in informal discussions of what systematic planning could mean to them. What would be one or two important advantages to them? Listen for the vocabulary that faculty in the field use and speak their language.
2. Develop training for program leaders to help them lead systematic planning efforts. As a start, Kinnick (1995) offers a compendium of information viewed as useful by department chairpersons.
3. Showcase small efforts in planning and use of information by a few departments so that others may see useful models at work. Build and share models based on responsive catalysts that can be developed with disciplines accustomed to data-based planning. Keep complexity low, time frames short, and focus on immediately useful information when working with programs unaccustomed to systematic planning.
4. Provide channels for communication with program leaders so that they may observe the support of upper-level administrators for academic planning.
5. Learn to make the process of planning comfortable for specific groups of faculty. Be aware of discipline differences and use "different strokes for different folks." Faculty in some disciplines belong to the "chaotic school" and believe "a plan will ruin us." Start small with such programs.
6. Be sure that faculty feel they can maintain their autonomy and substantial discretionary time while coordination of the planning process is taking place.
7. Look for ways to convert defensive catalysts into responsive or role-related ones.
8. Look for ways to recognize and remove inhibitors to planning while strengthening facilitators. Encourage natural time cycles for planning (such as the progress of student cohorts) rather than arbitrary deadlines.
9. Postpone planning projects that are adversely affecting the climate for academic planning or causing it to become less hospitable. Resume the effort at a later date.

Implications for Future Research

Our study has refined some questions for other researchers and has helped to identify others. Catalysts, leadership, and climate emerged as dimensions that differentiate program planning from course planning. Clearly, institutional differences are extremely potent contextual factors in program planning. These suggest specific dimensions for future study which may continue to increase our understanding of program planning. We set forth a number of questions that deserve further research. Some of these will require comprehensive studies and some may be answered more simply.

1. In the faculty view, what is the relation between catalysts for change, ongoing demands for accountability, and attempts at educational improvement for quality's sake? What are the relative strengths of incentives for each?
2. Does effective leadership for planning have to come from someone with responsibility for resource allocation?
3. What is the effect of program size? Is there an optimum size for planning?
4. What are the primary differences in faculty planning for hierarchical programs as compared to loosely organized ones?
5. What differentiates planning in a professional or career-oriented program from planning in an academic discipline?
6. How can a productive reciprocity be established between faculty program planning and the student advising process?
7. How and when ought students to be involved in program planning? What is the effect of student involvement in planning?
8. In what ways do the size, research orientation, and selectivity of an institution influence program-level planning?

We propose that one next research step would be to confirm that certain elements, namely leadership, characterize programs that are engaged in systematic planning regardless of which types of catalysts are at work. To study such questions, while controlling for disciplinary variation, researchers might select specific disciplines that vary in their educational purposes and pedagogical traditions and conduct case studies of program planning in these fields at five to 10 colleges. The case studies should include planning activities that focus on several aspects of academic planning and varied decision making processes. Another important research project would be to learn what types of information can be used effectively by leaders in their roles as catalysts and facilitators. Such a study might entail a search for exemplars in program planning and careful study of them in their natural settings.

We also have some definite suggestions for conducting future research. As researchers who are also faculty members, we did not expect to encounter sub-

stantial semantic differences in studying program planning as we did. For example, we found that the term *curriculum development* is clearer to faculty members than *program planning* even though we were careful to define planning terms in each interview. If we explored this issue again we would refer to the *dynamics* of the faculty group rather than to *faculty politics* and to *faculty beliefs* about education rather than to *educational assumptions*. Similarly, *influence* is a gentler word than *pressure*. Rather than asking about educational objectives, we would ask faculty “What do students need to learn?” Instead of asking about the “centrality” of the program in the college or university, we might ask “Who thinks this program is essential?” We have not yet found good substitutes for words like *outcomes* and *indicators* both of which seem to trouble faculty as overly quantitative and externally motivated. We are, however, certain that *benchmark* is not a good substitute. In sum, terms used by educational researchers and theorists can be as foreign to faculty members as business terms and their use may elicit unexpected results.

CONCLUSION

Varied external and internal influences now affecting higher education assure that demands for assessment of student outcomes, program review, and other effectiveness measures will continue to exist. In many colleges and universities, institutional researchers will have an important part to play in such evaluative efforts that respond to new guidelines from state agencies and accreditors. Evaluation or assessment results should be used not to diminish faculty efforts in educational planning but rather should increase its importance and its relation to educational effectiveness and efficiency. Although the best time to design curricular evaluations is when the program objectives are being established, the link between evaluation and planning currently is tenuous and underdeveloped. This is especially true at the program level where responsibility for student learning is ideally centered. Poorly defined program-level plans limit the ability to use assessment results for either accountability or improvement. Similarly, the connection between program-level planning and institutional planning is weak. When planning processes are not mutually reinforcing at the various organizational levels planning is hollow and short-lived. Researchers who learn more about how faculty plan within their program groups and how to help them do it more reflectively will be better equipped to improve these connections and develop useful and comprehensive planning endeavors in colleges.

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NOTE

1. In describing the same type of planning that Richardson and Gardner called "disjointed," Bean and Kuh (1984) called it "naturalistic" planning.

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