Decision Rules Used in Academic Program Closure

Where the Rubber Meets the Road

The “economic fundamentals” for many American colleges and universities have changed, creating a new playing field with a different set of fiscal rules (Breneman, 1997; Massey, 1994). States are allocating less money, federal research dollars are drying up, and the tuition-paying public is adverse to large tuition increases, all while higher education costs are increasing (Breneman, 1993; Hovey, 1999; O’Keefe, 1987). At the same time, those paying public higher education’s bills—taxpayers, state legislatures, and tuition-paying students and their families—are demanding high quality and more from their investments, and they are increasing their scrutiny (Harvey & Immerwahr, 1995; Haworth & Conrad, 1997). The demands of the increasingly influential market to do new things and to set different priorities are difficult to meet without the extra cushion of uncommitted resources that was available in the past (Levine, 1997). Many suggest that higher education’s programs are too costly and out of date and that institutions cannot continue to offer such expansive ranges of programs.

As intentional strategies, more and more institutions are adjusting academic priorities and, in many cases, closing academic programs. Recent high profile closures occurred at the University of Chicago, St. Olaf College, and Auburn University. Program discontinuance is a “necessary adaptive mechanism” (Dougherty, 1979, p. 1) in organizations that are constrained in the range of ways they can increase or reallocate their

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fiscal resources, such as universities, hospitals and government agencies (Behn, 1988; Hardy, 1987; Pettigrew, Ferlie, & McKee, 1992). Eliminating select programs may help ensure organizational health.

Program discontinuance is a difficult decision to make in higher education, because the changes can be emotionally charged (Dill & Sporn, 1995), faculty can lose their jobs and have their life’s work interrupted (American Association of University Professors, 1995), and the cuts have the potential to threaten institutions’ core values and alter institutional identities (Dougherty, 1979; Melchiori, 1982). Unlike other types of decisions in higher education, such as a new curriculum or a revised endowment investment plan, program closures send “shock waves through the university community” (Hardy, 1990, p. 317). They create inner turmoil and stress among those involved and affected by the outcomes (Gumport, 1993), and draw the attention (and passions) of administrators, faculty, and trustees (Dougherty, 1979; Melchiori, 1982).

When institutions have to make tough choices, prioritize among departments, and close academic programs, by what criteria do they make this decision? What characteristics are considered when institutions must decide which programs to keep and which to close? The purpose of this study is to understand the criteria used by institutional leaders to identify academic programs for termination. The study adopts a dual framework from limited rational choice theory to understand this decision process.

**Conceptual Framework: Program Discontinuance and Decision Rules**

The most common portrayal of organizational decision making is one of limited rational choice, where decision makers identify alternatives, explore consequences, and make choices based upon a set of decision rules that differentiate consequences (March, 1994; Pennings, 1986; Pfeffer, 1982). Decisions are made in order to act and to bring about desirable results. This is a logic of consequence (March, 1997). Limited rational choice suggests that there is a relationship between information, criteria, and decision outcomes, and it has been shown to be used in retrenchment decisions (Ashar & Shapiro, 1990). The key questions from this decision-making framework are: What acceptable actions are possible? What future consequences might follow each alternative? How valuable are the various consequences? What decision rules are used to select among alternatives? (March, 1994).

Limited rationality theory suggests that not all alternatives are considered. “Instead of calculating the best possible action, they search for an action that is ‘good enough’” (March, 1994, p. 8–9). In other words, decision makers look for options that satisfy some minimum threshold of
acceptability (Simon, 1986), and thus "intendedly rational behavior is behavior within constraints" (March, 1988, p. 270). These constraints, such as the difficulties of anticipating every possible outcome and the unlikelihood of considering all alternative and available information, simplify the decision-making process (March, 1994; March & Simon, 1992; Perrow, 1986). The implication for program discontinuance is that all programs are most likely not under consideration. That said, which are the potential targets, and how do institutional decision makers differentiate among feasible choices?

The intended (but not always realized) purpose of program discontinuance is to strategically reshape an institution by internally reallocating resources (Levine, 1997; Slaughter, 1995). "Programs should be measured with an eye toward their relative value, so that reallocation can be facilitated" (Dickeson, 1999, p. 18). The "relative values" used to prioritize various programs in times of retrenchment primarily center upon maximizing program quality and containing costs while considering mission centrality (Gumpert, 1993; Slaughter, 1993, 1995).

Dickeson (1999) suggests the following ten criteria in his advice to academic leaders: (1) history, development, and expectations of the program; (2) external demand for the program; (3) internal demand for the program; (4) quality of program inputs and processes; (5) quality of program outcomes; (6) size, scope, and productivity of the program; (7) revenue and other resources generated by the program; (8) costs and other expenses associated with the program; (9) impact, justification, and overall essentiality of the program; and (10) opportunity analysis of the program (p. 54). The decision rules he suggests are economic (demand, revenue, and costs), quality, and centrality.

Yet, the decision rules for identifying programs for closure are most likely not straightforward and based upon the decision rules of cost, quality, and centrality (Gumpart, 1993). For example, Slaughter (1995) argues that retrenchment decisions are made based on patterns of wealth and power and are market dependent. Because of the history, expectations and norms of collegial decision making (Bess, 1988; Birnbaum, 1988), high stakes decisions such as these require commitment from numerous stakeholders, specifically from the faculty (Birnbaum, 1992; Rosovsky, 1990). Broader retrenchment decisions, as well as program termination decisions, can become extremely political (Hardy, 1990; Pfieffer & Salancik, 1980) as faculty most likely will be involved in the decision-making process that identifies the departments of their colleagues, and possibly their own units, as targets for closure. Thus, cost, quality, and centrality might make sense as the logical decision rules for identifying programs for closure, but they might not generate the needed faculty
commitment necessary to implement the decisions. As Hardy (1990) notes, "it is one thing for central administrators to decide on the principle of selective cutbacks; it is another to actually carry them out" (p. 316).

Within the limited rationality framework, an alternative perspective may help us understand the criteria used in identifying programs for closure. Brunsson (1982) suggests that organizations face two problems in decision making: one, to choose the right thing—*decision rationality*—and, two, to get things done—*action rationality*. His argument asserts that decisions can be made based upon rational criteria but yield little action, or they can be made "irrationally" but take into consideration cognitions, motivations, and commitments that lead to action. "Since decision processes aim at action, they should not be designed solely according to such decision-internal criteria as the norms of rationality; they should be adapted to external criteria of action" (Brunsson, 1982, p. 32). Irrational foundations for decisions may not lead to the "optimal" outcome in an abstract sense, but they abide by other criteria, such as involvement or historical precedence, that accomplish the task. The central issue in action rationality is one of efficiency—how can decisions best be carried out—rather than one of effectiveness (Gladstein & Quinn, 1985; Pfeffer & Salancik, 1978).

The action rationality perspective challenges the common wisdom associated with decision rationality. Rather than thoroughly exploring available options, weighing consequences considering alternatives, and choosing the option that optimizes results, action rationality seeks information that supports particular palatable alternatives and analyzes these in terms of a narrow range of desired results that people will support; it is dominated foremost by the desire to implement and to act (Brunsson, 1982; Gladstein & Quinn, 1985). The logic of order is different. The process is not first about identifying the best alternatives and then gaining commitment, but of identifying alternatives essential to obtaining support for action.

In program discontinuance, the decision rationality criteria said to be used to make the choice—such as eliminating the weakest programs or the most costly—might not be the needed (action rationality) criteria if programs are actually to be closed. Frequently high stakes decisions have to give the illusion of doing the right things (Ashar & Shapiro, 1990; March, 1994) while using alternative decision rules.

**Research Questions**

This study sought to better understand from an organizational perspective, when the rubber meets the road and decisions have to be made
about which programs to close and which to support, what decision rules are invoked? To what extent did the decision rules reflect decision rationality or action rationality?

Slaughter (1993) raised similar questions in her study of retrenchment, but she adopted a rule-based sociological framework of wealth and power (neo-Marxist). Her framework is grounded in the assumption that rules in which outcomes are shaped by a logic of appropriateness guide decisions (March, 1994). This study adopts an alternative conceptual framework, grounded in the assumption that actors within organizations have the flexibility to make choices to create autonomous and preferred outcomes, a logic of consequence. To make the distinction between paradigms, March (1997) quotes Duesenbery (1960, p. 233), who said, “Economics [and by analogy psychology] is all about how people make choices; sociology [and by analogy anthropology and political science] is all about how they don’t have any choice to make.” This study adopts the former assumption, Slaughter’s the latter. How compatible are the results suggested by different frameworks? By exploring complex organizational phenomena through multiple conceptual lenses, a more nuanced understanding may emerge (Van de Ven & Poole, 1995).

This investigation is a post hoc analysis from a larger study of program discontinuance (Eckel, 1998) where the discontinuance process was found to involve three sets of criteria: (1) the stated criteria offered to decide among choices; (2) criteria used to remove programs from a list of potential targets; and (3) criteria used to identify the actual closures.

Method

This study adopted a multi-site case study method to address the research questions, because its purpose was to understand a complex process phenomenon that could not be quantified or controlled, and so that cross-site comparisons could be made (Herriott & Firestone, 1983; Yin, 1994).

To be eligible for this study an institution (1) must have discontinued academic programs within the last seven years that had not been reinstated, (2) was classified as a Research I or II university, and (3) was accessible. The institutions—the University of Maryland at College Park (UMCP), Oregon State University (OSU), the University of Rochester (UR), and Kent State University (KSU)—were selected from a list of 22 universities generated from searches of The Chronicle of Higher Education, Academe, Trusteeship, and phone calls to three national associ-
ations. UMCP and OSU terminated degree programs and dismantled the units offering those programs, and KSU and UR discontinued degrees but kept intact the units offering those degrees. (A distinction hypothesized to be important in the original study.) The specific programs closed at each institution are listed in Appendix A.

I interviewed between 11 and 16 individuals from each institution, including administrative and faculty decision makers and individuals from the affected units. The interviews, using open-ended questions, focused on the processes through which institutions closed academic programs. In the interviews, I placed specific emphasis on the rationale for the closures, the roles of leaders, shared governance and external influences in the discontinuance process, and the effects of the closures on the institution. The specific interview question driving this inquiry was: On what basis did the institution decide to cut particular programs? Interviews were key data sources because in studying organizational change qualitatively, “researchers are in the perspective business” (Pettigrew, 1995, p. 107). They must seek out and listen to different stories that help create a picture of what occurred, how it occurred, and why. Because this research sought to understand decision rules at work, the meaning assigned by participants became exceedingly important (Pettigrew, 1995; Weick, 1995). Interviews were tape-recorded and later transcribed. Interviews ranged in length from 25 minutes to two and one-half hours; the average was one hour.

In addition to interviews, written materials provided important information (Merriam, 1988). I reviewed meeting minutes, institutional reports, speeches, other relevant campus documents, and on-and off-campus newspaper accounts. The documents were obtained primarily from the informants and through meetings with campus archivists. Of particular importance were reports that outlined criteria or gave justifications for specific decisions.

From the collected data, I drafted case reports that included all of the potentially relevant material collected from the site visit (Yin, 1994). This process included four steps: (1) creating a working outline immediately following the campus visit based on information from the interviews; (2) reading each of the interview transcripts and original documents and noting where items and statements fit into the original outline, expanded the outline, or differed from it; (3) upon rereading each interview and document, placing text into the outline; and (4) going through a similar process for all of the other collected materials.

Each case report contained all of the pertinent information about the institution’s discontinuance process. To identify the various decision rules working at each institution and to look for patterns across cases, I
used two three-step data analysis processes, first for within-case analysis and then for cross-case comparison (Miles & Huberman, 1994). First, I identified and pattern coded the elements within each case relating to criteria and decision rules. Consideration was given to criteria mentioned in the literature (such as cost, quality, and centrality) and to criteria indicated in campus documents; other codes arose from the data. Second, I wrote memos linking similar bits of data across the various information sources (individual interviews and written materials) contained in each case report. Third, I developed a set of propositions outlining the decision rules used in each case. A second similar three-step process was carried out for cross-case analysis.

The research adhered to Yin’s (1994) principles of rigor for case study research. I used multiple sources of evidence to create “converging lines of inquiry,” constructed a data base of information for each case, and developed a logical chain of evidence that linked the analysis to specific instances in the case data base and to the research questions. To ensure trustworthiness, I engaged in peer debriefing and had informants read the case studies and comment (Lincoln & Guba, 1985).

Findings

The findings include three sets of decision rules that help understand the means by which programs were identified for closure: (1) the criteria stated by institutional leaders, (2) the decision rules used to reinstate programs earlier identified for closure, and (3) the decision rules used to close programs.

The Stated Criteria

Three of the four institutions (UMCP, OSU, and UR) identified criteria publicly as part of their discontinuance processes. KSU did not develop a formal list of criteria. The three sets of criteria are presented in Table 1. UMCP developed its criteria specifically for the closure process in a document called Criteria for Planning, which was created by the executive committee of the senate at the request of the provost. The criteria were developed in the form of questions to determine the worth of the program. Among these criteria were issues such as mission centrality, program quality, demand, duplication, and cost. The provost said:

We gave the deans two target figures. What would you do if you were to cut 5% of your budget? What would you do if you were to cut 10% of your budget? . . . We couldn’t attack the places where most of the money was, and in academic life, most of the money is tied up in academic salaries. I certainly didn’t want to be involved in relieving people of their tenure. We tried to
make this as economically motivated as possible, but we basically told the deans, and the deans responded, that the weakest programs were going to have to go. And that you wouldn’t get much money by closing X or Y was not going to be an excuse. There were a couple of deans who were serious about suggesting that we eliminate tenure. I didn’t want to do it. . . . That process itself [identifying 5–10% in cuts] identified some weak units.

At OSU, campus leaders relied upon a previously developed institutional policy, *Guidelines for Program Reduction*. This document was created by a committee of deans and approved by the faculty senate as part of an earlier program discontinuance process. One administrator said:

We began [as the result of earlier budget cuts] to . . . develop guidelines to help us when it came time to identify those programs that would be eliminated. This was chaired by a dean. . . . What they did, without identifying any programs, they said OK, these are the things that are important. And without knowing or listing them in the right order, they were things like centrality to the mission of the institution, size of the program, measure of its degree of success, measure of its contribution to society in addition to higher education, and so on. These are the guidelines that we used as we began to look at cutting programs out of the system.

Among its criteria were issues one might expect, such as reputation and quality, duplication, and cost. OSU’s criteria also included issues such as centrality to the idea of a university, legislative mandate, service to the state, and a program whose elimination would “have a substantial negative impact on education and societal concerns in the state.” Final criteria focused on past investments in programs, negative effects on underrepresented populations, and anticipated revenue loss. The stated criteria were framed to justify not closing a program.

The stated criteria at UR, called “global factors,” were developed by the administrative leaders and announced when the dean unveiled the closure decisions. These criteria included issues such as quality, costs, centrality to undergraduate education, and investment for distinctiveness. They also included criteria not identified by the other institutions such as linkages among units, and the involvement of graduate students in undergraduate education (the institution sought to close only graduate programs), and faculty scholarship.

All three institutions included cost, quality, and mission centrality in their list of stated criteria. The only other common criteria were program uniqueness or duplication avoidance (UMCP, OSU) and opportunities for program distinction (UMCP, UR).

Two potential and unresolved problems of applying the stated criteria to decision making are important to note. First, none of the three institu-
<table>
<thead>
<tr>
<th>Stated Criteria</th>
<th>UMCP</th>
<th>OSU</th>
<th>UR</th>
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<tbody>
<tr>
<td>Mission centrality</td>
<td>Is the program central in terms of growth, preservation and communication of knowledge, and instructional mission?</td>
<td>A program that is essential for every university</td>
<td>The centrality of the discipline and its current or projected importance to the undergraduate population</td>
</tr>
<tr>
<td>Quality</td>
<td>What is the quality and reputation of the program and faculty?</td>
<td>An objective evaluation indicates national or international reputation</td>
<td>The quality of faculty and graduate students</td>
</tr>
<tr>
<td>Cost</td>
<td>What are the costs of maintaining vs. increasing its level vs. savings resulting from reductions?</td>
<td>Cost is minimal relative to the tuition or income it generated</td>
<td>The costs of supporting the research/scholarly mission of the program</td>
</tr>
<tr>
<td>Contribution to region</td>
<td></td>
<td>OSU is better equipped than other organizations</td>
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<tr>
<td>Demand</td>
<td>What is the current and projected importance and demand for the program?</td>
<td>A substantial negative impact on education and issues in the state</td>
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<tr>
<td>Legislative mandate</td>
<td></td>
<td>A program that exists because of legislative statute</td>
<td></td>
</tr>
<tr>
<td>Uniqueness/Duplication</td>
<td>Does the program duplicate work on campus or within the system?</td>
<td>A program that is the only one of its kind within the state</td>
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<tr>
<td>Opportunity for distinction</td>
<td>Are there opportunities for comparative advantage because of time, location, or faculty talents?</td>
<td></td>
<td>A consideration of which disciplines are distinctive or could be with a modest investment</td>
</tr>
<tr>
<td>Impact on instruction and scholarship</td>
<td></td>
<td>Role of grad. students in the delivery of undergrad. instruction and in the conduct of faculty research/scholarship</td>
<td></td>
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<tr>
<td>Revenue</td>
<td></td>
<td>Elimination would result in substantial loss of revenue</td>
<td></td>
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<tr>
<td>Past investment</td>
<td></td>
<td>A program that represents a substantial capital investment</td>
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tions addressed the issue of relative weights among their stated criteria. In its public document explaining the decision-making process, the leaders of the UR process wrote, “the importance of these factors must be combined with an overall sense of what is best and most feasible given the limited resources for the College as a whole” (p. 5, Rationale for the Restructuring Plan). The document used by OSU administrators did not indicate relative weights, although it did speak to the matter when it said:

It also should not be assumed that every stated criterion is of equal weight, or that a program will be “scored” by the algebraic addition of its positive and negative features. . . . Many of these . . . criteria are partially or substantially subjective in character, and the balancing of these factors will involve value assumptions and policy choices. These balances will be finally struck and policy choices made at the campus level only after opportunity to address them has been afforded all interested persons in accordance with established . . . procedures. (p. 4, Guidelines for Program Redirection)

The ambiguity of the guidelines at OSU created some confusion among those not directly involved in making the decisions. Said one faculty member from a closed program:

If anything that could have been communicated [better], it would have been what criteria are being used, because the rumor mill kind of ran rampant. I imagine there were some objective criteria, . . . but it was very unclear as to what the criteria were and how these programs were tapped based on those criteria. . . . If there were stated criteria for units then to put together their best case, . . . that didn’t happen.

UMCP also did not address weighting in any of its documents. That institution’s first report, Preserving Enhancement, noted that the joint faculty-administration decision-making body “was acutely aware that many
of its goals and criteria tugged the process of decision in conflicting
directions" (p. 8). These statements, found at all three institutions' pre-
specifying criteria, allude to the possibilities of other decision rules at
work and that what is said and what is done might be two different
things.

The second curious element is the point at which the criteria were pre-
presented to the campus. OSU had criteria previously established that were
part of a formal institutional policy. UMCP developed its criteria as an
early step in the discontinuance process. At UR, the process unfolded
differently, as leaders announced the criteria at the end of the process
once the decisions had been made, not at the beginning. The criteria
were summarized in the Rationale for Restructuring, a document dis-
tributed the same day of the announced closures.

Criteria Used to Reinstall Programs

Exploring the criteria campuses used to reinstall programs slated for
discontinuance provides more information about the decision rules at
work. UMCP originally identified programs that it subsequently re-
moved from the list of affected units (nuclear engineering, hearing and
speech, and library sciences at UMCP). UR reversed one decision
(mathematics). The president at OSU prevented a recommended pro-
gram closure (range management) from being acted upon.

At UMCP, informants identified the following explanation for remov-
ing the three programs: (1) the costs to dismantle the campus' nuclear
reactor and the input of funds from another institution to sustain the
nuclear engineering program; (2) the potential negative impact on the
community prevented the university from closing the hearing and
speech clinic; and (3) a satisfactory level of projected demand and the
on-and off-campus support retained the College of Library and Informa-
tion Science.

At UR, strong political opposition from off-campus scholars and aca-
demic societies likely influenced the reversal of the decision to close the
mathematics department, although not admitted readily by senior ad-
ministrators. Said one mathematics faculty member: "The American
Mathematics Society took this very seriously. They regarded it as a very
dangerous precedent for the profession. Their view was that if Rochester
could eliminate its graduate math program, then the following year
maybe half a dozen other schools would follow suit." Some informants
said that the curricular changes and a cost-neutral counter-offer made by
mathematics, which aligned the department more closely with the goals
of the institution's retrenchment plan, convinced the administration to
reverse its decision. The dean said:
We continued to get pressure from outside people, and we stood firm to that pressure. . . We had some private meetings . . . with several key faculty from the math department. . . . We were willing on some dimensions to bargain with them, but we couldn’t bargain on the financial end of things. . . . The result was that they came up with a proposal, and we came back with a slightly modified proposal because it was not exactly financially neutral, and then we involved the Physics Department in this. They were the only department after the fact that said that [cutting] math might not have been a good idea.

At OSU, closing range management would have negatively affected Eastern Oregon University because it was a joint program. The president said:

We have a program in range management, which is not only housed on this campus in Corvallis, but also on the campus of Eastern Oregon University. We made the decision at the president’s level that we were not going to do anything that would significantly damage another institution. . . . We tried to look at the integrity of the whole system rather than just our institution.

In sum, institutions evoked a combination of the following decision rules to determine which programs to remove from the list of closures: cost associated with closure, contribution to community, projected demand, negative effect on other institutions, off-campus political pressure, and alignment with institutional goals. Patterns of criteria to reinstate programs across the four institutions included costs and external political pressure at UMCP and UR. Table 2 compares the factors considered to reinstate or remove programs from consideration for closure at the three institutions.

Closure Decision Rules

The final element to explore concerning decision rules are those that were seemingly used to identify programs for discontinuance. The OSU procedure forewarns of the possibility that decisions may be reached for reasons other than the stated criteria. That document said:

Given the great diversity of academic programs, the stated criteria will not include all considerations that may be applicable to individual programs. It is understood that such additional considerations are not rendered irrelevant by their omission and may be therefore considered. (Guidelines for Program Redirection, pp. 3–4)

The criteria used at UMCP to identify programs for closure were a combination of stated and unstated criteria. A stated criterion was mission centrality, but the decision rule used focused on college mission, not institutional mission, because some of the programs closed were professional programs in non-professional colleges. For example, urban studies and radio, television and film (professional programs) were in
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<th>Criteria to Reinstall</th>
<th>UMCP</th>
<th>OSU</th>
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<tr>
<td>Costs</td>
<td>Too expensive to dismantle nuclear reactor</td>
<td>Cost-neutral arrangements</td>
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<tr>
<td>Contribution to community</td>
<td>Hearing and speech clinic</td>
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<tr>
<td>Projected demand</td>
<td>Enrollment in LIS</td>
<td></td>
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<tr>
<td>Negative effect on other institutions</td>
<td>Range Management at Eastern Oregon</td>
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<tr>
<td>Political pressure</td>
<td>On-and off-campus supporters for LIS</td>
<td>Involvement of American Society for Mathematics, Negative Publicity in NY Times and Chronicle of Higher Education</td>
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<tr>
<td>Alignment with goals</td>
<td></td>
<td>Altered the courses for non-math majors; Developed tighter linkages with other units</td>
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the College of Arts and Humanities. At the same time, none of the programs slated for termination were critical or core programs (central to the institution's mission) that informants believed the university must have, such as English or chemistry. One faculty member from a closed program said:

We were in a college, Arts and Humanities, which was obviously the cornerstone of a university like ours, but we were a professional program. We were conditional; we weren't English; we weren't history; we weren't art. Parenthetically, the other program that got closed [in the college] was another professional program.

Other factors suggest that the closed programs at UMCP were politically vulnerable, revealing additional decision rules. The units that were closed did not have champions among institutional leaders; they were programs where no one would (or did) come to their aid; and they lacked strong leaders. One faculty member said:

I don't think it was articulated, but... those units [closed] all had relatively weak leadership. One unit was so badly divided that they couldn't even speak to each other... The ones that survived had very strong leadership. There was a certain coherence among the faculty. They seemed to know what they wanted to do. They seemed to be able to hold themselves together.

Some of the units at UMCP had new or novice leaders. The chair of a
closed program said, "I was new to the job so I thought it was an exercise. I didn’t think they would really implement something as drastic as they were suggesting." Other programs were in political shambles with significant and long-term infighting. A dean illustrated the lack of internal consistency and lack of unit leadership when he said:

In many cases, the programs shot themselves in the foot. . . . There was a program that demanded an external review and I allowed it to pick the external reviewers. The reviewers came in and said the program you have sucks and what you ought to do is reconfigure it in a different direction, bring in all new people, which is the equivalent of saying shut it down. Now it is very difficult for a faculty to argue on an evaluation that they demanded, with people they chose. That was one of the programs that was closed. It was a very small program.

The criteria used at OSU were similar in many ways to those invoked at UMCP, and decision makers did follow some of their stated criteria. For example, one stated criterion was a negative impact on education in the state, which prevented range management from being closed. Unstated criteria also were used, many of these related to what one informant described as a "window of opportunity." Among the unstated decision rules was the lack of strong unit leadership: two of the programs had new chairs, and the College of Education faculty had recently voted "no confidence" in the dean. Other decision rules were low numbers of students and faculty.

Another reason some units were identified was that they were not central to the college mission. For example Journalism, a professional program in the College of Liberal Arts, was closed. A faculty member from that college said:

Journalism became kind of a perennial target within the College of Liberal Arts primarily because it was a professional area within a liberal arts academic unit. In a sense, it was a fish out of water. It was seen as too professional or quasi-commercial. If something had to be cut, then it probably ought to be that to maintain the purity of the unit.

Another faculty member discussing the closure of another department (his own) said: "[Our department] sits on the peripherals of both the College of Liberal Arts and the College of Science. . . . It was not a big loss to either one of the deans. It was not a core liberal arts [program] or a core science."

Changes within the College of Education also provided a large "window of opportunity," as described by one person. The faculty had recently voted no confidence in the dean. The college was in the midst of a transition to a fifth-year professional model that effectively restructured
teacher education and lowered the college’s student credit hour generation, lessening the demand for full-time faculty. It was intentionally reducing its faculty size, enrollment, and course offerings when the institution was seeking to reduce academic offerings. According to one administrator in the College of Education:

It wasn’t [just] that we had lost the dean, we had closed down our largest student credit hour generating program. . . . It was a college decision, but it was very much driven by the dean at the time. In fact, the model that was developed was not really endorsed by the faculty. That was part of the problem the dean had with the faculty. He was mandating something, and they were telling him something else, and he was unwilling to compromise. In fact, that probably . . . caused the vote of no confidence in him and led to his demise.

The decision rules used at UR were similar to those at OSU and UMCP. Among the alternative criterion invoked was the units’ lack of strong leadership. A chair of a non-targeted department said: “They were departments that were rather poorly led, and they were basically very vulnerable because they had not made a very good case for continuing. They all had problems, absolutely no doubt about that. . . . Something had to be done because the status quo certainly was not the answer.” Many of the department heads were new or the departments were lead by people who could not resolve internal squabbles. They did not understand the severity of the problems or that they needed to take action to prevent the termination of their units. A novice chair of a discontinued program said: “Even before I was chair, and in my first year as chair, the handwriting in some ways was on the wall for this department. I didn’t read it that way immediately, I mean there were a lot of new things for me to read at that point.” Many units also had low numbers of faculty and/or numerous faculty vacancies. They also had low numbers of students and tended to be isolated from other programs.

The reinstatement of the mathematics’ doctoral program at UR is an informative negative case example where the decision failed because leaders did not adhere to workable decision rules. Mathematics had (1) a sizable faculty, (2) strong leaders who were able to mobilize their faculty and off-campus supporters; and (3) faculty and the program graduates who were well connected to the national scientific community and able to create unwanted negative attention and gain political support. Because UR leaders violated decision-making rules, they failed to close the department. On paper, the criteria to identify mathematics for closure might have been well founded, but in action, it was fallible.

Although KSU did not identify criteria publicly for program closure prior to its process, a set of decision rules was invoked for determining that one program, counseling psychology, would be closed over another,
school psychology. This decision was based upon the following criteria: First, college administrators elected to retain the program more closely aligned with the college’s child-focused mission—counseling psychology worked with adults in hospitals and clinics, while school psychology worked with children. A college administrator noted: “The Counseling Psychology people did nothing with schools. They were less central to the mission. Our mission priorities placed community agencies working with schools and families a priority. They did not take that approach, it was very individual [and hospital based].” Second, Counseling Psychology had a lower number of faculty (one) who did not or could not garner support for his cause. The program at one time had more faculty, but two took early retirement, one did not receive tenure, and another died. Said one college administrator:

It was easier [to discontinue a program with one faculty member] than if there would have been a faculty with five or six left to move out. We had only one person left. You don’t battle the same level of distention as if we went in to close out a program that had been as strong as it had been in quality with about a dozen faculty members. That was why it was such a good time to do it.

Third, the program also did not have a lot of students, nor did it have much support on campus. One college administrator commented: “Nobody cared enough to fight for it. It was very isolated and unto itself. . . . If you are a stand alone and you are small, say 50 students and 3 faculty, [it] doesn’t make a very formidable force for preservation.” Another said: “It was a relatively small program with a limited number of alumni. I think when we sometimes have larger programs with more alumni, they will get quite active in voicing to the provost or the president about the closure, and just that outcry from the public and alumni makes it too difficult a situation to eliminate a program.” Fourth, a program similar to counseling psychology that existed across campus could house the remaining faculty member, and a nearby institution offered a counseling psychology program.

In an unrelated, earlier process, the Theater doctoral program at KSU was terminated following a similar pattern. The program was characterized by leadership troubles and internal conflict. As one university administrator commented:

The directors [of the program] came and went, however, that is against the background of a school which had a tradition of internal division. . . . In a relatively brief period of time, we had three directors, all of whom were good, all of whom became subject to controversy within the unit. [They] were blamed for everything from the weather to not giving certain elements [of the department] adequate support.
The Theater doctoral program also had a low number of students (8) and faculty (2). It was a scholarly program in a professional school and thus not central to the college's mission, and it did not have administrative champions. In fact, the provost thought closing the doctoral program might gain the institution some credit and favoritism in a Board of Regents initiated program to reduce the number of doctoral programs in the state.

In sum, the common criteria across the four institutions included lack of strong leadership (UMCP, OSU, UR); little centrality to the mission of the college (not institutional mission) (UMCP, OSU, KSU); low numbers of faculty (OSU, UR, KSU); and low numbers of students (OSU, UR, KSU). Table 3 presents the decision rules used across the four institutions.

**TABLE 3**
A Comparison of Decision Rules Used by Institution

<table>
<thead>
<tr>
<th>Suspected criteria</th>
<th>UMCP</th>
<th>OSU</th>
<th>UR</th>
<th>KSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of strong unit leadership</td>
<td>New leaders; vacant leadership positions</td>
<td>Vote of no confidence in education; weak leaders</td>
<td>Weak leaders; novice leaders</td>
<td></td>
</tr>
<tr>
<td>Mission centrality in college, not institution</td>
<td>Professional programs in liberal arts colleges</td>
<td>Professional program in liberal arts college</td>
<td>Adult focus in child-centered unit; scholarly program in professional college (Theatre)</td>
<td></td>
</tr>
<tr>
<td>No champion</td>
<td>No support from top administration or college administration</td>
<td>No support from top administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small number of faculty/ vacant lines</td>
<td>Faculty vacancies; low numbers of faculty in units</td>
<td>Faculty vacancies; low numbers of faculty in units</td>
<td>Only one faculty member (Counseling Psychology) Two PhD faculty (Theatre)</td>
<td></td>
</tr>
<tr>
<td>Small number of students</td>
<td>Low number of students</td>
<td>Low number of students</td>
<td>Only 8 students (Theatre)</td>
<td></td>
</tr>
<tr>
<td>No linkages with other units</td>
<td></td>
<td></td>
<td>Disconnected faculty member</td>
<td></td>
</tr>
<tr>
<td>Other changes occurring</td>
<td>Moving to a 5th year model in teacher education</td>
<td></td>
<td>Disconnected faculty member</td>
<td></td>
</tr>
<tr>
<td>Program duplication</td>
<td></td>
<td></td>
<td>Similar program on campus and nearby</td>
<td></td>
</tr>
</tbody>
</table>
The role of quality. Although quality, a frequently articulated decision rule, did not surface directly, evidence suggests that it was invoked as a filtering mechanism. For example, informants at both UMCP and UR said that although the institution used a process to identify programs for closure, a list of possible targets were known prior to starting the process. One informant from UMCP said:

If you were to do a poll on campus: Name the 10 likely departments that you think will be hit. I would bet that the seven that were closed would have appeared on 80% of the lists of people who named them at all. . . . And I think that is because anyone who sits in their college knows who the strong units are and who the weak units are, and that wasn’t a big deal.

The provost said:

I think everyone understood that this was not a process that could be a top-down process. You could say from the top what the goals are and then let people work it out. So everybody immediately knew once we knew we were not going to go the equal distribution route . . . that decisions had to be made through a [campuswide] process. Even if with a little bit of thought you might have guessed how the decisions were going to turn out to be. You just could not say that out loud.

Leaders at UR also implied that they knew which programs would most likely be targeted before the process began. The dean said:

We pretty much knew a group of, let’s say, 10 departments within which we were likely to make some cuts. . . . You don’t have to be dean very long to have a pretty good sense of the quality. The problem is, you can’t specify precisely to a department chair how you know that. In other words, I can’t give a department chair a piece of paper that says, “You are an A+ department for the following reasons.” Because the following reasons consist of things that are rather subjective. Things like, I have looked through all of your annual reports from the faculty and I have a sense that you got five people in your department who are A+ and could go to Harvard, Yale, Princeton, wherever they wanted to go, at any moment. And then you have got this group here that are B+, great . . . And then you have got this group here who are so-so. . . . I think [that] if I sat down with every department chair and went through every faculty member one by one we would pretty much agree on that.

A point of limited rationality theory is that decision makers do not consider all alternatives, but start with a constrained list (March, 1994), and quality helped narrow the possibilities. Quality, although not invoked formally or, for that matter, neither defined nor clarified, most likely played a role in identifying potential programs for closure, but acted as a filter to narrow the range of potential targets, not as a final determinant. As one informant said, those involved “knew where the water leaked.”
One way to interpret the “knowing” of targeted units before the process is to say that the processes were only for political reasons and maneuvering. Rather than view leaders as crafting a process for its symbolic sake (Birnbaum, 1988; Bolman & Deal, 1991) or to rationalize the decisions after the fact (Gladstein & Quinn, 1985), the process did identify specific programs for closure. Leaders may have started with an informal list, determined by quality, but the process helped to determine which programs specifically to close. The process identified those programs that were not central to the mission of their college, were politically vulnerable, did not have champions or large numbers of politically astute faculty, students, or alumni, and had ineffective or novice leaders. Without a process, these elements may not have surfaced.

Discussion

The purpose of this study was to understand the decision rules guiding program discontinuance. Secondarily, this study sought to test the framework of action rationality and decision rationality.

The experiences of the four institutions suggest that the decision rules evoked to close academic programs included the following: (1) Programs that were closed had weak or novice leaders. (2) They were small programs with low numbers of students and (3) with low numbers of faculty. (4) Programs were closed that were not central to the mission of the college that housed them (independent of the institutional mission). For example, closed programs were either professional programs in liberal arts colleges (such as journalism at OSU, and radio, television and film at UMCP), or liberal arts programs in professional colleges (such as theater at KSU). The second set of decision rules at work that influenced program closure processes were those that determined which programs to reinstate that had once been marked for termination. They included: (1) costs: being too expensive to close (dismantling the nuclear reactor at UMCP) or finding “cost-neutral” alternatives at UR; and (2) external political pressure not to remove programs at UR and UMCP. It is interesting to note that off-campus groups, rather than providing the impetus to change as so often presumed, in this study, prevented change from occurring.

Second, institutional decision makers for the most part did not use the criteria they specified. Although institutions said publicly that closures were to be based upon some combination of institutional mission centrality, quality, cost, contribution, demand, mandate, uniqueness, distinction, revenue, and investment (to name most of the criteria identified by three of the institutions), they used only quality, and this was used
indirectly as an initial screen. The programs that were closed did have low numbers of students, but rather than being linked to demand, an expected economic variable, size was political, as the small number of pro-program supporters could not generate adequate political clout. Because decision makers did not make choices to maximize their stated criteria of cost, quality or centrality, the number of programs closed was not as essential as if they had chosen in ways to optimize results. For example, the amount of money they saved no longer had the same importance. In fact, none of the institutions in this study tracked the savings from closures (Eckel, 1998).

Third, this study does not support much of the common wisdom of deciding among programs to close. Program closure decision rules have little to do with external demand for graduates, anticipated enrollments, or internal demand for courses. Institutional decision makers do not distinguish among programs based directly on quality of inputs or outcomes, on the revenue or resources generated, on the impact of programs, or on their history (Dickenson, 1999). Programs were closed in this study that did not have strong unit leaders, that lacked champions on campus, that were not central to the missions of their colleges, and that had small numbers of faculty and students (and thus alumni). As one informant said, "they took the ones they could get away with."

To focus particularly on quality, this often-identified criterion was used to limit the range of choices, not to specify particular programs. It was used first, informally, imprecisely, and independently. It set the limits of limited rationality by constraining the number of alternatives considered and the amount and accuracy of the needed information (March, 1997). Quality thus played a role in setting parameters, but it did not factor into the choice process at the times or in the ways typically expected, such as a comparative indicator coupled with other criteria such as cost and demand.

Fourth, the findings offered no counter to those suggested by Slaughter and her market framework. The programs closed may indeed be far from the market and fall victim to strong economic undertows. Institutions closed programs in education, journalism, theater, religion, textiles, recreation, agriculture, human ecology, and recreation and tourism. They did not tap biotechnology, economics, or engineering. The two sets of findings reinforce one another as different frameworks suggest consistent findings with different explanations. Although when taken together, it is difficult to determine the interactions of the frameworks; market forces might determine the extent to which a decision is "doable" as Slaughter asserts, or the desire to act limits the choices to a list of possibilities shaped by the market.
Fifth, because institutional leaders did not invoke the stated decision rules but used alternatives, one might conclude that the process of determining programs for closure may have identified the actual criteria. "Human choice behavior is as much a process for discovering goals as for acting on them" (Cohen & March, 1986, p. 220). Preferences often are determined through action, rather than action determined through preferences (Weick, 1979). In program discontinuance at the four institutions, the choice of certain programs is shaped by the necessity to act. Acting, in this case, determining which programs to close and which are "close-able," becomes the process of collective organizational thinking (Birnbaum, 1988).

Finally, the findings suggest action rationality over decision rationality. Institutional decision makers, as this study demonstrates, invoke a rationality that can get the job accomplished. They do not identify criteria—typically cost, centrality and quality—determine relative weights among the criteria, collect data for comparison, and make decisions based upon the data to maximize economic benefits. Action rationality may not close the most costly programs, the weakest ones, or those least central to the institution, leading to a watering down of results. For program closure in these four cases, action rationality is political. The decision rules invoked identified programs that did not have the political strength to fight back, were small, had weak or novice leaders, and did not have champions across campus. Decision makers, to close programs, followed a rationality based upon power, negotiation, and coalition building (Baldrige, 1971; Bolman & Deal, 1992). When the action rules were violated, such as with Mathematics at UR, closures did not occur. Even though action rationality brought about closures, three of the four institutions developed a list of criteria that alluded to decision rationality. One might conclude that the illusion of decision rationality is needed to keep the process moving, but action rationality is needed to accomplish the task.

Conclusion

This study suggests that the majority of decision criteria identified are not used to select programs for closure. Rather, institutional decision makers use alternative criteria, ones that lead to action. Simply having stated criteria, and possibly a process to develop those criteria, may be more important to the discontinuance process than serving a utilitarian choice purpose. Stated criteria most likely fulfill a symbolic role needed to generate commitment and action (Birnbaum, 1988; Bolman & Deal, 1992; Chaffee, 1983). The stated criteria, as well as the legitimate
process by which they are developed, create involvement opportunities for key actors, capture the attention of influential stakeholders, develop an atmosphere of seriousness, and identify members of potential coalitions, both allies and opposition.

Those seeking guidance on program closures should understand the importance of the discontinuance process for identifying workable decision rules that lead to action. Although leaders at these four campuses did not adhere to their stated criteria, the processes they used uncovered workable criteria. Attention to process is essential, not simply to create legitimate and acceptable processes that are politically acceptable, but also to “discover” criteria that will lead to intended outcomes.

Because decisions are not based on cost, centrality, or quality, decision makers might reconsider readily adopting a strategy of program closure in the first place. By closing the programs “they could get away with,” decision makers neither meet their goals of saving money, improving quality, or streamlining focus, nor do they follow efficient processes. Closure processes might cause pain, disruption, and hard feelings for possibly little actual return. Decision makers thus are caught between reaching their intended goals—which in the case of program discontinuance tend to be reducing costs, enhancing quality, or realigning institutional strategy—and closing politically vulnerable programs that may do little to increase quality, save money, or create new strategy.

Program closures might only be considered as a worthwhile strategy if closing any department is more important than closing the right program—which might be the case to prove agility to state legislators or to create a campus climate of enhancement that is to be taken seriously, such as at UMCP and UR—and if the actual amount of money saved or quality gained is unimportant. At a minimum, institutional leaders should realize that program discontinuance is not a strategy that will most likely maximize outcomes in terms of cost, quality, or institutional centrality.

Finally, leaders should develop a more critical eye to distinguish between helpful and unhelpful management advice. Academic decision makers should come to realize that rational decision rules may be insufficient to bring about action and that advice solely from this perspective may lead to failed processes and perceptions of administrative ineptness.
APPENDIX A
Programs Closed by Institution

University of Maryland at College Park

- The Department of Agriculture and Extension Education, thus terminating bachelor’s, master’s and doctoral degrees in Agricultural and Extension Education;
- the Department of Housing and Design, thus terminating a bachelor’s degree in Housing, Advertising Design and Internal Design;
- the Department of Textiles and Consumer Economics, thus terminating bachelor’s degrees in Textiles, Apparel Design, Textile Marketing/Fashion Merchandising and Consumer Economics, and master’s and doctoral degrees in Textiles and Consumer Economics;
- the Department of Industrial, Technological, and Occupational Education, thus terminating MA, MEd, EdD, and PhD degrees in Industrial, Technological, and Occupational Education and six bachelor’s degrees in Industrial Technology;
- the Department of Radio, Television and Film, thus terminating bachelor’s, master’s, and doctoral degrees in Radio, Television and Film;
- the Department of Recreation, thus terminating bachelor’s, master’s, and doctoral degrees in Recreation;
- the Department of Urban Studies and Planning, thus terminating bachelor’s and master’s degrees in Urban Studies (but keeping a Master of Community Planning degree and moving it into the School of Architecture);
- the College of Human Ecology (including those programs named above in the Departments of Recreation, Housing and Design, and Textiles and Consumer Economics; remaining programs in the college were distributed among various colleges).

Oregon State University

- Eliminating the College of Education; and within the college, closing the departments of postsecondary and technological education; mathematical, science and computer science education; counselor education and college student services administration; and curriculum and instruction. These closures would eliminate degree programs in industrial arts education, marketing education, reading, social science education, technology education, trade and industrial education, and training and development. The remaining programs would be merged into a reorganized College of Human Ecology and Education;
- Closing the Department of Religious Studies and the Journalism Department, terminating all degrees offered through those units, and eliminating an undergraduate degree program in broadcast media, all in the College of Liberal Arts;
- Closing the Department of General Sciences in the College of Science;
- Eliminating the hotel, restaurant, and tourism management program and closing the Management Science Department in the College of Business;
APPENDIX A (Continued)

- Closing undergraduate degree programs in poultry science and soil science and merging 17 departments into 11 in the College of Agricultural Sciences.

University of Rochester

- PhD programs were “suspended,”¹ in Chemical Engineering, Mathematics, Linguistics, and Comparative Literature;
- A year prior, the doctoral program in Anthropology was closed.

Kent State University

- PhD program in Counseling Psychology;
- PhD program in Theater.

Notes

¹Campus leaders at all four institutions declined offers of institutional anonymity.
²Because the study was retrospective, the researcher was not present during the discussion, thus the following is inferred from the data collected.
³Programs were not officially terminated, but rather suspended, a technical term in the State of New York that does not require state permission and leaves open the door for reinstatement.

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